# WHENUAPAI HEAVY AA BATTERY, 92 TRIG ROAD AND 4 SPEDDING ROAD, WHENUAPAI: HISTORIC HERITAGE EVALUATION FOR AUCKLAND COUNCIL UNITARY PLAN



Prepared for Auckland Council

May 2017

By Sarah Macready, MA



# 1.0 Purpose

The purpose of this document is to consider the place located at 92 Trig Road and 4 Spedding Road, Whenuapai, Auckland against the criteria for evaluation of historic heritage in the Auckland Unitary Plan.

The document has been prepared by Sarah Macready of Clough & Associates Ltd on the specific instructions of our client, Robert Brassey, Principal Specialist Cultural Heritage Unit, Auckland Council. It is solely for the use of Auckland Council for the purpose it is intended in accordance with the agreed scope of work.

# 2.0 Identification

Site address	4 Spedding Road and 92 Trig Road, Whenuapai, Auckland
Legal description and Certificate of Title identifier	Lot 17 DP 62344 (4 Spedding Road) Lot 16 DP62344 (92 Trig Road)
NZTM grid reference	E1744319 N5925717
Ownership	4 Spedding Road: Goddit Limited 92 Trig Road: Fantastic Trustee Limited/Lucky Five Family Trust
Unitary zoning	Future Urban Zone
Existing scheduled item(s)	N/a
Additional controls	N/a
Heritage New Zealand Pouhere Taonga listing details	N/a
Pre-1900 site (HNZPT Act 2014 Section 6)	No. The place is of World War II date and has no identified pre-1900 archaeological values
CHI reference/s	20469
NZAA site record number/s	N/a

# 3.0 Constraints

This evaluation is based on the information that could be sourced within the timeframe available. Historical research into the site and its surrounds was not exhaustive, and there is potential for more information to be sourced. However, research for the evaluation was sufficient to enable the site to be evaluated against the criteria.

A site inspection of part of the site at 4 Spedding Road was undertaken on 17 March 2017. Most of the site is buried underground, and its condition was inferred from the few visible elements and limited subsurface probing. The property at 92 Trig Road could not be accessed, but the condition of the site within the property was inferred from observation from adjacent land and review of aerial photographs.

# 4.0 Historical summary

The Whenuapai Heavy AA (Anti-Aircraft) Battery was part of an Auckland-wide system of anti-aircraft defence that was initiated after Japan's entry into World War II with the bombing of Pearl Harbour in 1941. The AA batteries were part of a larger World War II defence network known as Auckland Fortress, which included other gun batteries, observation posts, tunnels and searchlights whose function was to protect the port and city of Auckland against attack from the sea.

The battery was constructed to protect the Whenuapai Aerodrome, one of a number of locations around Auckland which were identified as being of key strategic importance. It was one of 12 similar AA batteries mounting four 3.7 inch heavy AA guns that were planned or constructed around Auckland. A number of smaller (medium and light) AA batteries were also installed.

Construction began at Whenuapai in July 1942, using private contractors under the supervision of the Public Works Department, and was still under way in March 1943. The Whenuapai battery was one of the earlier types of heavy AA battery to be constructed, known as Type B, and consisted of four gun emplacements incorporating a central gunpit, crew shelters and ammunition recesses, as well as a battery command post. The wider defence complex at Whenuapai incorporated a light AA battery and searchlights.

By the end of 1943 the threat of aerial attack had receded and the batteries were placed in reserve. The guns at Whenuapai were removed in 1945, but the emplacements were left intact and were still visible in 1959. They were later infilled.

See Appendix 1 for further historical information.

# 5.0 Physical description

The historic heritage place is located across two rural residential properties at 4 Spedding Road and 92 Trig Road, Whenuapai (Figure 1), about 650m south-southwest of the Whenuapai Aerodrome. Trees have been planted along the boundary between the two properties and within the historic heritage place on the Spedding Road property within the last 20 years. At 92 Trig Road the ground cover over the historic heritage place consists of mown grass and smaller specimen trees. A large house built in the 1990s with a swimming pool and tennis court are located to the east of the historic heritage place within 92 Trig Road, and there is a house to the north at 4 Spedding Road which has been there since at least the 1950s.

The historic heritage place consists of the four concrete gun emplacements and command post that made up the Whenuapai Aerodrome Heavy AA Battery. The

features are all buried underground and their locations were initially determined on the basis of a 1959 aerial photograph taken before they had been infilled (see Appendix 4 Figure 11 overlay).

Two of the emplacements (the northern and central) and part of a third (southern) are located on the property at 4 Spedding Road, while a fourth emplacement (the southeastern) and the command post, and part of the third emplacement (the southern), are located at 92 Trig Road (see Appendix 4, Figure 11). The driveway to the house at 4 Spedding Road curves around the historic heritage place and its route has clearly been influenced by the location of the gun emplacements.

While all the features are buried, the presence of the three emplacements at 4 Spedding Road (northern, central and southern) was confirmed through visual inspection and subsurface probing.

A small part of the southern gun emplacement was either not infilled or had been emptied out and timber planks (now collapsed) laid over the top. Two concrete ammunition recesses and a connecting outer concrete wall are accessible by ladder. The recesses still retain timber uprights that would have supported shelving, and the concrete structure is in good condition, with shuttering marks still clearly evident on the walls, though there has been minor damage to an inner low concrete wall. (See Appendix 4, Figure 12–Figure 13, Figure 15–Figure 21).

In the central emplacement a single ammunition recess is not infilled and is accessible by ladder. It is in good condition, with timber shelf supports and part of a timber door still in place, but with a damp floor. (See Appendix 4,Figure 12–Figure 13, Figure 22–Figure 27).

The northern emplacement is not accessible but clearly still present subsurface. Part of its outer concrete wall is visible beneath a garden feature and subsurface concrete is identifiable through probing. (See Appendix 4, Figure 12–Figure 13, Figure 28–Figure 30).

The property at 92 Trig Road was not accessible, but inspection from the boundary and examination of aerials established that the location of the southeastern emplacement is covered by a grassed mound, while that of the command post is under grass and small specimen trees, indicating that the features would still be present subsurface. (See Appendix 4, Figure 31–Figure 32).

The gun emplacements and command post were reinforced concrete structures set into the ground and built to a standard design (Type B), which is the same as the design used at Te Atatu (Appendix 2, Figure 6–Figure 7). This type of gun emplacement is c.14m in internal diameter, set c.2m into the ground, with a central square gunpit containing mountings for the gun; walls on four sides; with access stairs at three corners down to the shelters and ammunition recesses located behind the walls; and an access ramp down to the gunpit. The concrete base to which the gun was bolted was c.3m thick. The command post was a multi-roomed rectangular structure c.13.5m by c.6.5m. (See Appendix 1 for further information).

All of the structures will still be present, largely infilled beneath the ground surface. Their full condition is not known but they were constructed of thick reinforced concrete and are probably in fair to good condition based on the parts of the two emplacements that are currently exposed. Minor damage would be expected near the ground surface and some deterioration of timber and metal elements. Other buried emplacements at Hobsonville and Te Atatu have proved to be still intact when excavated out. However, trees have been planted over much of the site within the last c.20 years and it is not known what damage the tree roots may have caused.

Key Physical Features: Four gun emplacements and a command post.

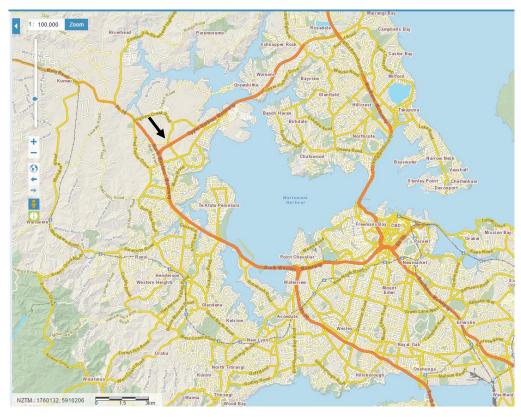




Figure 1. Location of the historic heritage place within 4 Spedding Road and 92 Trig Road (map and aerial source: Auckland Council Geomaps)

# 6.0 Comparative analysis

Surviving anti-aircraft battery sites are rare both nationally and in the Auckland region. Four heavy AA batteries survive in Auckland, at Orakei, Te Atatu, Hobsonville and Whenuapai, while two have survived in Wellington and one at Lyttelton (see Appendix 2).

The other three surviving heavy AA batteries in the Auckland region are scheduled in the Auckland Unitary Plan:

Orakei, Bastion Point: AUP Schedule 14.1 ID 01590, Category A\*, identified values A (historical), D (knowledge), F (physical attributes), G (aesthetic) and H (context).

Te Atatu, Gunner Drive: AUP Schedule 14.1 ID 00039, Category A\*, identified values A (historical) and H (context)

Hobsonville, Scott Road: AUP Schedule 14.1 ID 00144, Category B, identified values A (historical) and H (context)

A single gun emplacement that was part of the heavy AA battery at Chamberlain Park also survives in Mt Albert, and is also scheduled: AUP Schedule 14.1 ID 01722, Category A, identified values A (historical), H (context) and E (technology).

The Orakei heavy AA battery is on reserve land and accessible to the public. It is a different design to Whenuapai, being the improved Type C, but this was altered to allow the guns to bear upon areas of the harbour and provide a defence against enemy ships as well as aircraft, giving it a broader function. The Orakei battery was also the command post for Auckland's entire anti-aircraft system. It is in excellent condition (Appendix 2, Figure 8) and is located in close association with other scheduled military heritage elements (Fort Bastion, observation posts, searchlight emplacements, tunnels).

The Te Atatu heavy AA battery is on reserve land and accessible to the public. It was constructed to the same design (Type B) as the Whenuapai battery, and is in excellent condition, having been excavated out and restored within the last 20 years (see Appendix 2, Figure 6–Figure 7).

At Hobsonville, the gun emplacements are on private property and have recently been affected by subdivision. One of the emplacements and the command post have been excavated out, are in good condition and are located within a property on Scott Road (the command post beneath the existing house). Two emplacements are still infilled, one within the road reserve, and the fourth has been partially demolished to make way for housing.

The single Chamberlain Park gun emplacement is accessible to the public.

The anti-aircraft batteries are part of a wider defence system in Auckland and nationally, which includes numerous other extant World War II defences, and earlier defences dating back to the 19th century. These have been detailed in studies by Cooke (2000) and Corbett (2003) (see references in Appendix 1).

# 7.0 Significance criteria

#### (a) Historical

The place reflects important or representative aspects of national, regional or local history, or is associated with an important event, person, group of people or idea or early period of settlement within the nation, region or locality.

The Whenuapai heavy AA gun battery is associated with the defence of Auckland and New Zealand during World War II, a historical event of both national and international significance. Its construction and operation were associated with the New Zealand Army and the Public Works Department, organisations which contributed significantly to the defence of the nation during the war. The Whenuapai battery was part of an extensive defence system known as Auckland Fortress, which included anti-aircraft defences protecting Auckland from aerial attack and other gun batteries and associated defence works providing protection from enemy ships. Similar fortress systems including AA batteries were established at Wellington, Dunedin and Lyttelton, protecting the country's key ports.

Anti-aircraft defences at military aerodromes, including Whenuapai, were a key element of New Zealand's defence response (Cooke 2000: 264-6). It was considered at the time that a Japanese invasion would be preceded by air reconnaissance and then by heavy air attacks. It had been observed that the Japanese always started their operations by seizing aerodomes and establishing shore-based aircraft, and weakly defended aerodromes were therefore considered to be a grave danger.

The Whenuapai battery is now one of only four surviving heavy AA batteries in Auckland and one of only seven nationally, and is therefore rare at a regional and national level.

The Whenuapai heavy AA battery therefore has considerable historical significance at a local, regional and national level as it represents an important period and event in New Zealand's history, and is an example of a regionally and nationally rare type of heritage place.

See Appendix 1 for a fuller historical background.

# (b) Social

The place has a strong or special association with, or is held in high esteem by, a particular community or cultural group for its symbolic, spiritual, commemorative, traditional or other cultural value.

The Whenuapai heavy AA battery is buried and not known to the general public, but is of interest to military historians and is referenced in their reports. It represents an important period in Auckland's history and has the potential, if public access became available, to become a focus of community remembrance and commemoration of World War II and the role of Whenuapai as part of New Zealand's defence response during this period. It is considered to have moderate social value at a local level based on its potential to identify and preserve an aspect of Whenuapai's history that is at risk of being forgotten.

#### (c) Mana Whenua

The place has a strong or special association with, or is held in high esteem by, Mana Whenua for its symbolic, spiritual, commemorative, traditional or other cultural value.

The Whenuapai heavy AA battery is not known to have a strong cultural association with, or be held in high esteem by, Mana Whenua.

The importance of the place to tangata whenua is for mana whenua groups to determine.

#### (d) Knowledge

The place has potential to provide knowledge through archaeological or other scientific or scholarly study, or to contribute to an understanding of the cultural or natural history of New Zealand, the region, or locality.

The battery site has some potential to provide information relating to its construction through archaeological investigation or scholarly study, but this is limited, as it was built to a standard design and there is another example built to the same plan at Te Atatu which has already been restored and studied. However, it is possible that it may have incorporated minor local innovations or improvements, which would only become apparent if the battery was excavated and cleared.

If it were made accessible to the public with appropriate interpretative information, it has the potential to enhance public understanding of Auckland's defences during World War II, and the important role played by Whenuapai Aerodrome, which it was designed to protect.

It therefore has moderate knowledge value at a local and regional level based on its potential for presentation and public education in order to enhance understanding and appreciation of Whenuapai's role as part of a significant Auckland-wide defence system during World War II.

#### (e) Technological

The place demonstrates technical accomplishment, innovation or achievement in its structure, construction, components or use of materials.

The gun battery is a good representative example of a heavy AA battery, a type of defence that was of relatively recent development both in New Zealand and internationally, and is one of only two of its particular type in the Auckland region. Although built to standard designs, the gun emplacements demonstrate some technical innovation by the designers through improvements to allow easier installation and removal of the guns. It is therefore considered to have moderate technological value at a regional level.

#### (f) Physical attributes

The place is a notable or representative example of a type, design or style, method of construction, craftsmanship or use of materials or the work of a notable architect, designer, engineer or builder.

The gun emplacements and command post are good representative examples of reinforced concrete defence structures in general, and heavy AA emplacements in particular. While reinforced concrete defence structures are not rare in the Auckland region, AA batteries were designed and developed by military engineers immediately prior to and during World War II and are relatively rare regionally and nationally. The gun battery is therefore considered to have moderate physical value at a regional and national level.

#### (g) Aesthetic

The place is notable or distinctive for its aesthetic, visual, or landmark qualities.

The Whenuapai gun emplacements and command post are buried and have no aesthetic, visual or landmark qualities.

# (h) Context

The place contributes to or is associated with a wider historical or cultural context, streetscape, townscape, landscape or setting.

The Whenuapai heavy AA battery is closely associated with the Whenuapai Aerodrome located less than 1km to the north, having been installed to protect it from aerial attack.

Historically, it played an important role in Auckland's wartime defences, collectively known as Auckland Fortress. These included 11 other heavy AA batteries, a number of medium and light AA batteries, as well as a network of defences against sea attack which included gun batteries, observation posts, tunnels and searchlight emplacements. Auckland Fortress made up a significant part of New Zealand's defences during World War II, defending its largest city and port.

Today, the Whenuapai heavy AA battery has collective value as part of the surviving landscape of World War II (and earlier) defence sites in the Auckland region and nationally.

It is considered to have considerable context value at a regional and national level.

See Appendix 2 for further contextual information.

# 8.0 Statement of significance

The Whenuapai heavy AA gun battery has considerable historical value based on its key role in the defence of Auckland during World War II, a historical event of national and international significance, and as example of a regionally and nationally rare type of heritage place. It is one of only four surviving heavy AA

batteries in the Auckland region (only one other being built to the same design), and one of seven nationally. Its specific purpose was to defend the Whenuapai Aerodrome from aerial attack, defence of aerodromes in particular being seen as a key element of New Zealand's defence response. The place also has considerable contextual value as part of the surviving landscape of World War II (and earlier) defence sites in the Auckland region and nation-wide, which includes numerous other gun batteries and associated structures installed to provide protection from attack by sea. The place has moderate social value based on its potential to identify and preserve an important aspect of Whenuapai's history and identity that might otherwise be forgotten. It has moderate knowledge value in its potential to enhance understanding and appreciation of Whenuapai's contribution to Auckland's defence during World War II, through presentation to the public and on-site interpretation. It also has moderate technological significance as a good representative example of a particular type of AA battery demonstrating some improvements in design, and moderate physical attributes as a good representative example of reinforced concrete defence structures.

Overall, the Whenuapai battery is considered to have considerable heritage significance based on its historical and contextual values at a local, regional and national level.

# 9.0 Extent of the place for scheduling

The Whenuapai Heavy AA Battery is recommended for scheduling as a Historic Heritage Place. The identified extent of the place for scheduling is the area that is integral to the function, meaning and relationships of the place.

The extent of the area recommended for scheduling is shown on Figure 2. This includes the four gun emplacements and the command past, and extends over two adjacent properties. The western boundary follows the line of the existing driveway, which curves around the heritage place and clearly been influenced by the location of the gun emplacements.

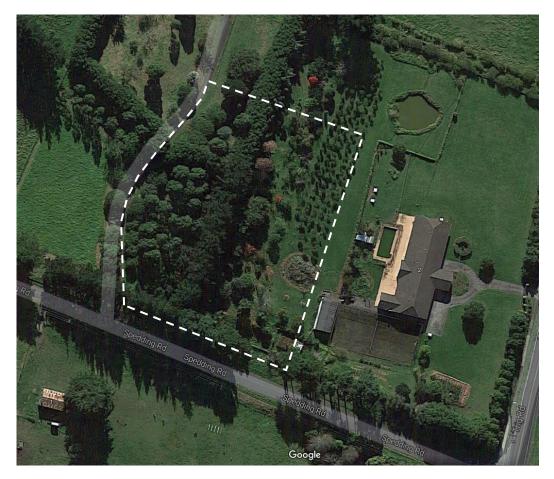


Figure 2. Extent of Whenuapai Heavy AA Battery recommended for scheduling

# 10.0 Recommendations

The Whenuapai Heavy AA Battery is recommended for scheduling as a Historic Heritage Place: Category B, as it has considerable overall significance to the locality, wider region and nation based on its historical value (A) and context value (H).

# 11.0 Table of Historic Heritage Values

Significance Criteria (A-H)	Value* (None, Little, Moderate, Considerable, Exceptional)	Context (Local, Regional, National, International)	
A- Historical	Considerable	Local, Regional, National	
B- Social	Moderate	Local	
C- Mana Whenua	N/A	-	
D- Knowledge	Moderate	Local, Regional	
E- Technological	Moderate	Regional	
F- Physical Attributes	Moderate	Regional, National	
G- Aesthetic	None -		
H- Context	Considerable Regional, National		

# \*Levels of significance or value:

**Exceptional**: of outstanding importance and interest; retention of the identified value(s)/significance is essential.

**Considerable**: of great importance and interest; retention of the identified value(s)/significance is very important.

**Moderate**: of some importance and interest; retention of the identified value(s)/significance is desirable.

Little: of limited importance and interest.

NA/None: none identified

# 12.0 Overall Significance

Place Name	Whenuapai Heavy AA Battery		
and/or Description			
Verified Location	4 Spedding Road and 92 Trig Road, Whenuapai		
Verified Legal	Refer to diagram: parts of Lot 17 DP 62344 (4 Spedding		
Description	Road) and Lot 16 DP62344 (92 Trig Road)		
Category	В		
<b>Primary Feature</b>	Gun emplacements and command post		
Known Heritage	A, H		
Values			
Extent of Place	Refer to planning maps		
	SE corner of 4 Spedding Road and SW corner of 92		
	Trig Road, Whenuapai		
Exclusions	None		
Additional			
Controls for			
Archaeological			
Sites or Features			
Place of Maori			
Interest or			
Significance			

# 13.0 Other recommendations

The place has been planted with trees within the last 20 years. These should be removed as they may cause future damage to the site through root growth.

Author Sarah Macready, Clough & Associates Ltd, Heritage Consultants

Date May 2017

Reviewer Robert Brassey, Auckland Council Cultural Heritage Unit

**Date** 6 June 2017

# **Appendices**

# **Appendix 1 Historic research**

Following Japan's entry into World War II with the bombing of Pearl Harbour in December 1941, the provision of anti-aircraft defences to protect key infrastructure and military installations became a priority. A programme of light and heavy anti-aircraft (AA) batteries was started early in 1942, but before it had reached completion the threat of Japanese attack had diminished and many of the works were abandoned (Grattan 1948: 555).

Anti-aircraft defences at military aerodromes were a key element of New Zealand's defence response (Cooke 2000: 264-6). It was considered at the time that a Japanese invasion would be preceded by air reconnaissance and then by heavy air attacks. It had been observed that the Japanese always started their operations by seizing aerodomes and establishing shore-based aircraft, and weakly defended aerodromes were therefore considered to be a grave danger. Whenuapai Aerodrome was therefore a location of key strategic importance and its defence a priority.

By early 1943 four-gun AA batteries had been completed at Whenuapai and at 11 other locations around Auckland, including at Hobsonville Aerodrome and the Te Atatu Peninsula (Corbett 2003: 157-61; Grattan 1948: 555-560; Cooke 2000: 544, 552, 553, 558-9, 561, 566; Clough & Macready 2015).

Construction of the heavy AA batteries involved not only construction of gun emplacements, but also auxiliary structures such as shell recesses, observation and predictor posts and accommodation for personnel. Sites had to be levelled, sewerage, drainage and water provided and access roads formed. Accommodation for personnel included dormitories, messrooms, orderly rooms, stores, ablution blocks, cookhouses, etc. (Grattan 1948: 555).

Corbett (2003: 160) describes the design of the gun emplacements as follows:

'The gun emplacements were nine-sided reinforced concrete structures recessed into the ground, with the gun bolted into its centre. Around the sites of the emplacements were recesses for the ready use ammunition and a telephone cupboard. On some of the batteries two rectangular crew shelters were incorporated into the sides of the emplacements. They were intended as rest quarters for the crews on duty, but were soon abandoned as they were unpopular with the crews, the Public Works Department describing them as "unsatisfactory". The emplacements were placed in an arc with the command post, also of reinforced concrete, in the centre.'

The earliest heavy AA emplacements built in New Zealand in 1942, with the built-in crew shelters, were War Office designs, called Type A and B (Cooke 2000: 561). In these types the crew shelters and ammunition storage were in large extensions off the central pit. In addition to being unpopular with the crews, in October 1942 they were found to be 'not acceptable because shells placed in recesses may be hit by ejecting cases or enemy aircraft fire, and it is impossible to keep ammo dry' (SSO Arty, quoted in Cooke 2000:561). The Public Works Department was asked to modify the design to suit New Zealand requirements and minimise construction work and costs, which resulted in the Type C design constructed at Hobsonville and other locations, with 8 radial ammunition recesses (Cooke 2000: 561).

The design of the emplacements was also changed by replacing one of the sides with a sloping ramp so that the gun could be more easily lowered down via the ramp on its four-wheel travelling mount and positioned in the centre of the emplacement (ibid.). 'These were known as mobile emplacements, as the guns could be removed within hours, instead of the day it took to remove the static mounting bolted into the centre of the emplacement' (Corbett 2003: 160).

The battery Command Posts were two-level rectangular structures, 44ft (13.4m) by 21ft (6.4m) with 6inch (15.2cm) blast proof concrete walls, containing 'a telephone room, war shelters, accumulation room and platforms for the rangefinder and predictor' (Cooke 2000: 561) There was also an enclosed plotting room of 13 by 18 ft (4m by 5.5m) (ibid.).

The site for the heavy AA gun battery at Whenuapai was secured in June 1942 and construction began in July 1942 (Cooke 2000: 566). Figure 3 and Figure 4 show the battery under construction in July and September 1942. The emplacements were initially intended to be Type A but were later changed to Type B, and were still under construction in March 1943 (ibid.). They were built by private contractors under the supervision of the Public Works Department (Corbett 2003: 160)

The four emplacements housed 3.7 inch heavy AA guns, capable of firing a 28lb (12.72kg) shell to a height of 32,000 feet (9754m). Each gun was bolted to a concrete base 10 feet (3m) thick. The gun mounting base and platform were set 6 or 7 feet (1.8-2.1m) into the ground so that when the gun was mounted and the barrel horizontal it would just clear the surrounding ground (Grattan 1948: 558). The battery command post, which controlled the firing of the guns, was located close to the gun emplacements for easy communication with the guns.

At Whenuapai, in addition to the emplacements and command post, the wider defensive system included a light AA battery of eight 40mm Bofors guns, and six searchlights (Cooke 2000: 566).

By the end of 1943 manning of the coast and anti-aircraft defences at New Zealand's main ports was reduced, the batteries having been placed in reserve by mid-1943 (Corbett 2003: 160). The guns were removed from all the batteries in 1945 and the batteries were closed.

The heavy AA gun emplacements were left intact after the war (Cooke 2000: 566), and were still clearly visible in 1959 (see Figure 5). They were subsequently infilled, and the property in which they were situated was subdivided in 1978, placing them within two different properties (see Appendix 3, NA41D/706).

The Whenuapai and other AA defences around Auckland were part of a much larger World War II defence system known as Auckland Fortress (Corbett 2003). This included an extensive network of larger gun batteries, observation posts, tunnels and searchlights designed to protect Auckland against attack by sea. Fortress Auckland was one of several fortress defence systems in New Zealand focussed on the main ports and cities (Cooke 2000).



Figure 3. Oblique aerial photo dated 28 July 1942 showing Whenuapai Aerodrome and two of the gun emplacements under construction at 4 Spedding Road (circled), looking north (source: RNZAF Official K13160)



Figure 4. Oblique aerial photo showing the gun emplacements under construction, 7 September 1942 (source: RNZAF Official, K13464)



Figure 5. 1959 Aerial view showing the abandoned gun emplacements and command post at what are now 4 Spedding Road and 92 Trig Road, Whenuapai (source: Auckland Council)

# References:

Clough, R. and S. Macready. 2015. Proposed Residential Development, 17, 17a and 19 Scott Road Hobsonville: Heritage Impact Assessment. Clough & Associates report prepared for Scott Point Estate LP.

Cooke, P. 2000. *Defending New Zealand: Ramparts on the Sea, 1840-1950s*. Part Two. Wellington: Defence of New Zealand Study Group.

Corbett, P. 2003. A First Class Defended Port. The History of the Coast Defences of Auckland, its Harbour and Approaches. Auckland Conservancy Historic Resources Series No. 17, Department of Conservation.

Grattan, F.G. 1948. *Official War History of the Public Works Department*. Ministry of Works, Wellington.

#### Appendix 2 Supplementary comparative research

Heavy AA gun batteries were built at 12 sites around Auckland, six sites in Wellington, one at Lyttelton and one at Dunedin. The 12 Auckland sites were at:

Alexandra Park

**Auckland Domain** 

Bayswater

**Belmont** 

Chamberlain Park

Hobsonville Aerodrome

Northcote

Orakei

Ponsonby

Te Atatu

Stanley Bay

Whenuapai Aerodrome

(Corbett 2003: 159; Grattan 1948: 555-560)

Of these, all five structures making up the battery (the four gun emplacements and the command post) are preserved and on display to the public at Te Atatu (Figure 6) and Orakei (Figure 8). The Te Atatu emplacements at Gunner Drive are Type B, like those at Whenuapai. The Orakei gun emplacements at Bastion Point were Type C, but were altered to allow the guns to bear upon areas of the harbour and provide a defence against enemy ships as well as aircraft (Corbett 2003: 159). The Orakei battery was the fire command post for Auckland's anti-aircraft defence system (ibid.).

At Hobsonville, field inspection in 2015 found that all four of the Type C gun emplacements had survived, three subsurface and one exposed and in use as a garden feature at 19 Scott Road, while the command post was also preserved under the house on the property, and was in use as a wine cellar (Clough and Macready 2015). However, the property was subdivided in 2016 to be developed as part of a Special Housing Area. Today, the exposed emplacement remains in excellent condition within the main property (Figure 9), which includes the existing house, beneath which the command post is in use as a cellar. A second emplacement is located within the road reserve, but is to remain in situ, as is a third gun emplacement largely incorporated into another property but extending slightly into the road reserve. The fourth gun emplacement is now located within two properties and was partially demolished in March 2017, leaving in place the concrete base and part of the surrounding concrete wall; two houses are to be constructed over what remains.

A single Type C gun emplacement survives from the Chamberlain Park heavy AA battery (Figure 10), although others may be present or partially present subsurface. It is accessible to the public from the entrance to the Chamberlain Park Golf Course at 46A Linwood Avenue, Mt Albert.

Apart from at the five sites referred to above (Orakei, Te Atatu, Hobsonville, Whenuapai and Chamberlain Park), all other heavy AA batteries in Auckland are reported to have been destroyed (Corbett 2003: 161).

In Wellington, two of the heavy AA gun batteries are still intact: the Brooklyn battery, which is intact on private property; and the Mt Crawford battery on Department of Corrections land (Cooke 2000: 544-569). The Mt Pleasant battery at Port Hills, Lyttelton is also intact (ibid.).

In addition to the AA gun batteries, there are numerous extant World War II concrete coast defence structures in the Auckland region designed to protect the port and city from attack by sea. These are described by Corbett (2003) and Cooke (2000) and include the large 9.2 inch gun batteries at Stony Batter on Waiheke Island and Whangaparaoa, the 6 inch gun battery on Motutapu Island, and various subsidiary batteries, observation posts, tunnels, searchlights and pillboxes. There are also a number of earlier concrete coast defence structures dating back to the Russian Scare of the 1880s and the first three decades of the 20th century, including at North Head, Mt Victoria, Fort Takapuna and Bastion Point, Orakei (ibid.), which are all part of the broader historical landscape relating to coast defence.

Similarly, the Auckland Fortress defences during World War II and its antecedents were part of a national system of defence protecting the country's main ports and cities (Cooke 2000).



Figure 6. Aerial view of the heavy AA battery at Gunner Drive, Te Atatu (source: Google Maps)



Figure 7. Closer aerial view of a gun emplacement and the command post at Te Atatu (source: Auckland Council Geopmaps)



Figure 8. Aerial view of the heavy AA battery at Bastion Point, Orakei (source: Google Maps)



Figure 9. Photograph of the exposed gun emplacement at 19 Scott Road, Hobsonville, looking down the ramp towards the gunpit, with ammunition recesses visible on the far side (photo: Macready 2015)



Figure 10. The single surviving gun emplacement at 46a Linwood Avenue (Chamberlain Park Golf Course), Mt Albert (source: Auckland Council Geomaps 2015/16)

# References:

Clough, R. and S. Macready. 2015. Proposed Residential Development, 17, 17a and 19 Scott Road Hobsonville: Heritage Impact Assessment. Clough & Associates report prepared for Scott Point Estate LP.

Corbett, P. 2003. A First Class Defended Port. The History of the Coast Defences of Auckland, its Harbour and Approaches. Auckland Conservancy Historic Resources Series No. 17, Department of Conservation.

Grattan, F.G. 1948. Official War History of the Public Works Department. Ministry of Works, Wellington.

Macready, S. 2017. Whenuapai Gun Emplacements: Field Assessment. Clough & Associates report prepared for Auckland Council.

# **Appendix 3 Certificates of title**

		·*	
į	NEW	ZEALAND	[Говм В.
	Folio		$Register ext{-}book,$
Reference : Transfer No. Application No.	5959		Vol. 241, folia 28
Order for N/C 1			•
CERTII	FICATE OF TITLE	UNDER LAND	TRANSFER ACT.
			-
This Certificate, dated	the Lineary fursi day	of Sphere us, one thor	usand nine hundred and filken Witnesseth that
The Public	$\sigma$	nd Registration District of	CHICKICANO WELLIERBELY VALUE
CIN 2 HONO	C Walks		
is seised of an estate in fee-si	mple (subject to such reservations, rest	rictions, encumbrances, liens, and i	nterests as are notified by memorial under written e provisions of any Act of the General Assembly
of New Zealand) in the land	hereinafter described, as the same is de	elineated by the plan hereon border	ed, be the several admeasurements
a little more or less, that is	to say: All that parcel of land contains	emi all le la	
in the land	Registry Office at (	Ruckland under	1) of the Parish of
waipaneina	ad is Worment	II. Da Lique exp	y 10 101331 S
	A.		
			Musu
		: 10	District Land Registrar.
	**************************************	lo Part II of the	of Mile is prived subject.
11	1		Dot fand for
	53	Lease Nº 8460 It	Public Lystee to Thomas
	380/-7	Henry Gilson	for the town of 21 years
156	58	January 1919 at	//
	68- / <sup>-</sup> 03	3//	Canadus
		Francjor 10 2	68 915 The Public Cinetec
	\$182.0	to dis hayes	ry the King prostaged
		35735 at 1156 0	un or or
	//	Lease M. 17412	His Majesty the King to
	Scale 10 Chains to an	Thomas Den	y Sibron: lerm 21 iflars g: produced 27-6-39 at 2.150.
	<i>D. I. P.</i>	fon 1-1-193.	A Comment
		Transfer 4558.	
		Elomas Henry	gebron to record
		- information	Moujanine all.
		mortgage 3360.	so serbent blifton monie
			vances borkoration of home
•		7 caland Rudusco	1-7-1949 9 300

0.221

Reference: Certificate No. K. 44539

Reference: P.R. Vol. 203 folio 399

Transfer No.



ZEALAND

Register-book.

56 . folio

Schedule

# CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

of Grant, Witnesseth that HERBERT	CLIPTON NOASE of Kumeu, sharemilker,
scised of an estate in fee-simple (subject to such reservation	ons, restrictions, encumbrances, liens, and interests as are notified by memorial under
	ght of the Crown to take and lay off roads under any Act of the General Assembly of
w Zealand) in the land hereinafter described, as the same i	is delineated by the plan hereon bordered green, be the several admensurements a
le more or less, which said land was originally acquired by	
	, as from the
eighteenth day of July	, one thousand nine hundred and fifty-two under Sections 122
1 128 of the Lend Act, 1948.	and the state of t
	that is to say: All that parcel of land containing us more or less being Allotment 58 Parish of Weipereira
	- Neipareira
TRIC AREA IS 27. 927 8hd	DISTRIC
2706278 Lia	Markon
Conversion Factors: / 1 Acre = 4046m²	
1 Perch = 25.29m²	Assistant - Dictric Land Registrar.
1 Link = 2012 metres Walacas	
Parish of Waipare	CALAN.
	Subject to the reservations and conditions imposed
	by Section 59 of the Land Act, 1948.
	Mortgage 336050 Herbert Clifton Mosse to the State
· ·	Advences Corporation of New Iseland - produced
	J.L.R.
	K. 41979 Compensation Certificate by The Minister of
59	Works - entered 23/8/1952 at 10.3 o'c
1601-7	Mortgage 375768 Herbert Wifton Edase to the State
Allot 58 70	Advances Corporation of Mes 24 1and - produced
Flan	4/11/1952 8\$ 10. 1 west and Margon
D.P. 10424	V45575 (7-4
62 *44 1	The Miniation of Works, Intered 3: 4:1958
68 - 1 - 03	nt 2.20 occ Vihlemett
The state of the s	A24608 Invalor to lovely America his God at
	A 214608 I muster to Coroly's Properties Vinited at huckland. Produced 12.4. 1967 at 12.180's
	Memphis ALR
7/	A 214 600 morting to tarlet Cliffon house Produced
ļ <b>ļ</b>	45/653 dr 12.673 de 11/2 de 11
D.P. 10424	1. 218904 hope took Die Williamsey back y
Scale: 10 Chains to an iach.  1.3 Ros (Cite Surveyor)	blub mad salahir at Henderson
	10 1 10 10 10 10 10 10 10 10 10 10 10 10
Marrison & Grierson	19.4.1967 200 9. 50%
	la Tunbrige M.



# COMPUTER FREEHOLD REGISTER UNDER LAND TRANSFER ACT 1952

# R.W. Muir Registrar-General

#### Historical Search Copy

Identifier NA41D/706
Land Registration District North Auckland
Date Issued 09 August 1978

#### Prior References

NA1066/29

Estate Fee Simple

Area 5.7389 hectares more or less Legal Description Lot 17 Deposited Plan 62344

Original Proprietors Bhamji Properties Limited

#### Interests

Subject to Section 59 Land Act 1948

K41979 Compensation Certificate by The Minister of Works - 23.8.1952 at 10.03 am

K65575 Compensation Certificate by The Minister of Works - 30.4.1958 at 2.20 pm

Fencing Covenant in Transfer C877701.4 - 15.8.1995 at 11.51 am

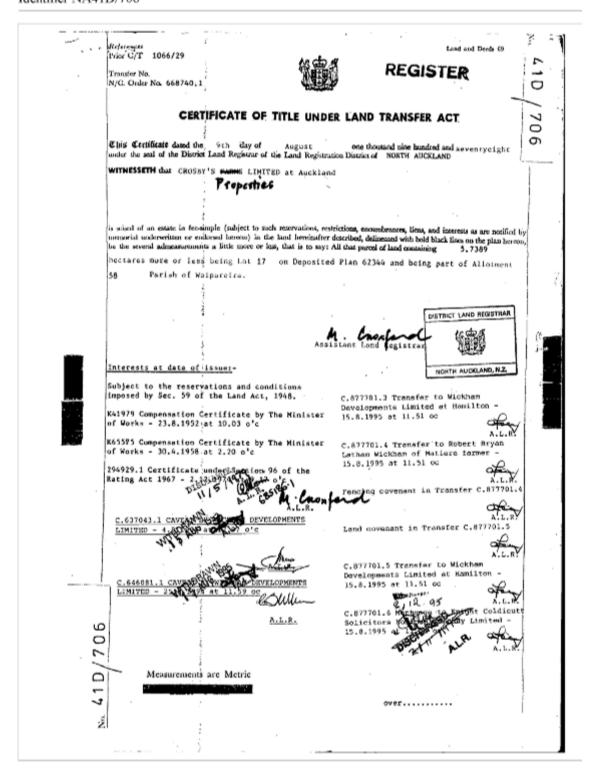
Land Covenant in Transfer C877701.5 - 15.8.1995 at 11.51 am

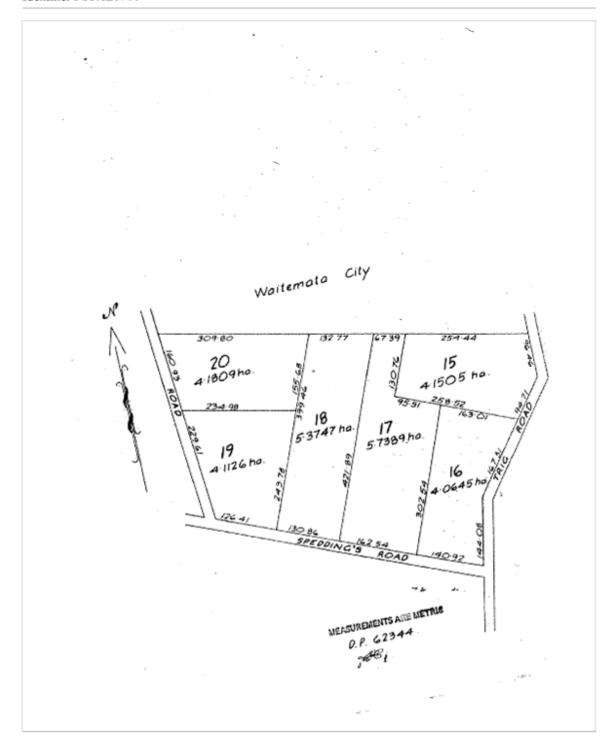
7548123.1 Departmental dealing correcting the instrument number from Transfer C877701.5 to Transfer C877701.4 - 19.9.2007 at 3:31 pm

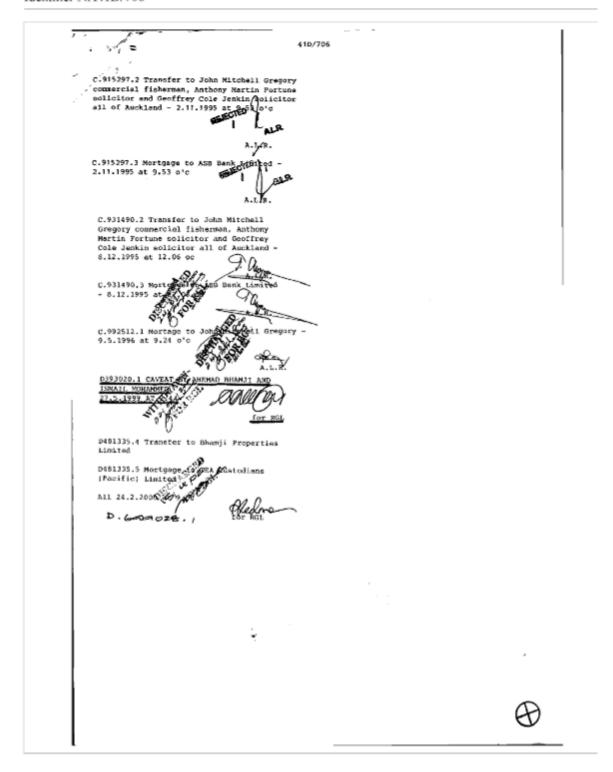
7690968.1 Transfer to Goddit Limited - 31.1.2008 at 12:12 pm

7690968.2 Mortgage to Westpac New Zealand Limited - 31.1.2008 at 12:12 pm

Transaction Id Client Reference 1428 Hinorical Search Copy Dated 11/05/17 3:34 pm, Page 1 of 4







# **Appendix 4 Photographs and plans**

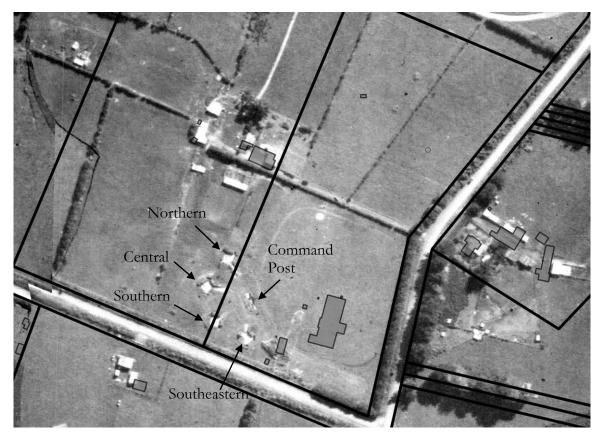


Figure 11. 1959 aerial view with current property boundaries and existing buildings overlaid (aerial source: Auckland Council). Labels identify the emplacements as referred to in subsequent photos

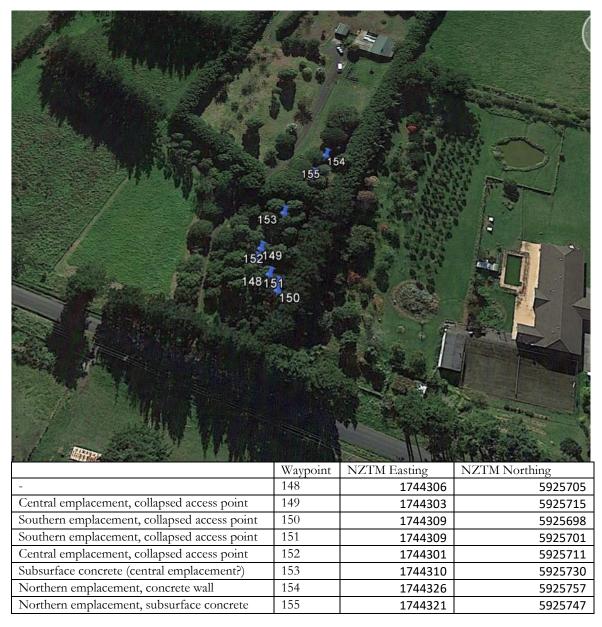


Figure 12. Aerial view showing GPS points taken in March 2017 at the southern (150, 151), central (149, 152, 153) and northern (154, 155) gun emplacements on the property at 4 Spedding Road

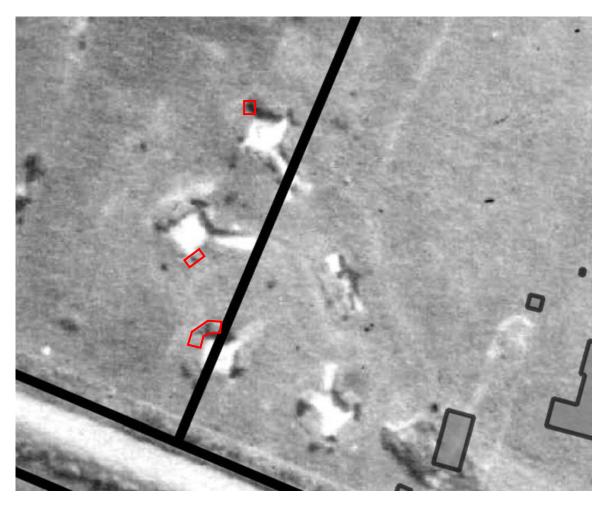


Figure 13. Locations where parts of the northern, central and southern emplacements were identified during field survey in March 2017



Figure 14. General view looking south over the area of the central and southern emplacements at 4 Spedding Road, showing planted trees over the site



Figure 15. Southern emplacement, looking SE. Ammunition recesses are located to the left and right (arrows)

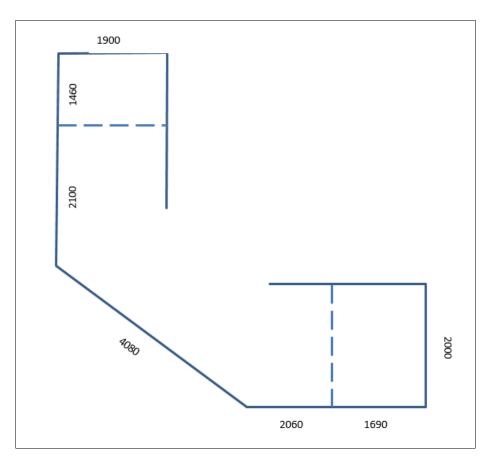


Figure 16. Southern emplacement – sketch plan of accessible area with approximate measurements



Figure 17. Southern emplacement looking S, showing collapsed timbers and soil/rubbish within the structure



Figure 18. Southern emplacement looking E



Figure 19. Southern emplacement, looking S towards southern ammunition recess. Note timber uprights for shelving and ventilation hole (arrows)



Figure 20. Looking E towards eastern ammunition recess in southern emplacement





Figure 21. Southern emplacement. Left: Timber shelving supports in eastern ammunition recess. Right: Looking south, showing area of damaged concrete (arrow), with southern ammunition recess beyond



Figure 22. Collapsed entrance point to central emplacement, looking NE



Figure 23. Ammunition recess in central emplacement, looking E/NE



Figure 24. Timber shelving uprights at side of ammunition recess in central emplacement



Figure 25. Central emplacement, looking out (SW) from within the ammunition recess, with wooden door still partially in place



Figure 26. Looking out (NW) from within the ammunition recess in the central emplacement, showing side wall inside and outside the recess



Figure 27. Central emplacement, looking W from within recess



Figure 28. Location of northern emplacement, looking SSW. The nearest tree is located within the area of the gun pit. To the right (arrow) is a stone and concrete edged garden area where a concrete wall was visible (at waypoint 154 – see Figure 12)



Figure 29. The concrete wall of the northern emplacement beneath the stone and concrete edging around the garden feature, looking W



Figure 30. Northern emplacement looking north showing the concrete wall (left arrow) and the one of the locations of subsurface concrete detected through probing (right arrow)



Figure 31. Looking E from property boundary towards the location of the fourth (southeastern) emplacement at 92 Trig Road which has been covered by a grassed mound

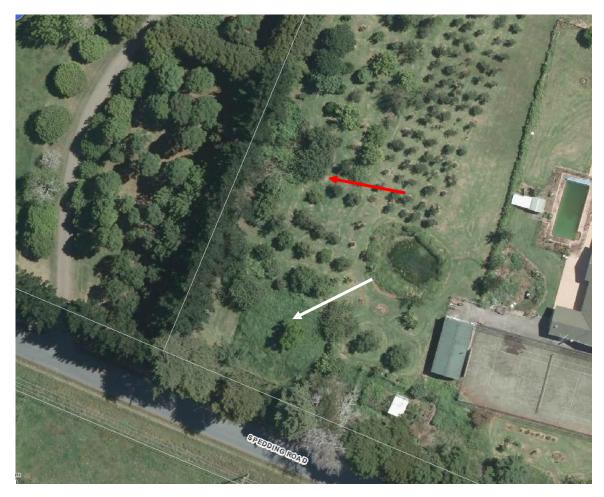


Figure 32. White arrow indicates the grassed mound in the location of the fourth (Southeast) emplacement. Red arrow indicates the general location of the command post, based on the 1959 aerial. Aerial source: Auckland Council Geomaps