

## REGISTER OF HERITAGE PLACES

DRAFT - Register Entry

1. DATA BASE No. 4626

2. NAME Woodman Point Munitions Reserve (fmr)

FORMER NAME (or OTHER NAMES) Woodman Point Munitions Magazine (fmr), Magazine Jetty (fmr)

3. LOCATION Cockburn Road, Coogee

#### 4. DESCRIPTION OF PLACE INCLUDED IN THIS ENTRY

Portion of Reserve 49220 being portion of Lot 304 on Deposited Plan 50276 being portion of Certificate of Title Volume LR3148 Folio 216; Portion of Reserve 42469 being portion of Lot 301 on Deposited Plan 50276 being portion of Certificate of Title Volume LR3148 Folio 215; Portion of Lot 777 on Deposited Plan being portion of Certificate of Title Volume LR3177 Folio 793; as shown on HC Curtilage Map P4626-2.

### 5. LOCAL GOVERNMENT AREA City of Cockburn

## 6. HERITAGE LISTINGS

•	Register of Heritage Places:		
	Woodman Point Munitions Magazines (fmr)	Registered	12/07/2002
•	National Trust Classification:		
•	Local Planning Scheme – Heritage List:		
	Woodman Point Munitions Magazines (fmr)	Adopted	14/07/2011
	Magazine Jetty	Adopted	14/07/2011
•	Local Heritage Survey:		
	Woodman Point Munitions Magazines (fmr)	Category A	10/04/2014
	Magazine Jetty	Category B	10/04/2014
	Residence – 361 Cockburn Road	Category C	10/04/2014
	Residence – 377 Cockburn Road	Category C	10/04/2014
	Tuart Trees, Woodman Point	Category T	10/04/2014
•	Register of the National Estate:		
•	Aboriginal Sites Register		

### 7. ORDERS UNDER SECTION OF THE ACT

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#### 8. HERITAGE AGREEMENT

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#### 9. STATEMENT OF CULTURAL HERITAGE SIGNIFICANCE

Woodman Point Munitions Reserve (fmr), a former explosives storage reserve comprising the remnants of 33 munitions storage facilities in varying condition (from 1903/4), predominantly in the form of concrete or limestone barrier bunding that surrounded a storage building, remnants of a former transport network (from 1904), a timber former munitions jetty (1903), a single-storey timber weatherboard and iron Federation Bungalow residence (1913), and the site of an additional single-storey residence (1913-2022), has cultural heritage significance for the following reasons:

the place has historic and rarity value as major munitions storage complex which was used for this purpose for 80 years, including during two key phases in Western Australia's history – to support the growing state mining industry, and WWII (Factor A).

the place has rarity value for its use for the storage of munitions on a largescale for close to a century (Factor B).

the place has scientific and representative value as a distinctive precinct reflecting the operations of a former explosives storage reserve which demonstrates the transportation, storage, management and safety measures associated with the handling of explosive goods, and has the potential to yield information about the development and use of the site (Factors C and D).

the place has historic value for its association with the Henderson Naval Base, which was established in 1913 and intended as a crucial naval defence point for the Commonwealth Naval Department (Factor A).

the place has scientific value with its over 30 elements associated with the storage of munitions demonstrating technical innovation in the distinctive design of the barrier bunds constructed from a range of material that surrounded munitions storage facilities, and the three extant brick munitions storage buildings designed to house volatile materials and withstand high temperatures (Factor H).

the place has aesthetic value as a cohesive and evocative precinct with its over 30 elements associated with the storage of munitions, laid out in a formation following the route of the former railway (Factor F).



## REGISTER OF HERITAGE PLACES

**DRAFT – Supporting Information** 

PLEASE NOTE: This Assessment Documentation is intended to provide sufficient information to consider the place for inclusion in the State Register. It is not intended to provide a complete record of the history of the place or its physical presentation.

## 10. ASSESSMENT OF CULTURAL HERITAGE SIGNIFICANCE

This section identifies the cultural heritage values of the place. Values that make a strong contribution to the place's cultural heritage significance are also included in the Statement of Cultural Heritage Significance above.

In determining cultural heritage significance, the Heritage Council has had regard to the factors in section 38 of the *Heritage Act 2018*. Cultural heritage significance means aesthetic, historic, scientific, social or spiritual value for individuals or groups within Western Australia.

It is considered that the place warrants inclusion in the State Register against the following factors relevant to cultural heritage significance:

## 10(A) Importance in demonstrating the evolution or pattern of Western Australia's history;

Woodman Point Munitions Reserve (fmr) was a major munitions storage complex from 1903 to 1984, used during two key phases in Western Australia's history, first to support the growing state mining industry, and later to support munitions production during WWII (historic value).

Woodman Point Munitions Reserve (fmr) is associated with the establishment of Henderson Naval Base in 1913, which was intended as a crucial naval defence point for the Commonwealth Naval Department, until the project was abandoned in 1923 and the land returned to State ownership in 1927 (historic value).

## 10(B) Importance in demonstrating rare, uncommon or endangered aspects of Western Australia's heritage;

Woodman Point Munitions Reserve (fmr) is rare in Western Australia as a large-scale explosives storage site which operated for 80 years, and which contains multiple elements that demonstrate the transportation, management, and safety measures associated with the storage of volatile materials. The former Munitions Jetty, Naval Foreman's residence, and munitions storage buildings and surrounding bunds are also rare examples of their types (rarity value).

## 10(C) Potential to yield information that will contribute to an understanding of Western Australia's history;

Woodman Point Munitions Reserve (fmr) has varying archaeological potential throughout the place, which can yield information about the development and operation of the munitions reserve, particularly with regard to the transportation and storage of explosive materials (scientific value).

The extant barrier bunds that surround the former munitions storage buildings demonstrate the safety measures used when storing explosive goods on a large scale, and have the potential to reveal information about the development of this technology throughout the site, particularly the use of concrete and limestone (scientific value).

## 10(D) Its importance in demonstrating the characteristics of a broader class of places;

Woodman Point Munitions Reserve (fmr) is representative of an early-twentieth century explosives storage area that demonstrates the transportation, storage, and safety measures associated with the handling of explosive materials. (representativeness).

## 10(E) Any strong or special meaning it may have for any group or community because of social, cultural or spiritual associations;

Woodman Point Munitions Reserve (fmr) is valued by the local community as part of Woodman Point Regional Park, a popular fishing, swimming, and bushwalking site (social value).

# 10(F)<sup>1</sup> Its importance in exhibiting particular aesthetic characteristics valued by any group or community;

Woodman Point Munitions Reserve (fmr) is a cohesive and evocative precinct with its over 30 elements associated with the storage of munitions in various states of deterioration laid out in a formation following the route of the former railway (aesthetic value).

## 10(H) Its importance in demonstrating a high degree of creative or technical achievement;

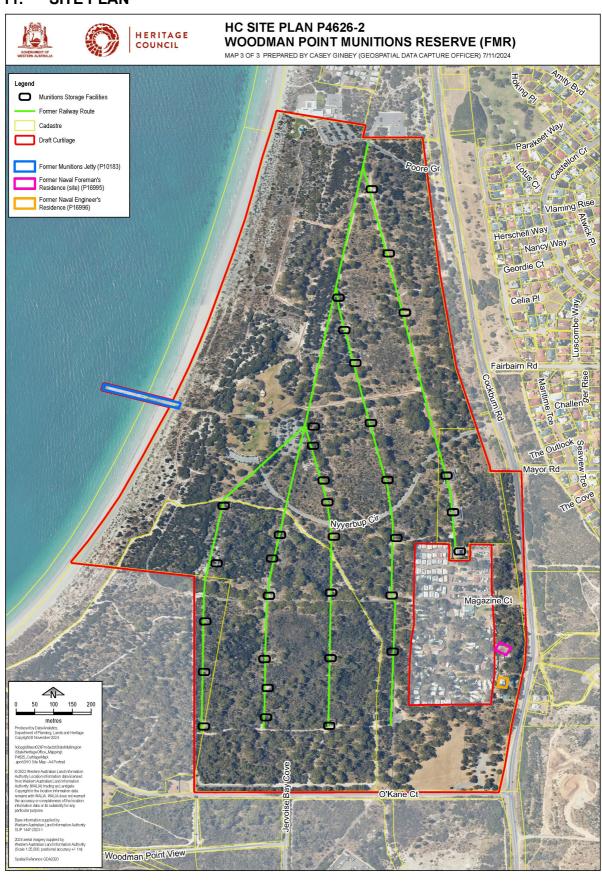
Woodman Point Munitions Reserve (fmr) demonstrates technical innovation with its distinctive stacked concrete and limestone U-shaped curtain bunds which surrounded munitions storage buildings to contain the force of an accidental explosion, and brick munitions storage buildings designed to withstand high temperatures, and protect volatile materials from risks associated with fire (scientific value).

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.

Register of Heritage Places Woodman Point Munitions Reserve (fmr) Place Assessed May 2024, August 2024, October 2024 Documentation amended:

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.

### 11. SITE PLAN



#### 12. SUPPORTING EVIDENCE

The documentation for this place is based on the 2002 heritage assessment completed by Curtin University students, assisted by Historian Kris Bizzaca, with additional information compiled by Lynley Forgione. The updated documentation was informed by a heritage report of the Magazine Jetty by Hocking Heritage + Architecture, for the Department of Transport (2021), and a 2022 archaeological report by Sean Winter PhD (Archaeology), Snappy Gum Heritage Services Pty Ltd, on behalf of the Department of Planning, Lands and Heritage. Additions and amendments have been made by the Heritage Council and the Department.

#### 12. 1 DOCUMENTARY EVIDENCE

Woodman Point Munitions Reserve (fmr) is situated within Reserves 49220 and 42469, the latter being partially within Woodman Point Recreational Reserve. The place was used for the storage of munitions between 1904 and 1984, and comprises the remnants of 33 munitions storage facilities in varying condition (from 1903), predominantly in the form of barrier bunding<sup>2</sup> that surrounded a storage building, and remnants of a former transport network (from 1904),<sup>3</sup> a timber former munitions jetty (1903), a single storey timber weatherboard and iron Federation Bungalow residence (1913), and the site of an additional single-storey residence (1913-2022).

The Traditional owners of the Cockburn area are the Beeliar Noongar, part of the Whadjuk Noongar group which were the original occupants of the Perth metropolitan area. The Beeliar Noongar lived alongside the area's freshwater lake and wetland system, establishing semi-permanent campsites, trails, and trade activity routes in the area. Woodman Point and Cockburn Road are among several culturally significant Aboriginal heritage sites recorded in the vicinity of *Woodman Point Munitions Reserve (fmr)*.

The Beeliar Noongar way of life was disrupted from 1829, with the arrival of British colonists in the Swan River colony. The first British settlements were established at Fremantle, Guildford, and Perth. The 1836 plans for a proposed townsite named Clarence captured most of the Woodman Point peninsular including the future site of *Woodman Point Munitions Reserve (fmr)*. During the nineteenth century the place remained isolated from settled areas and underwent minimal development.

#### **Explosives Reserve**

There was an increased demand for explosives in Western Australia following the growth of the mining industry. Prior to 1903 explosives used for loosening ore on the goldfields were transported to Robb's Jetty, approximately 3.8 km north of *Woodman Point Munitions Reserve (fmr)* by wooden hulled sailing vessels. After being stored in an old ship hulk near the jetty, the explosives were then stored in magazines situated among the sand hills. Following concern regarding their

Register of Heritage Places Woodman Point Munitions Reserve (fmr) Place Assessed May 2024, August 2024, October 2024 Documentation amended:

<sup>&</sup>lt;sup>2</sup> 'Barrier bunding' has also been referred to as 'curtain bunding' or 'berms'.

The Munitions jetty and storage buildings are also referred to as 'Magazines' or 'Munitions Magazines', however the term munitions has been used to be consistent with the naming of the Munitions Reserve in 1904.

Clarence 21. Plan of boundaries proposed for the townsite of Clarence in Western Australia. A. Hillman, Colonial Draftsman [scale: 2 chains to 1 inch, Tally No. 005637]. - State Records Office of WA (sro.wa.gov.au) Ref. Code Au WA S235, Cons.3868 Item 068, State Records Office of WA, accessed 16 August 2021.

proximity to Fremantle, the Government resolved to move the magazines to a new site at Woodman's Point.<sup>5</sup>

Works for the new explosives storage area and jetty began in 1903 and were completed in 1904 with the original magazines from Robb's Jetty transported to Woodman Point. The area to the east of the jetty, originally the Woodman Point Racecourse, was established by the Mines Department in 1904 as, Woodman Point Explosives Reserve (R8907).<sup>6</sup> The reserve comprised 327 acres, one-fifth being held for future use, and the remainder enclosed by an 8-foot-high galvanized iron fence. The reserve was connected via rail tracks to the main railway line and to the munitions jetty (owned by the Fremantle Harbour Trust at the time). The magazines themselves were described as 'erected in rows on a stretch of level country, and are so protected by substantial mounds that the force of any explosion would be turned towards the sea.'<sup>7</sup>

The reserve was used for the storage, sampling, and testing of explosives imported into WA for use in the mining industry. Explosives, which deteriorated en route, were held in magazines and inspected. Those classified as unstable were buried in the sand and destroyed on the nearby beach. Approved explosives were loaded into rail vans to be transported to mining centres throughout the State. Within the enclosure, sites were laid out for 27 main magazines for the storage of explosives, and 19 detonator magazines, all connected by parallel railway lines transversing the reserve. After the reserve's establishment, most of the magazines were built by the Department of Mines and private firms, including Elder Smith and Co Ltd who were the distributing agents for the explosives stored in the reserve, and Nobel (Australasia) Pty Ltd which built eight magazines at the site between 1936 and 1938.8

#### Naval Base

Around 1910, British Admiral Sir Reginald Henderson was invited by the Commonwealth Government to visit Australia and provide advice on naval defence and infrastructure. Henderson emphasised the strategic importance of Fremantle (Cockburn Sound) as the Western Fleet Primary Base and outlined special requirements for immediate dredging, surveying and land reservation works to establish the base. The explosives reserve was compulsorily acquired by the Commonwealth Government for defence purposes in 1916. The

<sup>&</sup>lt;sup>5</sup> 'Volcanoes Near Fremantle,' *The West Australian,* 11 November 1900, p. 11; 'Explosives Site,' *The Daily News*, 12 December 1902, p. 1.

<sup>6 &#</sup>x27;8907 Reserve for Explosives, 327 acres [cartographic material]', Department of Mines Western Australia, 1904. Accessed via State Library WA.

<sup>&#</sup>x27;The Explosives Magazines,' Western Mail, 21 May 1904, p.10.

Mines Department of Western Australia, Report for year ended 31 December 1936, Report of Chief Inspector of Explosives; Ibid., Report for year ended 31 December 1937, Report of Chief Inspector of Explosives; Ibid., Report for year ended 31 December 1938, Report of Chief Inspector of Explosives; 'Damage at Woodman's Point,' The West Australian, 26 June 1939, p. 14.

Royal Australian Navy website, <a href="https://www.navy.gov.au/media-room/publications/recommendations-adml-sir-reginald-henderson">https://www.navy.gov.au/media-room/publications/recommendations-adml-sir-reginald-henderson</a>, accessed 19 August 2021.

The Naval Forces of the Commonwealth, Recommendations by Admiral Sir Reginald Henderson K.C.B, 1911, <a href="https://www.navy.gov.au/sites/default/files/documents/Recommendations%20by%20Admiral%20Sir%20Reginald%20Henderson%201911\_opt.pdf">https://www.navy.gov.au/sites/default/files/documents/Recommendations%20by%20Admiral%20Sir%20Reginald%20Henderson%201911\_opt.pdf</a>, accessed 19 August 2021, pp. 14, 56.

<sup>&#</sup>x27;Defence Land, Cockburn Sound Western Australia – Compulsory Acquisition, 28th December, 1916', published in Commonwealth of Australia Gazette, 13 October, 1927, Issue No.110, p.2114.

In 1913, Ernest Percival Henshaw was appointed as naval base foreman. <sup>12</sup> At this time, preliminary work on the naval base was underway and on 7 May 1913, the WA Minister for Defence, Senator G.F. Pearce, performed an opening ceremony, officially naming it Henderson Fleet Base (Woodman Point). <sup>13</sup> Two timber residences were also built for the naval foreman and engineer in charge by August that year. <sup>14</sup>

Further construction on the naval base was halted with the beginning of World War I and the project was later abandoned by the Commonwealth in 1923. The reserve was transferred back to the State on 13 October 1927. The two timber residences were privately occupied between the wars, including employees of the nearby Quarantine Station. 16

#### World War II

Following Australia's entry into World War II in 1939, the Commonwealth Department of the Interior sought permission from the WA Department of Mines to erect 'explosives stores' for the Naval Department, on land previously leased for the adjacent quarantine station. The Department of Mines approved the request. That same year, the Munitions Jetty was extended by 120 feet as part of a state government program of coastal harbour facility works. The 1913 timber residences were occupied by naval officers at this time.

In 1941, construction started on three brick 'standard design cordite<sup>20</sup> and ammunition magazines' to support the nearly all-female employed Munitions Factory at Welshpool.<sup>21</sup> The contract was awarded to Fairweather and Son.<sup>22</sup> That same year, the Fremantle Harbour Trust rebuilt the munitions jetty and during the war it was used for transporting explosives to *Woodman Point Munitions Reserve* (fmr).

A new rail siding extension to the three brick munitions buildings was completed by December 1941. During the construction of the siding, sand was left in heaps by the Western Australian Government Railways (WAGR) to be sandbagged, and was the possible origin of the cement 'pillow' barrier bunds.<sup>23</sup> Construction and all

<sup>&</sup>lt;sup>12</sup> 'Henderson Naval Base, Mr Henshaw's Position', *The Western Mail*, 24 May 1918, p.18.

<sup>&#</sup>x27;Australian Navy Ceremony at Cockburn Sound', *The Murchison Times*, 10 May 1913, p.3.

With Camera and Notebook at the Cockburn Sound Naval Base', *The Sunday Times*, 24 August 1913, p.14.

<sup>15 &#</sup>x27;Naval Base Abandoned', *Tweed Daily*, 13 April 1923, p.2.

City of Cockburn Local Government Inventory, place record form for Watchman's Residence (fmr), Place ID 068, p.219-20, and place record form for Watchman's Residence (fmr), Place ID 69, pp. 222-223.

Mines Department file 1145/39: Woodman's Point Magazine and Explosives Reserve, Volume VIII, in microfilm collection of Department of Minerals and Energy Records Office, folios 46B, 47, and 48AA.

<sup>18 &#</sup>x27;Coast and Rivers,' Westralian Worker, 29 September 1939, p. 6.

City of Cockburn op.cit., p.223.

Cordite is an explosive material containing cellulose nitrate, sometimes mixed with nitroglyerin. *Collins Concise Dictionary*, 4th Australian ed., HarperCollins, Glasgow, 1999.

Letter from Commonwealth Department of the Interior to the Works Director of Western Australia dated 12 July 1941, reply to same dated 16 July 1941, and further response from Commonwealth dated 25 July 1941 (National Archives K1141/ 1, Items D.40-41/ 17-29 and 17-15, respectively); Adam-Smith, Patsy, 1984, *Australian Women at War*, Melbourne, Thomas Nelson Australia; *see also* Cairns, Lynne, 1995, *Fremantle's Secret Fleets*, Fremantle, Western Australian Maritime Museum, p. 35.

Commonwealth Department of the Interior, *Report on Application for Extension of Contract Period*, dated 20 July 1942 (National Archives Series K1141/1, Item D.40-41/17-5).

Rogers, Phillipa, 1999, *Troops, Trains and Trades: The Wartime Role of the Railways of Western Australia*, 1939-1945, Perth, Phillipa Rogers.

rework and contract extensions were finally completed in February 1942.<sup>24</sup> By this time the entire reserve had come under the control of the Naval Department, who used tractors on the earlier railway sidings, that had previously only been operated by horse-drawn wagons by the Department of Mines.<sup>25</sup>

### Post-World War II

The Reserve passed back into State control in 1945 following the end of the War.<sup>26</sup> The brick magazines were used as storage for mining explosives. Records indicate that explosives were being received at the jetty during the 1940s, and still in 1953,<sup>27</sup> though it is unclear when the jetty ceased to be used for this purpose. The 1913 residences were occupied by magazine watchmen during this time.<sup>28</sup>

By 1962 the Department of Mines had begun to look for a new site for explosives storage, due to urban expansion around the explosives reserve and the desire to improve recreation access to the beach north of Woodman Point.<sup>29</sup> In 1983, Cabinet announced that the explosives reserve was to be relocated within 12 months to a new site at Baldivis.<sup>30</sup> Explosive materials were moved from *Woodman Point Munitions Reserve (fmr)* to the new Baldivis site following its opening on 16 November 1984.<sup>31</sup>

<sup>&</sup>lt;sup>24</sup> Commonwealth Department of the Interior, Report on Application for Extension of Contract Period, op. cit.

Letter of 4 August 1942 from Western Australia Works Director to Director-General of Works, Commonwealth Department of the Interior (National Archives Series K1141/ 1, Item D.40-41/ 17-29); This is stated in *Troops, Trains and Trades* as being 1943. Rogers, Phillipa, op cit., p61.

Mines Department file, op. cit., folio 171.

<sup>&</sup>lt;sup>27</sup> 'Shipping', *The West Australia*, 29 March 1946, p. 12; 'Naval Armament Depot Near Perth – A well-guarded secret', 4 October 1945, p. 9; 'Polar Ship new supply ketch,' *The West Australian*, 6 June 1953, p. 6.

City of Cockburn Local Government Inventory, place record form for Watchman's Residence (fmr), Place ID 068, p.219-20, and place record form for Watchman's Residence (fmr), Place ID 69, pp. 222-223.

Mines Department file 860/ 56: Woodman's Point Magazine and Explosives Reserve, Volume VXI, folio 168, State Records Office of Western Australia, Acc 2921/ 221665-9.

Department of Minerals and Energy Annual Report 1983-84, p. 58.

Department of Minerals and Energy Annual Report 1984-85, p. 64



Figure 2: Woodman Point Aerial Imagery, 1965, sourced from Landgate, WA, 2024.

Following the closure of the explosives reserve, the Munitions Jetty was renovated and opened for public access. Vandalism at the site has resulted in damage to the extant magazine structures and the surrounding bunds. In 1995, one of the extant brick magazine buildings was enclosed within the boundary of the Woodman Point Caravan Park and adapted for use as the camper's kitchen.<sup>32</sup> The remaining two were unused.

From 1984 to 1998, the two 1913 residences (now Nos. 361 and 377 Cockburn Road) were used as private residences for park rangers.<sup>33</sup> No. 361 Cockburn Road was later vacated, while No. 377 Cockburn Road was reused as a regional park office.

#### **Current Use**

Woodman Point Munitions Reserve (fmr) forms part of the Woodman Point Regional Park, a popular recreational site. The Munitions Jetty, also known as the Woodman Point Ammo Jetty, remains a swimming, fishing, snorkelling and scuba diving location. In October 2020, as part of the \$5.5 billion WA Recovery Plan, the Department of Transport received \$9.69 million to replace the deteriorating jetty. The entire jetty will be demolished, excluding its 1939 piles, which will be retained due to their heritage value and use for diving. The final concept of the new jetty was selected in 2022 after undergoing community consultation.<sup>34</sup>

As of 2024, Reserves 49220 and 42469 are vested to the Conservation Commission of Western Australia and managed by the Department of Biodiversity, Conservation and Attractions (DBCA) as the Woodman Point Recreational Reserve. The residence at 361 Cockburn Road was demolished in 2022, while 377 Cockburn Road remains under the management of DBCA.

## 12. 2 PHYSICAL EVIDENCE

Woodman Point Munitions Reserve (fmr) comprises the remnants of 33 munitions storage facilities in varying condition (from 1903), predominantly in the form of barrier bunding that surrounded a storage building, remnants of a former transport network (from 1904), a timber former munitions jetty (1903), a single storey timber weatherboard and iron Federation Bungalow residence (1913), and the site of an additional single-storey residence (1913-2022). The condition of the 33 munitions storage facilities are as follows:

- Of the barrier bunds:
  - > 17 are ruinous
  - > 5 are in poor condition
  - > 10 are in good condition
  - 1 contains no evidence of a barrier bund.
- Thirteen of the munitions barrier bunds contain an extant munitions storage structure:
  - 8 of these are ruinous
  - 4 are in poor condition
  - ➤ 1 is in good condition

Western Australia Planning Commission letter to City Manager/ Town Clerk, City of Cockburn, Ref 23-631-1

City of Cockburn Local Government Inventory, place record form for Watchman's Residence (fmr), Place ID 068, p.219-20, and place record form for Watchman's Residence (fmr), Place ID 69, pp. 222-223.

<sup>&#</sup>x27;New Woodman Point Ammo Jetty', Department of Transport, Accessed August 2024, <a href="https://www.transport.wa.gov.au/projects/woodman-point-ammo-jetty.asp">https://www.transport.wa.gov.au/projects/woodman-point-ammo-jetty.asp</a>

The remaining 20 have no remains of a munitions storage structure.

As shown in the site plan, the munitions storage features are in a notable formation throughout the reserve, intersecting with the former railway line.

## Siting

Woodman Point Munitions Reserve (fmr) is within Reserve 49220 and 42469, the latter being partially within Woodman Point Recreational Reserve, an area of low coastal sand dunes, approximately 8km south of Fremantle. Although surrounded by low coastal scrub the reserve is visible from Cockburn Road. The place is accessed via Nyyerbup Circle off Cockburn Road, which runs within Reserve 49220, leading to a carpark and landscaped recreational area.

The State Registered places P499 Quarantine Station (fmr), Woodman Point (1886) and P508 Woodman Point Lighthouse and Keepers' Cottages (1902) are situated to the south. The Lighthouse, in an elevated position, is visible from the former Munitions Reserve. There are two Registered Aboriginal Cultural Heritage Sites located adjacent to Woodman Point Munitions Reserve (fmr), ID 15841 Woodman Point and ID 15840 Cockburn Road.





Figure 3: Example of vegetation within reserve, close Figure 4: Vegetation and footpath (2024). to coastline (2024).

## **Munitions Storage Facilities**

Thirty-three features have been identified which were associated with the storage of munitions. These are in varying states of deterioration.<sup>35</sup> These primarily comprise remnant barrier bunding (also known as 'berms') which surrounded a munitions storage building to contain potential explosions. The remnant bunds are in a 'U' shape surrounding either a structure or an internal space where the munitions storage building once was, oriented with the opening facing west (to the ocean) and intersecting with a railway line. Construction dates range from c.1903, c.1941, and pre-1953.36 Dimensions range from approximately 14m to 40m northsouth by 10m to 31m east-west.

For the purpose of this assessment, the types of bunds have been broadly categorised based on construction materials. Bunds were constructed from either

<sup>35</sup> An archaeological survey of the site in June 2022 identified the remains of 32 features, however this number did not include the extant brick munitions storage building that is now within the Woodman Point Caravan Park. As this feature is associated with the storage of munitions, it has been included in the total number of features.

Indicative construction dates are based on the 1904 site plan, correspondence from the Commonwealth Department of the Interior to the Works Director of WA (1941), and historic aerial imagery (1953).

cement 'pillows', from locally quarried limestone, or a combination of both. The following construction styles were identified:

- Cement Pillows constructed from stacked cement pillows over an earth core. Nine of these have been identified with the bunds generally forming a square shaped structure, with the cement pillows forming a trapezoidal shaped wall in cross section. Many of the cement bunds retain the crosshatch patterning from hessian bags once the cement dried.
- Limestone Blocks constructed from limestone blocks over an earth core.
   Fourteen of these have been identified. These bunds are generally semicircle in plan and are rounded in cross section.
- Combination constructed from both cement pillows and limestone blocks, over an earth core. Nine of these have been identified. These may represent bunds originally constructed with limestone blocks later repaired or reinforced with concrete pillows.
- One feature comprising a concrete pad did not contain evidence of a barrier bund, but is considered associated with the munitions storage facilities.<sup>37</sup>



Figure 9: U-Shaped Barrier Bunding (2014).



Figure 10: Concrete Pillow bunding (2022). 38



Figure 11: Remains of a Cement Pillow munitions bund, likely constructed pre-1953 (2022).<sup>39</sup>



Figure 12: Remains of Limestone Blocks munitions bund constructed c. 1903/4 (2022).<sup>40</sup>

Feature 42. The concrete slab is consistent with the front entrance to Features 26, 32 and 33.

Part of Feature 32 as recorded in Archaeological Report (p. 45).

Feature 17 as recorded in Archaeological Report (p. 32).

Feature 10 as recorded in Archaeological Report (p. 28).

Of the 33 features identified, 13 contain remnants of a previous munitions storage building. The condition is summarised in the below table:

Condition	Features
Good (1)	Brick munitions building within the caravan park (no feature number).
Poor (4)	Features 22, 26, 32, and 33.
Ruinous (8)	Features 7, 13, 17, 18, 19, 25, 27, and 42
No evidence of the former munitions structure (20)	Features 4, 6, 8, 9, 10, 14, 15, 21, 23, 24, 28, 29, 30, 31, 34, 35, 36, 37, 38, and 39.



Figure 13: Combination munitions bund with limestone and sand walls, reinforced with concrete pillows c.1903/4 (2022).<sup>41</sup>



Figure 14: Remnants of a timber and corrugated iron structure within the bund in Figure 13. The internally lined asbestos walls and part of the floors remain, but the roof is no longer extant. (2022).<sup>42</sup>



Figure 15: Combination munitions bund reinforced with jarrah boards dating from c. 1903/4 (2022).<sup>43</sup>



Figure 16: Remains of corrugated iron munitions magazine building within the bund as shown in Figure 15. The structure is timber-framed and has a vaulted roof, with a small foyer leading to a large internal space. (2022).<sup>44</sup>

Feature 26 as recorded in Archaeological Report (pp. 39-40).

Feature 26 as recorded in Archaeological Report (pp. 39-40).

Feature 22 as recorded in Archaeological Report (pp. 36-37).

Feature 22 as recorded in Archaeological Report (pp. 36-37).

The three brick former munitions storage buildings (c.1941) are the most intact. These are spaced roughly 70 metres apart and face Conservation Close. One is located within the Woodman Point Caravan Park and has been adapted for use as a camper's kitchen. The buildings are of similar scale and design, constructed with double red brick cavity walls with cream mortar pointing. There are two double width doorways, and ten sets of timber framed, double casement windows. Many of the original features, such as wire-reinforced glass windows and corrugated iron shutters, have been replaced with new materials in the one within the caravan park, though all three buildings retain their original sloping clay brick windowsills. There are air ventilation grilles at regular intervals around the lower part of the walls, with larger ventilation holes high in each end wall. The roof of each building is of a distinctive, double-layer design, intended to assist ventilation. The bitumen road connecting these buildings was originally a railway line.



Figure 17: One of three brick and asbestos Munitions Magazine buildings with Cement Pillow bunding, dating from c.1941 (2022)<sup>45</sup> This building is in the approximate location of Magazine 6a detailed on the 1904 plan, but is a different form to that noted on the plan.



Figure 18: Brick and asbestos Munitions Magazine building constructed c.1941. Similar scale and design to the building in Figure 17. Surrounded by Cement Pillow bunding (2022). 46 The building is in the approximate position of Magazine 6 in the 1904 plan, but is a different form to that noted on the plan.

### Munitions Jetty (fmr)

The Munitions Jetty (fmr) is located north of Woodman Point and is accessed by Nyyerbup Circle. The Jetty is 175m long and comprises a neck (landward, 80m long and 3.7m wide) and the head (seaward end, 95m long and 9.75m wide). The Jetty is supported by hexagonal reinforced concrete piles, with the head additionally strengthened with a central raking pile bent for vessel berthing.

The super structure comprises timber half caps bolted to the top of the concrete piles, running transverse to the structure, that supports 10 timber stringers on timber corbels, which in turn support transverse timber deck planks. There is a concrete deck overlay on top of the timber planks that was likely installed when the jetty became pedestrian only.

Feature 32 as recorded in Archaeological Report (pp. 45-47).

Feature 33 as recorded in Archaeological Report (pp. 47-48).







Figure 6: Head of Munitions Jetty (fmr) in 2024.

#### Weatherboard Federation Bungalow residence

On the western boundary is a single-storey raised timber weatherboard and iron Federation Bungalow residence, originally built for the Naval Engineer in 1913. The residence is situated amongst mature Tuart trees, within a fenced compound. A large modern prefabricated steel shed (c. 2003) and a modern steel-framed carport (c. 2018) and are situated adjacent.

North of this residence is the site of the former Naval Foreman's residence (1913), which was demolished in 2022 due to extensive termite damage. This building was of a similar style and construction to the extant Naval Engineer's residence. The site is likely to have high archaeological potential associated with the occupation of the residence, initially by the Naval Foreman and later by Magazine Watchmen.



Figure 7: Exterior view from north-west of extant former Naval Engineer's residence (2021).



Figure 8: Exterior south-west corner of formal Naval Engineer's residence (2021).

## **Transport Infrastructure**

A network of railway lines and internal roads connect the magazines and allowed the transport of materials within the site. The position of these lines is still largely intact, although many have been repurposed as walking and bike tracks. Numerous physical remnants of railway infrastructure remain in-situ, including metal tracks, wooden sleepers, raised track lines, and other individual items. A number of bitumen or crushed limestone roads and tracks were built for travelling within the site.



Figure 19: Remnant Railway Track looking south (2024).



Figure 20: In-Situ steel railway tracks and wooden sleepers, remnant of a railway crossing (2022).<sup>47</sup>



Figure 21: Bitumised road with railway tracks (2022).<sup>48</sup>



Figure 22: In-Situ Wooden Railway Sleepers (2022). 49

### 12.3 CONDITION

Elements which comprise the munitions storage facilities are in varying condition. Barrier bunds constructed with limestone and a combination of limestone and cement are more subject to deterioration from natural processes (such as wind and water). Cement pillow bunds are typically in moderate condition, though some walls have collapsed. Numerous features have been subject to vandalism, particularly graffiti. Corrugated iron and timber structures are generally in poor condition. The brick munitions storage buildings are in poor condition, excluding the one within Woodman Point Caravan Park which is in good condition. Refer to Appendix A for a summary of the condition for the munitions storage facilities.

The extant former Naval Engineer's residence is in good condition.

The munitions jetty is in poor to moderate condition and is intended to be replaced (excluding the 1939 piles).

Remnant transport infrastructure is in varying condition. Many railway tracks throughout the place have been covered for use as pedestrian and cycle paths.

Feature 20 as recorded in Archaeological Report (p. 35).

Feature 20 as recorded in Archaeological Report (p. 35).

Feature 11 as recorded in Archaeological Report (p. 28).

## Archaeological Potential

Areas of high archaeological potential include the three extant brick munitions magazines and associated bunds, and the reserve area below Nyyerbup Circle. This reserve area is currently fenced off, protecting any potential archaeological material from degradation, and is likely to be less disturbed.

Areas considered of moderate archaeological potential include the reserve area north of Nyyerbup Circle (excluding the carpark and grassed recreation area). While archaeological material is extant here, it is considerably more disturbed and in poorer condition compared to the fenced off southern portion. The reserve area south of Nyyerbup Circle, between the fenced portion and boundary of Woodman Point Caravan Park (not within the curtilage of Woodman Point Munitions Reserve (fmr)) has also been disturbed, with the extant features damaged and subject to landscaping.

Areas considered of low archaeological potential include the heavily landscaped car park and recreation area related to Woodman Point Beach. This area has been disturbed with modern development and features associated with the munitions site removed.

#### 12. 4 COMPARATIVE INFORMATION/THEMATIC ANALYSIS

### **Thematic Analysis**

There is one thematic history relevant to the consideration of this place:

• Thematic History of Western Australia 50 (WA Thematic).

Economy - Mining & Mineral Resources - the following key events are applicable for the place's use of storing explosives from 1904, following the growth of the mining industry:

1892 – Gold discovered at Coolgardie, major gold rush ensues.

1894 – Shift from alluvial prospecting to gold mining industry, companies mine reef gold as alluvial gold runs out.

Economy - Manufacturing & Secondary Industry - the following key events and phases are applicable for the place's use of storing munitions during World War II:

1939-1945 – manufacturing channelled into war effort, including local production of items no longer available for import due to war conditions; women increasingly employed in manufacturing, especially metalwork, machining, munitions.

1941 – factory producing small arms ammunition opens in Welshpool.

Governing - Law, order & defence - the following key events are appliable to the place for its establishment as a naval base from 1913 to 1927, and later use during World War II as a munitions site:

1913 – Opening of the Henderson Naval Base (Woodman Point)

<sup>50</sup> 'A Thematic History of Western Australia' (incl. Framework Spreadsheet & Narratives). Prepared for the Heritage Council of WA by Clare Menck, Historian, June 2018.

1941 – Loss of HMAS Sydney off WA coast shocks WA and brings war close to home.

*International Links* – the following key events and phases are applicable following the use of the site during World War II:

1939-1945 - World War II

1941 – HMAS Sydney sunk off WA coast by German Kormoran. All 645 Australians die along with 80 crew from Kormoran which was the highest loss of life by the Royal Australian Navy.

### **Comparative Analysis**

#### **Munitions Storage**

Woodman Point Munitions Reserve (fmr) held explosives from 1904 to 1984 for both mining and military purposes. The following places in the State Register and Heritage Council's Assessment Program are comparable, for an association with the storage of munitions for mining purposes:

- P3239 Cossack Townsite Precinct (RHP) (from 1860) there is archaeological evidence within this place of a former explosives magazine and jetty, constructed c. 1890s, that is associated with the development of gold and copper mining in the Pilbara. The explosives magazine comprises a stock structure with natural bedrock of a hill.<sup>51</sup>
- P10570 Statham's Quarry (fmr) (RHP) (from c.1894) a granite and diorite quarry in Gooseberry Hill, which also includes a rare concrete magazine that was partially built into a hillside, that was used to safely store explosives.
- P1700 Mt. Narryer Station, Mullewa (Assessment Program) (from c.1918) –
  a complex of homestead buildings that also includes a small stone
  magazine, built with a skillion cement roof and surrounded by a timber and
  wire fence.
- P1703 Murgoo Station Homestead, Murchison (Assessment Program) (from c.1877) – a complex of homestead buildings that also includes a corrugated iron magazine building.

The following places in the State Register and Heritage Council's Assessment Program are comparable, for an association with the storage of munitions for military purposes:

- P26 Albany Forts (RHP) (1893) a renovated artillery battery and army barracks, comprising two guns, transported buildings, ruins, a parade ground, and an underground magazine. The place formed part of the strategic defence of Australia from its establishment, being an early example of federal co-operation of the states and served through both World Wars.
- P526 Oliver Hill Battery, Wadjemup/Rottnest Island (RHP) (from 1937) comprises two 9.2" breech loading guns (H1 and H2) and their emplacements and underground facilities, including munitions storage, which formed part of the coastal defence system established during World War II to defend the Port of Fremantle. The H1 magazines contain separate

<sup>&</sup>lt;sup>51</sup> 'Cossack DRAFT Volume 1: Conservation Management Plan', TPG, February 2018, p.29.

rooms for handling the cordite and shells and a mechanical hoist to lift these to the gun pit above. The place also contains evidence of railway lines which once connected the site.

- P3247 Leighton Battery (RHP) (from 1942) comprises the remains of a mostly underground World War II artillery defence installation, including two magazine buildings.
- P3365 Cape Peron K Battery Complex (RHP) (from 1942) this place has been associated with the defence of Australia since its acquisition by the Commonwealth in 1916, and comprises two gun emplacements and their associated and adjacent ready ammunition and storage bunkers, and other elements.
- P1836 Irwin Barracks, Karrakatta (Assessment Program) (from 1896) a military complex which comprises magazine buildings (1898), Pre-World War II Artillery Barracks, World War II and post-War buildings. The magazines comprise two limestone buildings, one being a shifting and fuse room, and the other a power and ammunition room.

The following place included in the Shire of East Pilbara Local Heritage Survey is also comparable, as a magazine associated with mining use:

 P14217 Town Magazine, Marble Bar (c.1950s) – this place is a corrugated iron shed that held mining explosive until the early 1980s. The magazine is surrounded by concrete bund walls that was a later addition for extra protection. It is not certain if this magazine was used for military purposes.

The following place included in the Shire of Merredin Local Heritage Survey is most comparable to *Woodman Point Munitions Reserve (fmr)*, comprising multiple storage buildings associated with military use:

 P13515 Ammunition Dumps, Merredin (1941) – this place comprises approximately 49 concrete storage buildings scattered over approximately 100 hectares of land, that was originally camouflaged by bush. All buildings are constructed identical.

The above comparative suggests *Woodman Point Munitions Reserve (fmr)* is not rare as an example of a place associated with the storage of explosives or munitions. However, the place is rare as one where explosive materials were held on a large scale for a very lengthy period of time, and where a large number of extant albeit largely ruinous elements associated with the storage of these materials remain.

### **Naval Defence**

The Henderson Fleet Base (Woodman Point) was opened in 1913 for defence purposes by the Commonwealth Naval Department. The project was eventually abandoned in 1923, and the land was returned to State ownership in 1927. The extant weatherboard Federation Bungalow residence is directly associated with this event.

The following places are comparable to *Woodman Point Munitions Reserve (fmr)* for an association with the Royal Australian Navy:

• P596 Lady Lawley Cottage, Cottesloe (RHP) (from 1903) - a limestone Federation Bungalow residence that was used as a convalescent home for

- women personnel from the Australian Women's Land Army and the Merchant Navy during World War II.
- P17789 Cockburn Sound Anti-Submarine Boom (Protection Order) (1942)

   a group of timber pylons that were once part of a World War II anti-submarine defence system. Pylons were placed every 100m across the Parmelia Bank from Second Head, Garden Island, and Woodman Point to protect Cockburn Sound from submarine attack.
- P4501 Garden Island (Assessment Program) this place illustrates the role of Cockburn Sound and Garden Island during World War II particularly with regard to coastal defence.
- P27033 WRANS House, Wadjemup/Rottnest Island (Assessment Program) (1937) – this place was constructed at North Point on Wadjemup/Rottnest Island during the occupation of the island by Defence forces during World War II. The building was used by the Women's Royal Australian Naval Service between 1943 and 1945.

The following places, which have been determined to not warrant assessment for the State Register, are also comparable for this association:

- P4496 Naval Armament Depot, Byford (1942) the place contains the only remaining building of the Royal Australian Naval Armament Depot (a munitions magazine), a large munitions storage facility that operated from 1942 to 1981, that played a significant role in the military defence operations in Western Australia during World War II. There is little evidence remaining of other structures associated with the Depot.
- P18494 Palm Beach Jetty site (City of Rockingham Local Heritage Survey) (1944) – this is the site of a timber and concrete pile jetty constructed by the Royal Australian Navy in 1944, for use as a mooring place for Royal Australian Airforce Corvettes. It was replaced in the 1960s.

The above places are associated with the operations of the Royal Australian Navy during World War II, whereas *Woodman Point Munitions Reserve (fmr)* was established prior to this. *Woodman Point Munitions Reserve (fmr)* is also directly associated with the establishment of the Henderson Naval Base.

#### Federation Bungalow residences

The former Naval Engineer residence (1913), later used as a magazine watchman's residence (c. 1945-1982), was constructed in the Federation Bungalow architectural style. A search of the Historic Heritage database for places constructed in this architectural style between 1890 to 1920 returns 1353 entries, of which 1099 places are in the Metropolitan and Peel regions. Twenty-one of these are entered in the State Register, indicating the extant Federation Bungalow residence within *Woodman Point Munitions Reserve (fmr)* is not an uncommon example of this architectural style in WA. Though as indicated above, the residence is directly associated with the Naval Base function of the place.

## **Jetties**

The following State Registered places are comparable to the former Munitions Jetty, as jetties constructed during the Gold Boom, Inter War and Post War periods:

 P89 Lower Kalgan River Bridge & Jetty Group (RHP) (from 1905) – this place comprises the Lower Kalgan River Jetty Ruins (1912) and the twolane timber Lower Kalgan River Bridge (1958), also remnants of an earlier (1905) bridge. The place is significant as a group of related timber structures that transported farm produce and is representative of timber engineering in the Inter War period.

- P831 Tanker Jetty, Esperance (RHP) (from 1935) This place was originally a predominantly timber jetty, approximately 670 metres long, which was replaced in 2021. Elements of the original timber jetty have been incorporated into the new design. The place has significance as a site of commercial, social, and recreational pursuits since its establishment in 1935, and for its association with the period of economic growth in the region.
- P4553 Streeter's Jetty (RHP) (from 1896) a timber-framed established in 1896 and built in several stages, used until the 1980s. The place is significant as part of Broome's tramway system and is associated with Broome's pearling industry. The jetty is intended to be replaced.
- P4566 One Mile Jetty and Tramway (RHP) (from 1898) a timber jetty and light tramway that was established in 1898 and continually expanded until 1959. The jetty serviced the town of Carnarvon, importing and exporting a variety of goods. The jetty is planned to be restored after damage in 2021 from Cyclone Seroja.

The following place on the Assessment Program is also comparable:

 P4229 Gladstone Jetty, Carnarvon (Assessment Program) (from 1910) – remnant of a former port facility constructed to transport supplies between local pastoral stations and Perth.

As mentioned above, archaeological evidence has been found linked to a former magazine jetty at P3239 *Cossack Townsite Precinct* (c.1890s). The remnant structure comprises loose boulders that form a stone groyne. However, none of the above examples were constructed as munitions jetties, unlike the former Munitions Jetty within *Woodman Point Munitions Reserve (fmr)*.

#### Conclusion

There are other known examples of the individual elements within *Woodman Point Munitions Reserve (fmr)* throughout Western Australia, some of which have been entered in the State Register. However, *Woodman Point Munitions Reserve (fmr)* is a rare munitions storage complex, demonstrating the transportation, management, and safety measures implemented with the storage of explosive material on a large scale. No other known examples of this scale and form exist in the State. *Woodman Point Munitions Reserve (fmr)* is also significant as holding munitions to support both mining and military purposes.

#### 12. 5 KEY REFERENCES

Heritage Report for P10183 Magazine Jetty, Woodman Point, Coogee (August 2021) prepared on behalf of the Department of Transport by Hocking Heritage + Architecture.

Report on an archaeological assessment of the extent and condition of physical remains at the Woodman Point Munitions Magazine (fmr) site (August 2022) prepared on behalf of the Department of Planning, Lands and Heritage by Sean Winter PhD (Archaeology), Snappy Gum Heritage Services Pty Ltd.

## 12. 6 FURTHER RESEARCH

Further archaeological investigations may reveal additional material related to the use of the site. Further research can also be conducted on the types of barrier bunds and the materials used during construction, to determine if there is a dating pattern.

## **APPENDIX A – Features associated with the storage of munitions.**

The following 33 features associated with the storage of munitions at *Woodman Point Munitions Reserve (fmr)* were recorded in the archaeological report compiled Snappy Gum Heritage. The below table provides a summary of each:

Feature number	Barrier Bund Type	Munitions Storage Structure	Identification on 1904 Plan
Feature 4	Combination barrier bund in poor condition. Bund is heavily overgrown with vegetation.	No evidence.	Magazine 14
Feature 6	Combination barrier bund that is ruinous. Bund is heavily overgrown with vegetation.	No evidence.	Magazine 13a (detonator magazine).
Feature 7	Combination barrier bund that is ruinous. Bund is heavily overgrown with vegetation.	Minor evidence of structure in the form of vertical steel rods protruding from sand within the bund wall, that is ruinous.	Magazine 13
Feature 8	Combination barrier bund that is ruinous. Bund is heavily overgrown with vegetation.	No evidence.	Magazine 1.
Feature 9	Limestone block barrier bund that is ruinous. Bund is heavily overgrown with vegetation.	No evidence.	Magazine 12.
Feature 10	Limestone block barrier bund that is ruinous.	No evidence.	Magazine 3.
Feature 13	Limestone block barrier bund that is ruinous. Bund is heavily overgrown.	Minor evidence in the form of individual bricks and small fragments of corrugated iron, that are not in situ. Ruinous.	Magazine 10.
Feature 14	Limestone block barrier bund that is ruinous. Bund is heavily overgrown with vegetation.	No evidence.	Magazine 11.
Feature 15	Combination barrier bund in poor condition. Bund is heavily overgrown.	No evidence.	Magazine 12.
Feature 17	Cement pillow barrier bund in good condition. Railway lines run west of the bund.	Minor evidence in the form of four in-situ cement blocks and a range of structural material including fragments of asbestos sheeting, cement blocks, corrugated iron sheeting, timber posts, and steel. Ruinous.	Not marked on 1904 plan but is visible in 1965 aerial imagery.
Feature 18	Cement pillow barrier bund in good condition. Railway lines run west of the bund.	Minor evidence in the form of structural material both in-situ and secondary disposition, including steel posts, concrete floor posts, and concrete blocks. Ruinous.	Not marked on 1904 plan but is visible in 1965 aerial imagery.

Feature 19	Cement pillow barrier bund in good condition. Railway lines run west of the bund.	Minor evidence in the form of structural material in-situ and in secondary disposition, including concrete floor posts. Ruinous.	Not marked on 1904 plan but is visible in 1965 aerial imagery.
Feature 21	Limestone block barrier bund that is ruinous. Bund is heavily overgrown with vegetation. Railway lines run in front of the bund.	No evidence.	Magazine 19.
Feature 22	Combination barrier bund reinforced with jarrah board that is in poor condition. Railway lines run in front of the bund.	Extant corrugated iron munitions storage building with a timber frame and vaulted roof, in poor condition.	Magazine 20.
Feature 23	Limestone barrier bund that is ruinous. Bund is heavily overgrown with vegetation. Railway lines run west of the bund.	No evidence.	Magazine 20a (detonator magazine).
Feature 24	Limestone block barrier bund that is ruinous. Bund is heavily overgrown with vegetation.	No evidence.	Magazine 21.
Feature 25	Cement pillow barrier bund in good condition. The bund walls form a trapezoidal cross section and is a square 'u-shape' in plan. Railway lines run west of the bund.	There are remains of a magazine storage structure in the form of timber flooring and a collapsed timber wall frame. Ruinous.	Magazine 23. A barrier bund is not shown on this plan, suggesting the extant bund was a later construction.
Feature 26	Combination barrier bund in good condition. Railway lines run past the bund.	There are remains of a magazine storage structure with timber framed falls and external corrugated iron sheeting and internal asbestos lining, in poor condition.	Magazine 22.
Feature 27	Combination barrier bund in poor condition. The rear wall has slumped, but the concrete pillow reinforcements are relatively intact. Bund is heavily overgrown with vegetation.	There are structural fragments including corrugated iron sheeting and timber that may have been associated with the munitions storage structure, that is ruinous.	Magazine 17.
Feature 28	Limestone block barrier bund that is ruinous. Bund is heavily overgrown with vegetation.	No evidence.	Magazine 18.
Feature 29	Combination barrier bund that is ruinous. Bund is heavily overgrown with vegetation.	No evidence.	Magazine 18a (detonator magazine).
Feature 30	Cement pillow barrier bund in good condition. The bund has been covered in cement render applied using a corrugated iron mould and large vertical steel reinforcement bars are on both	No evidence.	Not marked on 1904 plan but is visible in 1965 aerial imagery.

	interior and exterior walls. Within		
	the walls is heavily overgrown with vegetation.		
Feature 31	Cement pillow barrier bund in good condition. The bund is of similar construction to Feature 30 and is overgrown with vegetation.	No evidence.	Not marked on 1904 plan but is visible in 1965 aerial imagery.
Feature 32	Cement pillow barrier bund in good condition. There are four walls of bunding, with a west wall approximately 10m from the Ushape bunding.	A munitions storage building remains extant, constructed with brick walls, concrete flooring, and a hipped asbestos sheet roof. The building is heavily graffitied. Structure is in poor condition.	As this building was constructed c. 1941 is it not on the 1904 plan, but it is in the approximate location of Magazine 6a.
Feature 33	Cement pillow bund in good condition. This is of similar construction to Feature 32.	A munitions storage building remains extant, of similar scale and construction to that within Feature 32. Structure is in poor condition.	As this building was constructed c. 1941 is it not on the 1904 plan, but it is in the approximate location of Magazine 6.
Feature 34	Limestone block barrier bund that is ruinous. Bund is heavily overgrown with vegetation.	No evidence.	Magazine 8.
Feature 35	Limestone block barrier bund that is ruinous. Bund is heavily overgrown with vegetation.	No evidence.	Magazine 9.
Feature 36	Limestone barrier bund that is ruinous. Bund is heavily overgrown with vegetation and was truncated by the construction of Nyyerbup Crescent.	No evidence.	Magazine 16.
Feature 37	Limestone block barrier bund that is ruinous. Bund is heavily overgrown with vegetation.	No evidence.	Magazine 15a (detonator magazine).
Feature 38	Combination barrier bund that is in poor condition. The concrete pillow reinforcements are relatively intact. Bund is overgrown with vegetation.	No evidence.	Magazine 15.
Feature 39	Limestone block barrier bund that is ruinous. Bund is heavily overgrown with vegetation.	No evidence.	Magazine 14a (detonator magazine).
Feature 42	No evidence of a barrier bund.	Remains of a flat concrete slab, that considered the ruinous front entrance of a munitions building. There is no other evidence of a munitions structure.	Approximately location of Magazine 24.

No feature	Cement pillow barrier bunding in	A brick munitions storage	N/A. Munitions	i
number	good condition.	building that is within the	storage building	ı
		Woodman Point Caravan Park,	constructed c.	ı
		in good condition. This is of	1941.	ı
		similar scale and construction to		1
		Features 32 and 33. This		ı
		feature was not recorded as		ı
		part of the archaeological		1
		survey.		ì





## HC CURTILAGE MAP P4626-2 PROPOSED AMENDMENT **WOODMAN POINT MUNITIONS RESERVE (FMR)**

