



HERITAGE NEW ZEALAND
POUHERE TAONGA

New Zealand Heritage List/Rārangi Kōrero – Report for a Historic Place **World War Two Fuel Tank Blast Wall, PAEKĀKĀRIKI** **(List No. 9869, Category 1)**



HNZPT staff at the WW2 Fuel Tank Blast Wall, Paekākāriki (B.Wagstaff, Heritage New Zealand, 9 February 2023)

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EXECUTIVE SUMMARY

Purpose of this report

The purpose of this report is to provide evidence to support the inclusion of the World War Two Fuel Tank Blast Wall in the New Zealand Heritage List/Rārangi Kōrero as a Category 1 historic place.

Summary

The World War Two Fuel Tank Blast Wall, built in 1942-43 for the associated US Marines camps at Paekākāriki, has outstanding historical significance as a demonstration of New Zealand's role in the allied response to the Pacific War against Japan. It is a rare surviving structure to represent the transformation of New Zealand localities such as Kapiti when they accommodated the US Marines and defence activity. As an authentic example among only three blast walls confirmed to survive, its architectural and technological values show the skill and co-operation of the builders in meeting the defence demands of a top-secret programme in a pressured timeframe. The structure is within the important ancestral landscape of Wainui, significant to mana whenua Ngāti Haumia ki Paekākāriki of Ngāti Toa, with shared interests extending to Ātiawa ki Whakarongotai. Its heritage values are enhanced by its location amidst a historical landscape of the former Kapiti camps, marked by the ongoing commemorative activities of the community.

At the start of the nineteenth century Kapiti was inhabited by Rangitāne, Muaūpoko, and Ngāti Apa, who had intermarried with Ngāti Ira people. From 1822 successive waves of hapū and whanau from Kawhia and Taranaki moved to the region, led by Ngāti Toa chief Te Rauparaha who valued Kapiti's strategic location for trading with the European whalers who were beginning to frequent Cook Strait. Conflicts between the migrant and incumbent groups resulted in tribal boundaries being redrawn and Ngāti Toa Rangatira, Ātiawa ki Whakarongotai and Ngāti Raukawa ki te Tonga became mana whenua along the Kapiti Coast. European colonisation, and the sale of the Wainui Block in 1859, reduced Māori lands near Paekākāriki to a number of reserves for settlement and cultivations; these were further reduced by subdivision, sale, and seizure by the Crown for public works. Ngāti Haumia ki Paekākāriki have maintained ahikā at Wainui. By the twentieth century the subject land was owned and farmed by Harold Smith, whose brothers had adjoining farms.

The Japanese attack on Pearl Harbour in December 1941 brought the threat of invasion sharply into focus for New Zealand. New Zealand joined Britain and the United States in declaring war on Japan, and New Zealand began hosting US Marines (USMC) in a mutually beneficial arrangement: New Zealand was a strategic staging and supply post for the US Military's operations in the Pacific, while the

Marines strengthened our defences. Three large camps were built at the north of Paekākāriki to accommodate 15,000 servicemen, swelling the small seaside village between June 1942-November 1943. The Public Works Department was also ordered to build a network of camouflaged Aviation Reserve fuel depots around the country, to service planned US air bases. Each bolted steel fuel tank was to be encircled by a splinter-proof blast wall to limit damage from explosions.

Aviation Reserve 17 at Paekākāriki was started in May 1942 in a valley near the camps. The Public Works department excavated a former meander of the Te Puka Stream and built the blast wall foundations. The 10-metre-high x 18-metre diameter circular brickwork was completed by Love Construction Co. between February and April 1943. USMC Engineers welded and laid 670 metres of fuel pipeline between the tank and a railway siding, and road filling points suggest the installation was uniquely for holding US motor spirits instead of aviation fuel. A bolted 350,000-gallon tank was sent from the USA, but the tank panels were in poor condition and needed preparatory treatment.

However, before the tank could be assembled, all further construction was cancelled on 29 April 1943 due to changing strategic priorities. The PWD resisted orders to return the site to its original state. The suggested reuse of the installation as a water reservoir ultimately came to nothing and it was left in situ. In 2012 the farm was taken by the Crown and the Transmission Gully Motorway built near to the blast wall, which was identified for heritage conservation as part of the project.

1. IDENTIFICATION¹

1.1. Name of Place

Name

World War Two Fuel Tank Blast Wall

Other Names

AR17 (Aviation Reserve 17); AR17 Bulk Fuel Storage Site; Paekākāriki Fuel Containment Structure; Brick Fuel Containment Tank; Petrol Storage Tank; Paekākāriki Fuel Tank Splinter-proof Wall; Fuel Storage Tank

1.2. Location Information

¹ This section is supplemented by visual aids in Appendix 1 of the report.

Address

Te Puka Stream
State Highway 59
PAEKĀKĀRIKI
Wellington

Additional Location Information

The tank site is near to 324 State Highway 59, Paekākāriki, and sits just to the west of the northern end of Te Ara Nui o Te Rangihaeata/Transmission Gully (State Highway 1), alongside Te Puka Stream.

GPS (NZTM): N1765396.98m; E5460990.00m.

Local Authority

Kāpiti Coast District Council

1.3. Legal Description

Lot 1 DP 368307 (RT 277518), Wellington Land District

1.4. Extent of List Entry

Extent includes part of the land described as Lot 1 DP 368307 (RT 277518), Wellington Land District and the structure known as World War Two Fuel Tank Blast Wall thereon, including a curtilage of 5 metres around the circular structure and extending approximately 20 metres west towards the edge of the farm track near Te Puka Stream, to encompass the outer sump and its outlet pipe, and the approximately 10 metres of remnant fuel pipeline visible north of the outer sump in the track embankment.

(Refer to [map in Appendix 1](#) of the List entry report for further information).

1.5. Eligibility

There is sufficient information included in this report to identify this place. This place is physically eligible for consideration as a historic place. It consists of land and a structure that is fixed to land which lies within the territorial limits of New Zealand.

1.6. Existing Heritage Recognition

Local Authority and Regional Authority Plan Scheduling

Scheduled in Kāpiti Coast District Plan, Operative 30 June 2021, B87 'Petrol Storage Tank' in SCHED7 Schedule of Historic Heritage.

Other Protection Mechanism

Designation NZTA-002 Transmission Gully Main Alignment/Te Ara Nui o Te Rangihaeata (State Highway Purposes) in Kāpiti Coast District Plan.

New Zealand Archaeological Association Site Recording Scheme

This place or sites within this place have been recorded by the New Zealand Archaeological Association. The reference is R26/415: Fuel Storage Tank.

2. SUPPORTING INFORMATION

2.1. Historical Information

The climate and resources of the Kapiti Coast have attracted people for many centuries. Traditions hold that Kapiti Island was sliced from the mainland by the great Polynesian explorer Kupe.² Following permanent settlement in Aotearoa, the rangatira Tara, son of Whātonga of the Kurahaupō waka, settled at what came to be known as Te Whanganui-a-Tara (Wellington harbour) and around the region.³ Descendants of his brother Tautoki, known as Rangitāne, settled in Kapiti, the Manawatū and Wairarapa.⁴ In time, groups now known as Muaūpoko and Ngāti Apa also emerged and settled in the district, and were closely allied with their Rangitāne kin.⁵ Ngāti Rangi hapū are said to have occupied the area around

² Chris Maclean, 'Wellington region - Early Māori history', *Te Ara - the Encyclopedia of New Zealand*, <http://www.TeAra.govt.nz/en/wellington-region/page-5>, accessed 18 January 2023

³ Matene Love, *Te Ara o Ngā Tuna: the Path of our Ancestors*, <http://www.wcl.govt.nz/maori/wellington/TeAra1.html> (accessed 5 June 2020); Darren Reid, 'Muaūpoko - Early history', *Te Ara - the Encyclopedia of New Zealand*, <http://www.TeAra.govt.nz/en/muaupoko/page-1>, accessed 18 January 2023

⁴ Robyn Anderson and Keith Pickens, *Rangahaua Whanui District 12 – Wellington District: Port Nicholson, Hutt Valley, Porirua, Rangitikei, and Manawatu*, Waitangi Tribunal, August 1996, p.4

⁵ Ballara notes that groups known by older names Ngāti Hamua and Rakai-whakairi also shared Kapiti pā with Rangitāne. Angela Ballara, 'Te Whanganui-a-Tara: phases of Māori occupation of Wellington Harbour c.1800-1840', in David Hamer and Roberta Nicholls (eds), *The Making of Wellington 1800-1914*, Victoria University Press, Wellington, 1990, p.13; Darren Reid, 'Muaūpoko - Invasion and colonisation', *Te Ara - the Encyclopedia of New Zealand*, <http://www.TeAra.govt.nz/en/muaupoko/page-2>, accessed 18 January 2023; W.W. Carkeek, *The*

Paekākāriki and Paraparaumu.⁶ In the seventeenth century Ngāti Ira of Hawke's Bay arrived in the region and extensive intermarriage occurred. Other iwi who made a home in the region included Ngāti Kahungunu, Ngāi Tahu, and Ngāti Māmoē.⁷

Nineteenth century arrivals in the district

From 1819, war parties (tauā) and successive migrations (heke) of northern tribes triggered more conflict and dislocation in the region. The catalyst for this has often been attributed to the northern Māori acquisition of European muskets but other factors contributed, such as changing codes of inter-tribal relations, changing practices of warfare, and increased population pressure on traditional resources.⁸

A phase of warfare in the Waikato resulted in groups from Kāwhia, including Ngāti Toa Rangatira and Ngāti Koata, migrating to Kapiti in the early 1820s, after a stay in Taranaki.⁹ Ngāti Toa Rangatira descend from Hoturoa through Tuhinga, Mango and Tupahau.¹⁰ Their allies from Taranaki (Ngātiawa/Te Ātiawa, Ngāti Mutunga, Ngāti Maru and Ngāti Tama) followed suit, fearing retaliation from Waikato for having defended Motunui in 1822.¹¹ Kapiti offered a strategic location and valuable access to trading with the Pākehā whalers who were beginning to frequent Raukawa Moana (Cook Strait).¹²

Tikanga Māori traditionally established resource rights through raupatu (conquest).¹³

Conflicts between Ngāti Toa and Muaūpoko at Papaitonga resulted in Muāupoko dispersing

Kapiti Coast: Maori history and place names of the Paekakariki-Otaki district, Reed, Wellington, 1967 (this edition 2004), p.12; Grant Huwyler, 'Ngāti Apa - Origins', *Te Ara - the Encyclopedia of New Zealand*, <http://www.TeAra.govt.nz/en/ngati-apa/page-1>, accessed 1 February 2023

⁶ Carkeek notes Ngāti Rangi as being a principal hapū of Muaūpoko. Carkeek, 1967, p.17

⁷ For example Ngāti Kahungunu were said to be occupying a pā on Kapiti Island around 1819/20. Carkeek, 1967, p.21; Darren Reid, 'Muaūpoko - Invasion and colonisation'

⁸ Ballara, 1990, pp.9-11

⁹ Ngāti Toa chiefs Te Rauparaha and Te Rangihaeata had first visited the Wellington region in 1819 as part a war party led by Ngāpuhi chiefs from Northland, followed by the Āmiowhenua expedition in 1821 which included Ngāti Whatua, Ngāti Maniapoto and Ngāti Maru. Ballara, 1990, p.11, 15. Ngāti Koata migrated slightly after the initial groups. Tamihana Te Rauparaha/Ross Calman (ed.), *He Pukapuka Tātaku Ngā Mahi a Te Rauparaha Nui / A Record of the Life of the Great Te Rauparaha*, Auckland University Press, Auckland, 2020, p.153

¹⁰ Ngāti Toa Rangatira and Trustee of the Toa Rangatira Trust and The Crown, *Deed of Settlement of Historical Claims*, 7 December 2012, <https://www.govt.nz/assets/Documents/OTS/Ngati-Toa-Rangatira/Ngati-Toa-Rangatira-Deed-of-Settlement-7-Dec-2012.pdf>, accessed 31 January 2023

¹¹ The Taranaki whanui iwi of Kapiti are often referred to collectively as 'Te Ātiawa' or 'Ngātiawa' in sources of the time. Ballara, 1990, p.16

¹² Tamihana Te Rauparaha/ Calman (ed.), 2020, p.69

¹³ Te Ātiawa ki Kāpiti, 'Some aspects of Ati Awa Ki Kapiti History', <https://teatiawakikipiti.co.nz/iwi->

to refuge pā, including the escarpment at Paekākāriki.¹⁴ The migrants' claim of Kapiti was strengthened after the battle of Waiorua in 1824, in which a large force of established tangata whenua failed to oust the newcomers from Kapiti and Te Tau Ihu.¹⁵ After this, Muaūpoko, Ngāti Apa and Rangitāne withdrew northwards and Ngāti Ira south. Ngāti Toa settled the district and were soon joined by major heke of hapū and whanau from Taranaki.¹⁶ Ngāti Raukawa, a Tainui tribe from the Waikato with kinship links to prominent Ngāti Toa chief Te Rauparaha's family, migrated to the northern Kapiti coast in the late 1820s.¹⁷ Kapiti's population was further boosted in the early 1830s with more large migrations from Taranaki.¹⁸

Tensions in the increasingly crowded district built to a head in 1834 at Haowhenua pā, Ōtaki, with significant losses on all sides.¹⁹ Another major inter-tribal conflict known as Te Kuititanga occurred in 1839.²⁰

Impacts of colonial settlement

Christianity began to gain influence among Kapiti Māori in the late 1830s.²¹ Negotiations with New Zealand Company agents looking to purchase land for colonial settlement were also a prominent factor in the gradual settling of the nuanced cycles of war and dynamic movements of Māori in the Wellington region, as tribal boundaries were established.²² In the 1840s, however, colonial competition for land intensified conflict.

[history/](#), accessed 1 February 2023

¹⁴ The escarpment at Paekākāriki is on the next ridgeline west from the valley where the Fuel Tank is located. See NZAA Archaeological Site Records R26/270 (Pā), R26/182 (Pits/Terrace; Category 2 historic place List No.6140), R26/181 (Pit/Terrace; Category 2 historic place List No. 6139) and R26/180 (Pits/Terrace; Category 2 historic place List No.6138); Anderson and Pickens, 1996, pp.9-10; Carkeek, 1967, pp.29,30

¹⁵ Ballara, 1990, p.17

¹⁶ Robert McClean and Naomi Solomon, 'Cultural Impact Assessment: Proposed Paekākāriki Lifesaving Club Building, Wainui', unpublished client report, 20 Hakihea (December) 2022, p.13; Waitangi Tribunal, *Waikanae: Report on Te Ātiawa/Ngāti Awa Claims* (WAI 2200), 2022, pp.48-54; Te Ātiawa ki Kāpiti, 'Some aspects of Ati Awa Ki Kapiti History'

¹⁷ Anderson and Pickens, 1996, pp.12-13

¹⁸ Waitangi Tribunal (WAI 2200), 2022, pp.55-59

¹⁹ By this time Ngāti Ruanui and Taranaki iwi had joined the migration south, supporting Te Ātiawa at Haowhenua before moving on to Te Whanganui-a-Tara. Ballara, 1990, pp.24-25

²⁰ *ibid*, p.31

²¹ Te Ātiawa ki Kāpiti, 'Some aspects of Ati Awa Ki Kapiti History'. Historian Angela Ballara suggests that the Māori adoption of the Christian principle of peace-making, combined with earlier Māori peace-making techniques, offered ways to end the cycle of war with mana intact. Ballara, 1990, p.10

²² For example, the agreement between Te Ātiawa and the Wellington Company for land around Te Whanganui-a-Tara aligned with the territorial boundaries settled between the Port Nicholson tribes

Māori land at Kapiti was alienated through the Porirua Deed of 1847.²³ The Deed created reserves for Māori settlements and cultivations, including one at Paekākāriki and a village site nearby at the mouth of the Wainui Stream.²⁴ By this time, tensions over land in the Hutt Valley had resulted in the government detaining Te Rauparaha, and attacking his nephew Te Rangihaeata's pā at Pāuatahanui after the 1846 battle between Māori and Crown troops at Boulcott's farm.²⁵ Te Rangihaeata took position at what became known as Battle Hill, which was heavily shelled by the government force before they discovered that Te Rangihaeata had led his people to safety under cover of darkness.²⁶ His escape route northwards followed the path of today's Transmission Gully motorway, now commemorated with the name Te Ara Nui o Te Rangihaeata which Ngāti Toa Rangatira gifted in recognition of the place's significance.²⁷

Wainui Block

In 1859 the Crown purchased the Wainui Block, 30,000 acres of land which included the previous Ngāti Toa reserves at Wainui and Paekākāriki and created new reserves including Whareroa Pā (an important Te Ātiawa kāinga), and 50 acres of cultivation grounds at Te Puka, very near to the future Fuel Tank site.²⁸

and those of the Wairarapa, and the government purchase of the Manawatu/Horowhenua similarly prompted boundary delineation between Ngāti Raukawa, Ngāti Apa, Rangitāne. Anderson and Pickens, 1996, pp.21,70

²³ The Porirua Deed renegotiated the 1839 Kapiti Deed, which had been a much-disputed agreement for the sale of a huge swathe of Central New Zealand. Anderson and Pickens, pp.21, 30-31; Ministry for Culture and Heritage, 'The Port Nicholson purchase', URL: <https://nzhistory.govt.nz/war/wellington-war/port-nicholson-purchase>, updated 19-Oct-2021, accessed 8 February 2023

²⁴ The deed allowed for a portion of the land to be 'reserved and held in trust' for the future residence, benefit and maintenance of the said chiefs, their tribes and families. These reserves were insufficient and assigned without consideration of traditional ties to the whenua. Anderson and Pickens, 1996, pp.23-24, 31, 47

²⁵ Ngāti Toa's agreement to the Porirua Deed was therefore signed under pressure. Ministry for Culture and Heritage, 'Last battles', URL: <https://nzhistory.govt.nz/war/wellington-war/last-battles>, updated 19-Oct-2021, accessed 8 February 2023; Mīria Pōmare, 'Ngāti Toarangatira - 19th century: rise and fall', *Te Ara - the Encyclopedia of New Zealand*, <http://www.TeAra.govt.nz/en/ngati-toarangatira/page-3>, accessed 8 February 2023; Anderson and Pickens, 1996, p.46

²⁶ The last engagement was fought on Pouāwha maunga, uphill from the future Fuel Tank Wall site on the next ridge to the west. The bodies of the fallen were taken to Wainui pā. Carkeek, 1967, p.116

²⁷ 'The Great Path of Te Rangihaeata', Te Rūnanga o Toa Rangatira, 'Pānui: Te Ara Nui o Te Rangihaeata', 1 April 2022, <https://www.ngatitoa.iwi.nz/panui-1/te-aranui-o-te-rangihaeata>, accessed 8 February 2023; McClean and Solomon, 2022, p.10

²⁸ The adjacent Whareroa Block was sold in 1858. Walzl of the Waitangi Tribunal (WAI2200 / A194) concluded that while Te Ātiawa ki Kapiti had an identifiable connection with the Whareoa Pā Reserve in the Wainui Block, the other five Native Reserves in the block were more likely held and inhabited by Ngāti Toa, Ngāti Mutunga and Ngāti Maru. Walzl cited in Kesaia Walker and Barry Rigby, *Te Ātiawa/Ngāti Awa ki Kapiti: Twentieth Century Land and Local Issues Report, Commissioned by the Waitangi Tribunal for the Porirua ki Manawatū District Inquiry* (Wai 2200), Waitangi Tribunal,

Ballara records Ngāti Toa hapū Ngāti Te Maunu as living at Wainui Pā, near the mouth of the stream, in the late 1820s.²⁹ Ngāti Toa chief Ropata Hurumutu (1805-1875) of Ngāti Haumia ki Paekākāriki hapū settled there around 1834 and in 1871 he described it as being a large pā, with some timber houses, a school and a flour mill.³⁰ In 1850 H. Tacy Kemp observed around 195 people living there, growing wheat and kumara, processing flax, and about to move from older buildings to a new village site nearby, laid out by the government.³¹ Cultivations were Ngapaiparua, Rongo-o-Te-Wera (Ramaroa), Te Puka, Wairaka and Paekākāriki.³² Ngāti Haumia ki Paekākāriki have maintained ahikā at Wainui.³³ Miriona Mutu Mira Budge (d.1970), a descendant of Ropata Hurumutu and another Wainui rangatira Aperamaha Mutu Mira, is an important twentieth-century tupuna of Ngāti Haumia ki Paekākāriki who devoted herself to the Paekākāriki community.³⁴

In the mid-1830s neighbouring Whareroa Pā and its 13 acres of cultivations were occupied by the Ngāti Maru section of Te Ātiawa under Mitikaukau, who also occupied nearby Tipapa.³⁵ Te Ātiawa descend from Toi-te-huatahi or To-kai-rakau, who was the grandfather of Awanuiarangi, the eponymous ancestor of the iwi.³⁶ Te Ātiawa of Taranaki associate their identity with the Tokomaru waka.³⁷ There are strong interconnections between Ngāti Toa, Ngāti Tama and Te Ātiawa at Wainui and Whareroa.³⁸

December 2018, p.34; Anderson and Pickens, 1996, pp.78-80, 83-85; McClean and Solomon, 2022, p.13

²⁹ Te Peehi Kupe and his son Te Hiko are noted Rangatira of this hapū. Ballara, 1990, p.20

³⁰ In 2006 the prow of a waka was unearthed from the mouth of the Wainui Stream. McClean and Solomon, 2022, pp.14, 24; Carkeek, 1967, p.62

³¹ Henry Kemp was the Native Secretary in 1850. *ibid* p.62; 'Untitled', *Wellington Independent*, 31 August 1850, p.5 (supplement)

³² *ibid*; Carkeek, 1967, pp.189,192

³³ Native Title was awarded in April 1888, and by 1925 around half the block had been sold to private buyers; the majority of the block was taken by the Crown in 1949 and 1953 for Queen Elizabeth II Park. By 1975 only an urupā remained reserved as Māori land. Ngāti Haumia continue to live at the north end of Paekākāriki. Walker and Rigby, 2018, pp.43-44

³⁴ McClean and Solomon, 2022, p.15; Kapiti-US Marines Trust, Interpretation signage 'Camp Paekākāriki: The War Years' at south entrance to Queen Elizabeth Park, 2022

³⁵ Carkeek, 1967, pp.12, 213

³⁶ Peter Addis, 'Te Āti Awa of Taranaki', *Te Ara - the Encyclopedia of New Zealand*, <http://www.TeAra.govt.nz/en/te-ati-awa-of-taranaki>, accessed 30 January 2023

³⁷ Other Awa tribes who also descend from Awanuiarangi, such as the Bay of Plenty Ngāti Awa, associate themselves with the Mataatua waka. Peter Addis, 'Te Āti Awa of Taranaki - Origins and lands', *Te Ara - the Encyclopedia of New Zealand*, <http://www.TeAra.govt.nz/en/te-ati-awa-of-taranaki/page-1>, accessed 30 January 2023

³⁸ McClean and Solomon, 2022, p.15. Close kinship ties between interrelated groups existed at many settlements throughout the rohe and boundaries between iwi or hapū are not always clear cut. For

The Wainui Stream, and its tributary Te Puka Stream, are vital to the mauri of the locality. The lifegiving force of this awa enhances and protects the mauri of te taiao (the environment) and its people; the awa is a key indicator of its health. Te Puka and Wainui Stream have historically contained highly valued mahinga kai species of native migratory fish, such as longfin eel, koaro and redfin bully. The awa also supports the growth of rongoā plant species, important for traditional healing practices.³⁹ Restricted access and the degradation of the stream's health through Pākehā farming, roading and watercourse management activities impacted tangata whenua's kaitiaki of the whenua.

The 1847 military construction of the Paekakariki Hill Road opened up the land via an inland route along the Horokiri Valley between Pauatahanui and Paekākāriki. Construction of the Wellington-Manawatu Railway line in 1886 increased accessibility, after which the village of Paekākāriki developed.⁴⁰ Much of the northern end of Transmission Gully became owned and farmed by the Smith family.⁴¹ Tangata whenua retained a presence in the area and continued to care for their reserves, often leasing them to farmers. Native title for Te Puka Reserve was issued to Aperahama Mira, Ropata and Hirini Tangahoe, Wi Parata Te Kakakura and Heipiri Riki in 1888.⁴² By 1916 it had been sold to Leonard Smith.⁴³ His brother Harold Smith owned

example, Ngāti Toa hold sole mana whenua south of the Whareroa Stream, but hapū from Taranaki also lived at settlements at the south of the Kapiti district; for example Manukorihi hapū lived at Paripari, south of Paekākāriki. Carkeek, 1967, pp.122-123; Waitangi Tribunal (WAI 2200), 2022, p.75

³⁹ Atiawa Ki Whakarongotai Charitable Trust, 'Assessment of Ātiawa ki Whakarongotai Values Associated with Te Puka Stream', 9 March 2023, p.1

⁴⁰ Engineering New Zealand, 'Wellington and Manawātū Railway Heritage Record, <https://www.engineeringnz.org/programmes/heritage/heritage-records/wellington-and-manawatu-railway/>, accessed 21 February 2023

⁴¹ John Sidney Smith (1803-1880) was an English emigrant from Essex who had arrived in Wellington via Sydney in 1843 on board the Schooner Catherine with his wife Susan (1809-1877) and their young children, Francis (Frank) Wilson Smith (1836-1915), Isaac Smith (1842-1878) and Margaret Smith (1843-). When John Sidney Smith died in February 1880 his estate calculated his holdings at Wainui to be some 1,948 acres. In 1859 his eldest son Francis (Frank) received a 100-acre militia grant at Paekākāriki, and this appears to have been amalgamated with the land holdings of his father to create the Tunapo station at Paekākāriki which Frank leased from 1860. His brothers also took up land in the district, and the Smith family eventually came to farm an extensive area between MacKays Crossing, the Horokiwi valley and Pukerua Bay. Andy Dodd (Subsurface Ltd), '35 Wellington Road, Paekakariki: Archaeological Assessment', unpublished client report, 2022, pp.17-18; John Martin, 'Perkins Farm Buildings [DRAFT]', unpublished manuscript, [n.d – c.2022], pp.8-10

⁴² Walker and Rigby, 2018, pp.45-47

⁴³ *ibid*, p.52

the adjacent sheep farm in Transmission Gully, named 'Middle Run', which was where the Fuel Tank Wall would be built.⁴⁴ Many of the Smith's shearers were local Māori whanau.⁴⁵

World War Two

The outbreak of World War Two in 1939 immediately affected New Zealand, including those who left to serve overseas and those on the home front.⁴⁶ But the bombing of Pearl Harbour on 7 December 1941 brought the threat of Japanese invasion suddenly closer. New Zealand joined the United States and Britain in declaring war on Japan, and on 12 June 1942 the country began hosting US servicemen in a mutually beneficial arrangement: New Zealand was a strategic staging and supply post for the US Military's operations in the Pacific, while the Marines strengthened our defences.⁴⁷

Between June 1942 and mid-1944, 15,000-45,000 US Marines were at any one time stationed in various camps and facilities in the North Island. American servicemen received training for upcoming offensives, or rest and recovery in the aftermath of deployment. Facilities were a mix of temporary, purpose-built, and re-purposed existing buildings, prepared with the assistance of the Public Works Department (PWD) under the terms of the United States-New Zealand Mutual Aid Agreement signed in early 1942.⁴⁸

Over 50 accommodation camps were set up.⁴⁹ Paekākāriki was the location for three large camps, housing up to 15,000 men of the 1st and 2nd Marine Divisions of the US Marines Corps, and transforming the village of 530 residents.⁵⁰ Construction of Camp Paekakariki began on what is now the northern half of the village on 19 May 1942.⁵¹ Camp McKay was

⁴⁴ Martin, [n.d – c.2022], pp.17-18, 20

⁴⁵ Harold Smith's account books show payments to Ropata, Epiha, Mutu, Mira and others. *ibid*, p.24

⁴⁶ 'New Zealand and the Second World War', URL: <https://nzhistory.govt.nz/war/new-zealand-and-the-second-world-war-overview>, Ministry for Culture and Heritage, updated 5-Aug-2014, accessed 22 February 2023

⁴⁷ 'Overview', URL: <https://nzhistory.govt.nz/war/us-forces-new-zealand/overview>, Ministry for Culture and Heritage, updated 10-May-2021, accessed 22 February 2023

⁴⁸ 'United States-New Zealand Mutual Aid Agreement', *Appendix to the Journals of the House of Representatives*, 1942 Session 1, A-07

⁴⁹ 'The camps', URL: <https://nzhistory.govt.nz/war/us-forces-in-new-zealand/the-camps>, Ministry for Culture and Heritage, updated 10-May-2021, accessed 7 April 2022

⁵⁰ Kapiti-US Marines Trust, Interpretation signage 'Camp Paekākāriki: The War Years', 2022

⁵¹ *ibid*

built nearby on former Ramaroa Reserve land, and the 'Rail Air Shed', a large goods depot for the camps, was built at the Paekākāriki Railway Station.⁵²

On 14 June the first US troops arrived at the Paekākāriki camps for six weeks of training, before departing to Guadalcanal.⁵³ On 4 November 1942 the next groups arrived for a training block.⁵⁴ The Paekākāriki camps were expanded in February 1943 with the construction of Camp Russell (in what became Queen Elizabeth Park) to accommodate a large number of returning troops for an extended period of rest and recovery from the gruelling Pacific campaigns. Author Leon Uris published the novel *Battle Cry* about his time as a Marine at the Paekākāriki camps.⁵⁵

Paekākāriki seemed to the Marines like 'heaven after hell', and the locals opened their homes and hearts to the troops. Ngāti Haumia ki Paekākāriki provided much manaakitanga for the soldiers, despite the damage the camps were doing to their whenua.⁵⁶ Jean Andrews, daughter of Miriona Budge, recalled letting 30 soldiers use her kitchen on their first night in the camp, their regular use of her laundry, and her enjoyment of the dances, shows and movies at St Peter's Hall.⁵⁷ She also recalled suffering from the racist attitudes of some of the Americans.⁵⁸ Ngāti Haumia ki Paekākāriki assisted with the recovery of the bodies of Marines who drowned in a tragic beach-landing training exercise on 20 June 1943.⁵⁹

⁵² Ibid. Twelve local landowners had their land taken for defence purposes. Harold Smith of Middle Run farm 'came out one morning to find bulldozers ripping up the fences and the landscape of the golf course property, before even the serving of the proclamation to take over the land.' James M. Daley, *Hutt County Council Centenary 1877-1977*, Hutt County Council, 1978, p.107, cited in Martin, [n.d – c.2022], p.25; Paekākāriki Railway Station Goods Shed, Paekākāriki (Category 2 historic place, List No. 4961), <https://www.heritage.org.nz/the-list/details/4961>. *Ramaroa/Rongo o Te Wera Reserve was owned by Hemaima Rapihana, Ropata Tangahoe, Aperamaha Mira, Kereihi Putai, Hoani Warena Tunui, Tiripa Tunui, Hare Reweti, Hirini Tangahoe, Heta Wakatara Mareka, Riri ate Kahurangi and Heni Paiaro in 1887. The same year they sold the reserve to Archibald, William and Alexander Mackay.* Walker and Rigby, 2018, p.47

⁵³ The first units were from the 5th Regiment of 1st Division of US Marines. Kapiti-US Marines Trust, Interpretation signage 'Camp Paekākāriki: The War Years', 2022

⁵⁴ US Marines who were at the camps 4 November-26 December 1942 were from the 2nd Division. *ibid*

⁵⁵ Wikipedia, 'Battle Cry (Uris novel)', [https://en.wikipedia.org/wiki/Battle_Cry_\(Uris_novel\)](https://en.wikipedia.org/wiki/Battle_Cry_(Uris_novel)), accessed 24 February 2023

⁵⁶ Kapiti-US Marines Trust, Interpretation signage 'Camp Paekākāriki: The War Years', 2022; McClean and Solomon, 2022, p.20

⁵⁷ Gaylene Preston (dir.), *War Stories Our Mothers Never Told Us*, 1995, <https://www.nzonscreen.com/title/war-stories-1995>, accessed 24 February 2023

⁵⁸ 'Americans and Māori', URL: <https://nzhistory.govt.nz/war/us-forces-in-new-zealand/americans-and-maori>, Ministry for Culture and Heritage, updated 13-May-2021, accessed 24 February 2023

⁵⁹ Gaylene Preston (dir.), 1995; Frank Zalot Jr., 'Paekakariki when everything went wrong', Kapiti US Marines Trust, <https://marinenz.com/Articles/USS%20American%20Legion%20at%20Paekakariki>,

Aviation Fuel Reserves: the Paekākāriki Fuel Tank Blast Wall

In March 1942 the New Zealand government realised the need for increased storage of aviation fuel, as the US Military planned to station up to 200 aircraft here at bomber bases.⁶⁰ 12 fuel depot installations were initially planned, but Paekākāriki was not on the first list of priority sites as it hadn't yet been chosen as a camp location.⁶¹ However, the construction of what would become Aviation Reserve (AR) 17 at Paekākāriki was ordered in May 1942, after a committee from the Public Works Department, Air Force, Army Camouflage Unit, Railways Department, and Air Secretary's office had selected the tank's location.⁶² A pre-fabricated 350,000 gallon tank of bolted panels was shipped from the US due to local steel shortages, to be erected in an excavated nook of the Te Puka stream gully that could be covered with camouflage netting (a Japanese reconnaissance plane had been seen over Wellington in March 1942).⁶³ A steel pipeline would run the fuel to a siding on the railway line opposite the site. Road filling points were also included in the design, disguised at a turning circle laid out 'in an irregular manner...to give the appearance of an access track to serve the various farm buildings.'⁶⁴ The site was adjacent to the transport depot that served the camps, all of which were within easy walking distance.

Although urgent, construction of the fuel depot was delayed for a month due to the unavailability of mechanical excavators.⁶⁵ Works began in mid-July 1942, but the PWD reported that progress was slow due to the difficult site and waterlogged clay soil. In September 1942, brick walls were added to the designs for all of the AR depots that were receiving bolted tanks. The surrounding 'splinter-proof' or 'blast walls' would protect the tanks from pressure or piercing from a near-miss from a bomb, and at Paekākāriki, help

accessed 24 February 2023

⁶⁰ Gordon Burns, 'Aviation Reserve Fuel Depots', *Forts & Works: Thoughts and Words on the Defence of New Zealand*, Issue 9, August 2000, p.1

⁶¹ Air Secretary to Engineer-in-Chief Public Works Department, 23 March 1942, 'Defence Works and Buildings – Air Department Royal New Zealand Air Force [RNZAF] bulk fuel storage – Site AR17 – Paekakariki 1942-1942', item ID R21064922, box 796, file 23/553/17, Public Works Department (ACHL), Archives New Zealand

⁶² Engineer-in-Chief Public Works Department to Wellington District Engineer, 22 May 1942, item ID R21064922, Archives New Zealand

⁶³ 'Pacific War Timeline', URL: <https://nzhistory.govt.nz/war/second-world-war/war-in-the-pacific/timeline>, Ministry for Culture and Heritage, updated 16-Dec-2020, accessed 22 February 2023

⁶⁴ Engineer-in-Chief Public Works Department to Wellington District Engineer, 10 November 1942, item ID R21064922, Archives New Zealand

⁶⁵ Correspondence between Engineer-in-Chief Public Works Department and Wellington District Engineer, 4, 9, 29 June 1942, item ID R21064922, Archives New Zealand

retain the earth.⁶⁶ A gap between the tank and wall would allow for tightening of the tank joints and other maintenance. Love Construction Co., a major national construction firm and predecessor of today's Naylor Love, was contracted to build the brick blast wall in January 1943 once the PWD had completed the foundations, and they had finished building the wall by mid-March.⁶⁷ It included an access cut at ground level to allow the wall to be breached and the tank emptied into the stream in case of emergency.⁶⁸

The construction of the fuel pipeline and the preparation of the tank was happening at the same time. The pipeline required excavation of a 2200-foot (670 metre) trench roughly following the farm access track beside the stream.⁶⁹ The welding and joining of the 4-inch steel pipe, which was then sheathed in protective asphalt coating, was done by engineers of the US Marine Corps.⁷⁰ The second-hand tank panels, which had arrived from America on the *Philae* on 30 July 1942, were in such poor condition that they had to be sandblasted and painted before assembly could be considered. Preparation of the panels began in February 1943 but plant trouble meant progress was slow, and by late April only the tank's base panels were ready to be assembled. However, before assembly could begin, all work on AR17 at Paekākāriki was stopped.⁷¹

A change of strategy

While the first six months of the Pacific War had caused great concern for Pacific nations as Japan occupied Hong Kong, Singapore and the Philippines, and air-raided Indonesia and Darwin, the US Victory at the Battle of Midway in June 1942 effectively ended the danger of invasion in New Zealand.⁷² Subsequent US campaigns at Guadalcanal and Papua further

⁶⁶ Engineer-in-Chief Public Works Department to Wellington District Engineer, 23 September 1942, item ID R21064922, Archives New Zealand

⁶⁷ Correspondence between Engineer-in-Chief Public Works Department and Wellington District Engineer, 5, 9, 12, 19 January and 16 March 1943, item ID R21064922, Archives New Zealand; 'Naylor Love celebrates 100 years', *Building Today*, 1 July 2010, <https://buildingtoday.co.nz/2010/07/01/naylor-love-celebrates-100-years/>, accessed 26 February 2023

⁶⁸ Engineer-in-Chief Public Works Department to Air Secretary, 20 January 1943, item ID R21064922, Archives New Zealand

⁶⁹ Original plans for the tunnelling of a direct line were rejected. Engineer-in-Chief Public Works Department to Wellington District Engineer, 7 October and 10 November 1942, item ID R21064922, Archives New Zealand

⁷⁰ R.G. Colvin, Welding Engineer (PWD), report on details of pipeline, 25 November 1944, item ID R21064922, Archives New Zealand

⁷¹ Air Secretary to Engineer-in-Chief (PWD), 29 April 1943, item ID R21064922, Archives New Zealand

⁷² 'Pacific War Timeline', URL: <https://nzhistory.govt.nz/war/second-world-war/war-in-the-pacific/timeline>

turned the tide. At the end of December 1942 Washington ordered the Aviation Reserve programme in New Zealand be scaled back, with construction of AR5 (Greatford) and AR8 (Wiri) stopped.⁷³ The order notes that the Paekākāriki installation was, at that stage, to continue, despite it being behind schedule. From February to November 1943 the largest number of US Marines were in residence at the Paekākāriki camps for an extended period of recuperation, and it may have been this factor that allowed the USMC Engineers to speed up progress with their work on the fuel pipeline. However, by April 1943 the US-New Zealand allied strategists had decided that the need for fuel reserves had diminished to the point where any installations not yet completed would be cancelled.

At Paekākāriki, the railway siding had been built; the tank slab base and blast wall were complete but earth battering and backfilling around it was not; the pipeline was laid but not hooked up to the tank; and the tank panels were still being prepared so none had yet been laid or assembled.⁷⁴ Orders were therefore given to remove all works including the railway siding, fill in the excavation and return the fuel tank site to its original condition. Sandblasting of the tank panels was the only aspect of the project to be continued before they were packed up and sent to RNZAF Mangaroa, as they would otherwise deteriorate.⁷⁵

The US Marines permanently vacated the Paekākāriki Camps, and left New Zealand, on 1 November 1943 when they were deployed to Tarawa Atoll in Kiribati.⁷⁶ The War Assets Realization Board was set up to dispose of surplus buildings and equipment, to ensure redeployment of scarce assets.⁷⁷ The camps were dismantled (and 569 of the buildings at Paekākāriki sold for disposal) and the land cleared, ostensibly for return to the people who had owned it before it was seized.⁷⁸

However, Public Works Department officials protested against destroying the tank wall and pipeline, pointing out the considerable money spent on the project, and, as the pipeline had

⁷³ Air Secretary to Engineer-in-Chief Public Works Department, 30 Dec 1942, item ID R21064922, Archives New Zealand

⁷⁴ Engineer-in-Chief PWD to Air Secretary, 11 September 1943, item ID R21064922, Archives New Zealand

⁷⁵ Wing Commander to Engineer-in-Chief Public Works Department, 5 May, 11 June and 24 September 1943, item ID R21064922, Archives New Zealand

⁷⁶ Kapiti-US Marines Trust, Interpretation signage 'Camp Paekākāriki: The War Years'; Wikipedia, 'Battle of Tarawa', https://en.wikipedia.org/wiki/Battle_of_Tarawa, accessed 24 February 2023

⁷⁷ Kapiti-US Marines Trust, Interpretation signage 'Camp Paekākāriki: The War Years'

⁷⁸ *ibid*

never been used for fuel, the suitability of the site for use as a water reservoir.⁷⁹ This use was duly explored, and the Hutt County Council then the Railways Department were approached about taking it over. However, the Council had recently secured an alternative water supply on Leonard Smith's neighbouring farm, and the fuel tank site in the Te Puka Stream gully wasn't conveniently close enough to Paekākāriki Railway Station, so both declined.⁸⁰ By 1947 the economics of leaving the installation in situ versus removing it had become clear, and its presence was no doubt added to the list of compensation paid to Harold Smith for wartime use of his land.⁸¹

After the end of the Second World War in 1945, the Government determined to use most of the land it had taken at Paekākāriki for other purposes. The Smiths were pressured to sell more than 500 acres of the former camp sites. They held onto their Transmission Gully 'Middle Run' farmland and it became known as 'Perkins Farm' after Harold Smith's daughter Betty and son-in-law John Perkins took it over in 1970.⁸² The former Māori land of the Wainui Reserve was not returned to its original owners, despite Miriona Budge fighting hard for it.⁸³ Much of Wainui Reserve was developed for residential growth of Paekākāriki, and new streets were named in memory of both the US Marines and the ancestry of Ngāti Haumia ki Paekākāriki.⁸⁴ In 1953 the farmland north of the main road was permanently acquired by the Crown for the creation of Queen Elizabeth Park, a 1627-acre recreation reserve stretching between Paekākāriki and Raumati South.⁸⁵ The adjacent Whareroa Farm Park was also created on former Ramaroa Reserve land.⁸⁶

⁷⁹ Correspondence between Wellington District Engineer and PWD Permanent Head, 19 November 1943, item ID R21064922, Archives New Zealand

⁸⁰ Correspondence between Wellington District Engineer, Hutt County Council and Railways Department, 2 and 15 August 1944, 25 November 1946, 6 Jan 1947, and 28 February 1947, item ID R21064922, Archives New Zealand

⁸¹ Martin, [n.d – c.2022], p.26

⁸² *ibid* pp.26-27

⁸³ McClean and Solomon, 2022, pp.20-21

⁸⁴ For example, Tarawa, Mira, Mutu, Aperamaha, Tangahoe, Haumia, Horomona, Te Miti

⁸⁵ The only part of Wainui Reserve not taken by the Crown was the Mira whanau urupā. Greater Wellington Regional Council, *Queen Elizabeth Park: Resource Statement*, 2008, <https://www.gw.govt.nz/assets/Documents/2009/07/QEP-resource-statement.pdf>, accessed 24 February 2023, pp.16-17

⁸⁶ Department of Conservation, 'Whareroa Farm', <https://www.doc.govt.nz/parks-and-recreation/places-to-go/wellington-kapiti/places/whareroa-farm/?tab-id=50578>, accessed 27 February 2023

John and Betty Perkins continued to farm Middle Run until 2012, when after decades of negotiations the Crown agreed to acquire the entire property for the Transmission Gully motorway, a project that had been mooted for many years.⁸⁷ The Fuel Tank Wall was identified as a heritage site that could be affected by the works as it was within the road designation. Conservation of the Fuel Tank Wall was made a condition of the consent.⁸⁸

The US Marines remain important in the history of Paekākāriki and Queen Elizabeth Park, with history books and exhibits continuing to educate people about the time when the district played such a part in the ‘friendly invasion’.⁸⁹ Memorial gates were installed at Queen Elizabeth Park in 1962 as a physical marker of the camps, and have since been supplemented by prominent signage and memorials throughout the park and at Whareroa Park.⁹⁰ In 2009 the Kapiti US Marines Trust was formed to mark, research and celebrate the US Marines presence in the district. Their informative website shows the connections maintained with many veterans and the US Embassy, who attend annual services of commemoration on Memorial Day. A major event was held for the 70th anniversary in 2012.⁹¹

Associated List Entries

Bankside Fuel Depot, Bankside (List No. 7727)

⁸⁷ Martin, [n.d – c.2022], p.27; ‘Transmission Gully ‘fighter’ spent final years looking away as farm was ‘cut up’, *Dominion Post*, 14 February 2018, <https://www.stuff.co.nz/dominion-post/news/101392910/transmission-gully-fighter-spent-final-years-looking-away-as-farm-was-cut-up>

⁸⁸ Board of Inquiry into the Transmission Gully Project, *Final Report and Decision of the Board of Inquiry into the Transmission Gully Proposal, produced under Section 149R of the Resource Management Act 1991: Volume 2: Conditions*, EPA 0175, June 2012, <https://www.epa.govt.nz/assets/FileAPI/proposal/NSP000008/Boards-decision/33ecec3074/Transmission-Gully-Final-decision-volume-2-Conditions.pdf>, p.13

⁸⁹ For example, the major exhibition ‘A Friend in Need’, 2009, now permanently in the Paekakariki Station Museum; see ‘Further Reading’ and also Michael O’Leary, *Paekakariki: A Short History*, Paekakariki Station Precinct Trust, Paekākāriki, 2014; Harry Bioletti, *The Yanks are coming: the American invasion of New Zealand 1942–1944*, Century Hutchinson, Auckland, 1989; Jock Phillips with Ellen Ellis, *Brief encounter: American forces and the New Zealand people 1942–1945*, Department of Internal Affairs, Wellington, 1992; Nancy Taylor, *The home front*, Historical Publications Branch, Wellington, 1986, esp. vol. 1, ch. 14, ‘The American invasion’, and more at <https://marinenz.com/books?src=nav>

⁹⁰ For example, the Yankee Trail, a major memorial reminiscent of camp huts and a rebuilt Marines hut with internal display near the MacKays Crossing entrance, signage at Whareroa Farm Park, a Sailor’s Memorial commemorating those who lost their lives in the beach-landing training exercise, a palisade with extensive information panels to recognise Camp Paekakariki.

⁹¹ Kapiti US Marines Trust, <https://marinenz.com/>; ‘Memorial honours 10 US war dead’, *Kapiti Observer*, 31 May 2012, <http://www.stuff.co.nz/dominion-post/news/local-papers/kapiti-observer/7019321/Memorial-honours-10-US-war-dead>, accessed 25 February 2023; ‘Ambassador Mark Gilbert visits Kapiti US Marines exhibition’, https://www.flickr.com/photos/us_embassy_newzealand/sets/72157651511236700/, accessed 25 February 2023

2.2. Physical Information

Current Description

Wainui is the ancestral landscape of Ngāti Toa Rangatira at Kapiti.⁹² Wainui is the land between Te Ana-a-Hau (just south of Paekākāriki) and Whareroa Stream at the north, and stretches inland to Whakataka Pā at Upper Hutt and the Tararua Range.⁹³ The World War Two Fuel Tank Blast Wall is nestled in the foothills of the ancestral maunga Wainui and Pouawha, in a landscape of former cultivations, papakāinga, mahinga kai and tauranga waka at the coast, connected with a network of tracks inland.⁹⁴ The Te Puka Stream, a tributary to the Wainui Stream, runs alongside the Fuel Tank Wall; this awa remains culturally and historically significant to mana whenua Ngāti Toa Rangatira, with shared interests extending to Ātiawa ki Whakarongotai.⁹⁵

The World War Two Fuel Tank Blast Wall is located at the northern end of Te Ara Nui o Te Rangihaeata/Transmission Gully (State Highway 1). The structure is tucked into a former meander of the stream, approximately 20 metres west of the motorway but below the road level. The village of Paekākāriki sits over the ridgeline to the west, the open dunelands of Queen Elizabeth Park (site of Camp Paekakariki and Camp Russell) to the north, and Whareroa Farm Park (site of Camp MacKay) to the northeast. The Fuel Tank Wall is largely obscured by native bush including mature kohekohe, titoki and kanuka and is not visible from any distance.⁹⁶

⁹² McClean and Solomon, 2022, p.6

⁹³ The 1847 Porirua Deed and the 1859 Wainui Deed describe these boundary markers. *ibid*, p.9

⁹⁴ *ibid*

⁹⁵ Ātiawa Ki Whakarongotai Charitable Trust, 2023, p.1

⁹⁶ Boffa Miskell, *Brick Fuel Containment Structure: Conservation Plan prepared for Wellington Gateway Partnership*, 4 March 2015, p.21

A farm track provides access alongside the stream, and the Fuel Tank Wall sits on a platform elevated approximately 10 metres above the stream bed. On approach through perimeter security fencing, less than one quarter of the brick wall structure is visible. Around three-quarters of the circumference of the wall has been backfilled, and the surrounding bush partially screens the open approach.



The structure consists of a 10-metre-high circular brick wall enclosing an open space approximately 18 metres in diameter. The 350,000-gallon (1.3 million litre), 55 foot (16 metre) wide x 24 foot (7.3 metre) high bolted steel tank (never installed) was intended to sit inside leaving a gap between it and the enclosing wall.



Access to the interior is gained at ground level through a cut in the brickwork; although this opening is supported by a concrete lintel beam the rough edges of the brickwork above a certain height suggest a slight change in plans during construction. The lintel has been vandalised with modern graffiti painting, although deeply inscribed initials 'eg 'D.K.' may date from earlier when the concrete was softer.

The mortar visible on the exterior of the wall is more roughly pointed than that on the interior, aligning with the original plans to completely backfill around the exterior. Strands of reinforcing steel protrude from above the lintel.

The scale of the enclosure – although open to the sky – is impressive, as are the acoustics. Native bush fringes the top and towers above the enclosure, but is not oppressive because of the diameter of the open space. The ground is slightly uneven underfoot, the tank base now topped with grass concealing random rubble.



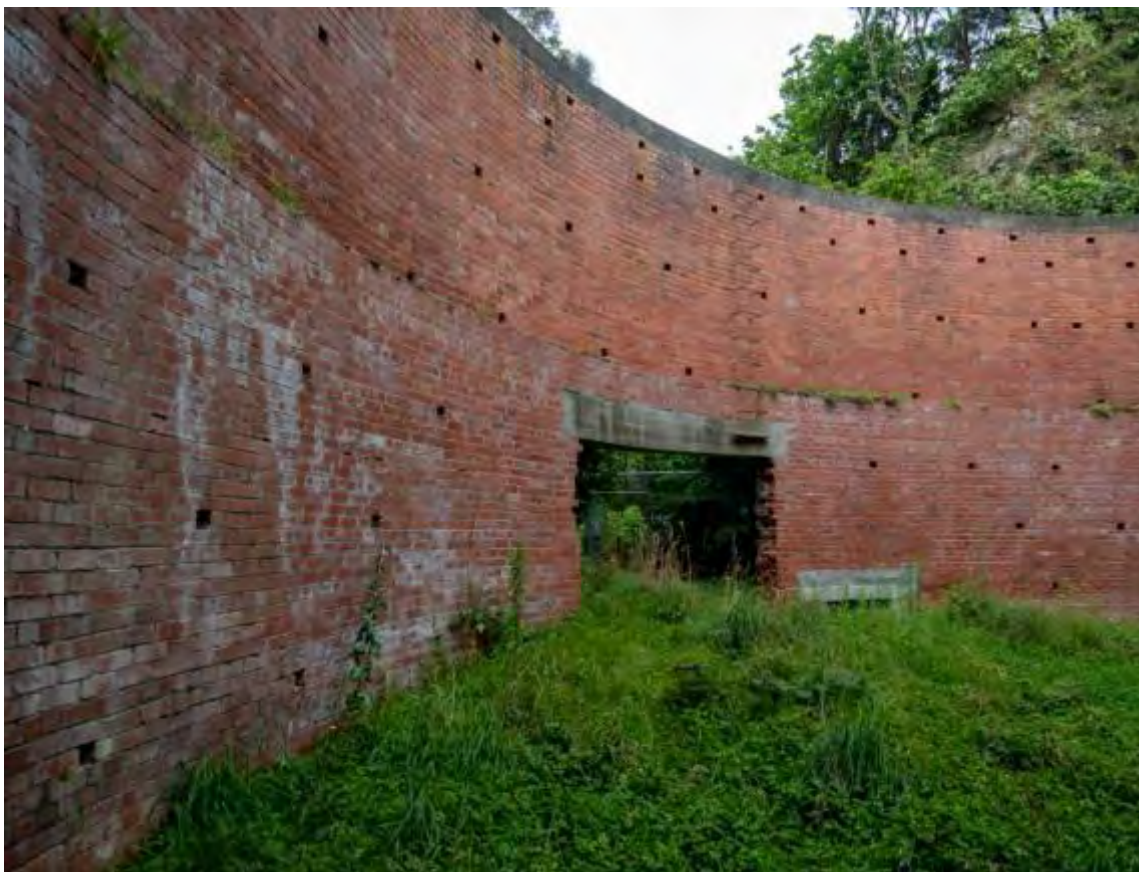
The

wall sits on a 2-foot-wide x 1-foot-high reinforced concrete foundation, and a 12-inch (30 centimetre) x 9-inch (22 centimetre) reinforced concrete bond beam ties it together at the top. The bricks are laid in common bond. At its base the wall is three bricks deep but just

over halfway up this steps in to two bricks deep. Weepholes are dotted at regular intervals, more frequently in the lower section.



Original plans show intentions to build a battered earth wall around the open, stream-facing section of the structure so it would be completely surrounded by earth walls. The rungs of a steel ladder fixed to the brickwork of the interior, above the opening in the brickwork, show the means of original access.



At the north of the opening, at ground level another small opening surrounded by reinforced concrete is visible.

This is the inner drainage sump, connected by a pipe to the outer drainage sump approximately 18 metres west above the edge of the farm track.



The outer sump is sunken within an open concrete chamber draining to a concrete pipe. The outer sump also contains a steel pipe and valve for the original fuel pipeline, which was laid for 2200 feet (670 metres) largely following the alignment of the stream and access track before passing



under the road (now SH 59) and terminating at the railway line. This pipeline is partially visible (in a rusted condition) in the track embankment for a short distance (approximately 8-10 metres) near the outer sump drainage pipe.



Any other remnants of the pipeline that may have been laid under the farm access track will have been buried under new fill in 2016 flood protection works that raised the level of the farm access track and protected it with concrete from scour from the Te Puka Stream.⁹⁷

⁹⁷ Pers comm. Dean Bradley (Senior Environmental Engineer, Transmission Gully Project, CPB HEB) to Blyss Wagstaff, 21 February 2023

Comparative Analysis

While New Zealand's heritage landscape is dotted with defensive works from throughout our history, places associated with the US Marines' time in the country are today relatively rare.

US Marines heritage

Accommodation camps for the troops were constructed mainly in the vicinity of Auckland and Wellington.⁹⁸ Over 21,000 men stayed in the Wellington area, settled at three large camps around Paekākāriki, and smaller camps at Pāuatahanui, Judgeford, Titahi Bay and in Wellington city's Anderson and Central Parks, and Hutt Park Raceway in Lower Hutt.⁹⁹ The camps in Kāpiti included 2,728 buildings, 1,590 huts and 3,401 tents.¹⁰⁰ Masterton's Solway Park also housed 2,400 Marines. Auckland had a scattering of camps that could host 29,500 people, and a few farm camps were also set up in the Warkworth area.¹⁰¹ 19 hospitals, including major institutions at Auckland's Cornwall Park and Wellington's Silverstream, were set up to treat over 10,000 returning soldiers.¹⁰² The American forces also involved a considerable number of support staff, including administrators, nurses and medics, and the Quartermaster Corps.¹⁰³ At least nine commercial buildings in Wellington City and 11 in Auckland city were commandeered for use as administration offices and staff accommodation; these returned to commercial use when no longer needed, and some have since been demolished.¹⁰⁴ Facilities for recreation were well used, such as sports grounds and gymnasiums, and halls for concerts, dances and movie screenings.¹⁰⁵

⁹⁸ 'US military forces in New Zealand map', URL: <https://nzhistory.govt.nz/media/interactive/us-military-forces-new-zealand>, Ministry for Culture and Heritage, updated 10-May-2021, accessed 7 April 2022

⁹⁹ 'The camps', URL: <https://nzhistory.govt.nz/war/us-forces-in-new-zealand/the-camps>, Ministry for Culture and Heritage, updated 10-May-2021, accessed 7 April 2022

¹⁰⁰ Kapiti US Marines Trust, 'The Camps', <https://marinenz.com/Articles/The%20Camps>, accessed 7 April 2022

¹⁰¹ There were camps at Papakura, Pukekohe, Mechanics Bay, Western Springs, and in various parks on the Auckland isthmus. 'The camps', URL: <https://nzhistory.govt.nz/war/us-forces-in-new-zealand/the-camps>, Ministry for Culture and Heritage, updated 10-May-2021, accessed 7 April 2022

¹⁰² *ibid*

¹⁰³ *ibid*

¹⁰⁴ For example, now-demolished commercial buildings used in Wellington included the Windsor Hotel, Hotel Cecil, Union Bank Chambers, Hannah's Building, Levy Building, Tisdalls Building, and King-s Chambers. Auckland's US Forces Post Office, Hotel Arundel, Grand Hotel, and Boat Pool building on Princes Wharf are known to have been used by US Forces before their demolition.

¹⁰⁵ 'Having fun US style', URL: <https://nzhistory.govt.nz/war/us-forces-in-new-zealand/having-fun-us-style>, Ministry for Culture and Heritage, updated 10-May-2021, accessed 7 April 2022

Camps were constructed by the state Public Works Department, pre-fabricating many of the buildings in the South Island.¹⁰⁶ The Public Works Department was established in 1876 and was responsible for extensive infrastructure and building development in New Zealand until its disestablishment in 1988.¹⁰⁷ Local construction companies also assisted.¹⁰⁸ Huts were used as infirmaries or storage sheds; men generally slept in tents pitched on wooden floors. Mess halls, cookhouses, recreation halls, hospital facilities, stores, laundries, officers' quarters and ablution blocks were among the more substantial structures. Supply depots and munitions storage facilities were constructed to ensure a steady supply of the goods and consumables needed to support the camps' military operations.

When the majority of the 2nd Marine Division departed for the Southern Attack force of Operation Galvanic on 1 November 1943, some rear echelon units remained to decommission the camps.¹⁰⁹ This involved the dumping and burial of equipment, vehicles and machinery in huge pits.¹¹⁰ Warehouses and storage facilities found use by government departments and eventually private purchasers. Larger buildings, especially hospital facilities, were generally taken over by Government departments or local authorities.¹¹¹ The Silverstream hospital in Wellington is one of the largest surviving military hospitals, now used as an accommodation and event centre, and the Royal Port Nicholson Yacht Club building in Wellington's Oriental Bay was built as a US Navy Barracks (now highly modified).

Most former camp buildings were offered free to local authorities for use as transit housing schemes, and these were distributed around the country.¹¹² Further buildings were dismantled, and their materials used by the Housing Department. 'Only a few of the poorer and less useful types of buildings' remained for sale to the general public after priority

¹⁰⁶ Kapiti US Marines Trust, 'Porirua Camps', <https://marinenz.com/Articles/Porirua%20Camps>, accessed 7 April 2022

¹⁰⁷ Boffa Miskell, 2015, p.17

¹⁰⁸ Lesley Varcoe remembers her father being man-powered to work for a Miramar construction company which pre-fabricated camp buildings in about six weeks. Kapiti US Marines Trust/Lesley Varcoe, 'Resident recalls U.S. warships in Paekakariki waters', <https://marinenz.com/Articles/Resident%20recalls%20US%20warships%20in%20Paekakariki%20waters>, accessed 8 April 2022

¹⁰⁹ Kapiti US Marines Trust, 'Porirua Camps'

¹¹⁰ *ibid.* Two known pit locations were on Te Pene Avenue in Titahi Bay, Porirua, and Judgeford Road in Pāuatahanui.

¹¹¹ The No. 6 Mobile Hospital at Avondale was converted into use at Avondale College, which has now been largely rebuilt.

¹¹² 'War Assets Realization Board Report for the year ended 31 May 1947', pp.6-7

applicants had taken their pick.¹¹³ It is known that some huts still remain in private properties around the North Island, but locations are difficult to survey. Small numbers remain on public display, for example huts in Queen Elizabeth Park, the Warkworth Museum, and MOTAT.

As many camp buildings were temporary in nature, little remains of the three former campsites at Kapiti apart from concrete floorpads and remnant sewerage infrastructure.¹¹⁴ Elsewhere in the North Island, similar surviving foundations and water supply remnants are known to exist at Anderson's Road Camp in Warkworth, and a Camp Commandant's house at Papakura and the A&P Showgrounds buildings at Masterton's Solway Park are surviving buildings associated with the US Marines camps.¹¹⁵

Warehouses built for the US Military at Auckland's Camp Bunn survive, as do some naval ammunition bunkers on Motutapu Island in the Hauraki Gulf.¹¹⁶ However, a rare recreation hall built for the Marines at Titahi Bay was demolished in December 2021.¹¹⁷ The Fuel Tank Blast Wall, and the 'Rail Air Shed' goods supply depot at Paekākāriki are now two of the most prominent surviving structures associated with the Marines in Kapiti and the Wellington region, among an increasingly rare national collection of heritage items associated with the Marines' time in New Zealand.

Aviation Fuel Reserves

Up to 17 Aviation Fuel Reserves were planned around the country, but of these it appears that construction only began on 15. Of these 15, only six are thought to have any surviving features. No traces of the other nine installations remain. As large tanks were at a premium during wartime and bolted tanks were in many cases returned to their original civilian owners (local fuel companies) or packed up and repurposed overseas (as at Paekākāriki), no fuel tanks are thought to remain at any. Some brick blast walls have survived due to their solid, triple-brick and cement construction. Three of the 15 installations - for Woodbourne

¹¹³ Ibid p.5

¹¹⁴ Kapiti Us Marines Trust, 'The Camps', <https://marinenz.com/Articles/The%20Camps>, accessed 25 February 2023

¹¹⁵ See Blyss Wagstaff, 'US Military Heritage In New Zealand: paper for the Heritage New Zealand Pouhere Taonga Board', BD-MHC-2022/06/14, June 2022 for a full survey.

¹¹⁶ Ibid

¹¹⁷ Mary O'Keeffe, 'Final Report for Archaeological authority 2022-247', 2022; GoogleEarth aerial imagery.

(AR3 and AR14) and Waipapakuri (AR6) airfields - did not have protective brick blast walls built as part of their original designs.¹¹⁸

It is unclear whether the remnants of AR5 at Kakariki (for Ohakea airfield) still remain, as the installation was filled with gravel when researched by Defence historian Gordon Burns in 2000 and not located in the present research.¹¹⁹ It is likely the remnant was a blast wall or at the least an excavated pit. Construction at this installation was halted in December 1943 before it was complete, although pipe fittings were said to remain in 2000.¹²⁰ Burns found that a blast wall was in situ at Swanson (AR7) near Whenuapai in the late 1990s, but its current existence is not confirmed.¹²¹ The installation at Cambridge for Rukuhia airfield (AR9) now exists only as a depression and a small concrete shed amidst a highly modified landscape of townhouses.¹²² Its tank was removed in 1950, the blast wall presumably also around that time.¹²³

A brick blast wall at Ormond, Gisborne (AR10), does survive on a private residential property. The structure was partially filled in 2003 for slope stabilisation, and is protected in the Gisborne District Plan with rules against planting deeply-rooted vegetation in the structure.¹²⁴ Another good example of a brick blast wall survives at Bankside (AR16) where the Aviation Reserve was built to serve a planned US bomber base at Te Pirita airfield, the construction of which was described as one of New Zealand's biggest 'secret' World War Two construction efforts.¹²⁵ The Bankside depot was the largest of the planned Aviation Reserves, with a capacity of 750,000 gallons of aviation fuel. It was completed and the tank filled with fuel in August 1942; the depot included a rail siding, fuel pipeline, guard accommodation and security fencing. When it was decommissioned in 1944, the fuel tank was sold to the

¹¹⁸ Gordon Burns, 'Aviation Reserve Fuel Depots', *Forts and Works*, Issue 9 August 2000, pp.1-3

¹¹⁹ Gordon Burns, 'Aviation Reserve Fuel Depots', *Forts and Works*, Issue 9 August 2000, pp.1-3

¹²⁰ Air Secretary to Engineer-in-Chief PWD, 30 Dec 1942, item ID R21064922, Archives New Zealand; Gordon Burns, 'Aviation Reserve Fuel Depots', *Forts & Works: Thoughts and Words on the Defence of New Zealand*, Issue 9, August 2000, p.2

¹²¹ Pers comm. Martin Jones, Heritage New Zealand to Blyss Wagstaff, 24 February 2023

¹²² Pers. comm Laura Kellaway to Blyss Wagstaff, Email: 'Cambridge US Fuel tank', 30 January 2023

¹²³ Waipa District Council, 'Secret fuel bunker', <https://www.waipadc.govt.nz/your-waipaa/about-waipaa/waipaa-history/secret-aviation-fuel-bunker-cambridge>, accessed 22 November 2022; Wings Over Cambridge, 'AR9 – The RNZAF Fuel Depot in Cambridge', <https://www.cambridgeairforce.org.nz/AR9%20Fuel%20Depot.htm>, accessed 22 November 2022

¹²⁴ 'WWII Fuel Reserve, Ormond', P46 in Tairāwhiti Resource Management Plan, G5 Schedule: Post European Contact Schedule; Pers comm. Paula Hansen (Gisborne District Council), excerpt from planners report on 2018 consent included in 'Request for official information', 30 November 2022

¹²⁵ Robyn Burgess, 'Registration Report for a Historic Place: Bankside Fuel Depot', List No. 7727, 2007, p.6

Associated Motorists Petrol Company and the buildings removed. The depot exists today as a large brick blast wall in its excavated pit, which had been used as a rubbish dump site but was cleared and restored c.2009. It is recognised on the New Zealand Heritage List/Rārangi Kōrero as a Category 2 historic place (List No. 7727).

The World War Two Fuel Tank Blast Wall at Paekākāriki is therefore one of only three confirmed surviving brick blast walls at former Aviation Reserves, with two others possibly still in existence. Amongst the 17 planned AR installations AR17 is unusual in that it appears to be the only one built for holding motor spirits for use by the US Marines at the three large camps nearby, instead of aviation fuel.¹²⁶ This is indicated by the inclusion of road filling-points at the Paekākāriki fuel depot, and the fact that the nearest airfield was some distance away at Paraparaumu. There was a small camp of 200 US Marines stationed at Paraparaumu, however the airfield was used by the RNZAF during World War Two.¹²⁷

Military historian Peter Cooke considers the Paekākāriki blast wall to be the most authentic example of its type in New Zealand.¹²⁸ Unaltered since its construction was halted on 29 April 1943, the structure has suffered little damage from vegetation and vandalism since then and has never been even partially filled in, unlike like the other surviving blast walls.

See [Table in Appendix 2](#) for further detail of surviving Aviation Reserves.

Construction Professionals

Public Works Department (Builder)

Love Construction Co, also known as Love Brothers (Builder)¹²⁹

¹²⁶ Military historian Peter Cooke also points to the Public Works Department's coverage of its own wartime work servicing aerodromes that doesn't include mention of AR17 (their list stops at AR16), suggesting that AR17 was for a different purpose. Cooke cites L. Clifton, *Official War History of the Aerodrome Services Branch*, Public Works Department, 1947, p.56. Pers comm (email) Peter Cooke to Blyss Wagstaff, 18 April 2023.

¹²⁷ Paraparaumu Airport Control Tower (Former), List No. 7532, <https://www.heritage.org.nz/the-list/details/7532>

¹²⁸ Boffa Miskell, 2015, p.14

¹²⁹ Love Brothers / Love Construction Co. operated from 1910 to 1969 when it was reformed as Naylor Love. The firm did construction work all around New Zealand. Major works include the 1930 Dunedin Town Hall, 1928 Regent Theatre in Dunedin, pre-fabricated housing for the government in the 1930s, and Chery Farm Hospital in Karitane in 1950s. They also partnered with Fletchers to work on construction for the 1940 Centennial Celebrations in Wellington. New Zealand Heritage List/Rārangi Kōrero Construction Professionals database.

US Marines Corps Engineers (Builder)

Construction Materials

Brick wall; reinforced concrete foundations, slab base and ring beam; concrete sumps and connecting pipe; steel fuel pipeline and valves.

Key Physical Dates

July 1942 – April 1943: Original construction. Excavation of fuel tank site began July 1942, completed October 1942; foundations for blast wall completed January 1943 and bricklaying completed end of February 1943; pipeline excavated, welded and laid between February and April 1943. Construction halted 29 April 1943.¹³⁰

Uses

Defence [Fuel Depot] (Former)

Vacant [Vacant]

2.3. Chattels

There are no chattels included in this List entry.

2.4. Sources

Sources Available and Accessed

Angela Ballara's 1990 chapter '*Te Whanganui-a-Tara: phases of Māori occupation of Wellington Harbour c.1800-1840*', Waitangi Tribunal reports, and cultural values assessments provided by Ngāti Toa Rangatira and Ātiawa Ki Whakarongotai contained sufficient information to suggest the Māori history and associations with the whenua and cultural landscape of the Fuel Tank Blast Wall's location, as well as how the land was alienated from Māori ownership. John Martin's unpublished research report on the Perkins' Farm provided good archival and social history of the farmland. Of the many who have written on the World War Two history of New Zealand, the Ministry for Culture and Heritage and the Kapiti US Marines Trust were particularly useful on the US Marines aspect. Gordon Burns and Peter Cooke of the Defence of New Zealand Study Group's research on the specific history of Aviation Reserves, and Burn's survey of surviving examples, were very useful and

¹³⁰ 'Defence Works and Buildings – Air Department Royal New Zealand Air Force [RNZAF] bulk fuel storage – Site AR17 – Paekakariki 1942-1942', item ID R21064922, box 796, file 23/553/17, Public Works Department (ACHL), Archives New Zealand

authoritative. This was supplemented by the report author's previous research survey of surviving US Marines heritage in New Zealand. The detailed correspondence, including weekly progress reports, held in the Public Works Department file on Aviation Reserve 17 at Archives New Zealand (item ID R21064922) provided essential detail on the construction of the structure.

Further Reading

Denys Bevan, *United States Forces in New Zealand 1942-1945*, Macpherson Publishing, Alexandra, 1992

Gordon Burns, 'Aviation Reserve Fuel Depots', *Forts and Works: Thoughts and words on the defence of New Zealand*, Issue 9 August 2000, pp.1-3

Kapiti US Marines Trust website, <https://marinenz.com/>

NZ History, 'US forces in New Zealand', URL: <https://nzhistory.govt.nz/war/us-forces-in-new-zealand>, Ministry for Culture and Heritage, updated 10-May-2021

Peter Cooke, *Defending New Zealand: Ramparts on the sea 1840-1950s*, Defence of New Zealand Study Group, Wellington, 2000

3. SIGNIFICANCE ASSESSMENT¹³¹

3.1. Section 66 (1) Assessment

This place has been assessed for, and found to possess aesthetic, architectural, cultural, historical, social, technological significance or value. It is considered that this place qualifies as part of New Zealand's historic and cultural heritage.

Aesthetic Significance or Value

The Fuel Tank Blast Wall at Paekākāriki has aesthetic values as an industrial 'ruin' hidden in a bush-clad environment. The now-quiet location contrasts with its history, the structure evocative of a busy past when Paekākāriki was temporarily transformed by the thousands of US Marines stationed there. The purely functional design has taken on an awe-inspiring quality due to its scale and setting, and ability to be appreciated from within the structure.

¹³¹ For the relevant sections of the Heritage New Zealand Pouhere Taonga Act 2014 see Appendix 4: Significance Assessment Information.

The high walls holding back the hills and trees but open to the sky, combined with the unusual acoustics of the large circular space, create a slightly surreal environment.

Architectural Significance or Value

The structure has architectural significance as a reflection of the methods and materials employed by the Public Works Department and Love Construction Co. to quickly meet the requirements of the New Zealand-United States defence network in 1942. It is representative of the string of Aviation Reserves across the country, with 15 sharing the PWD's design for the splinter-proof brick wall protecting the fuel tanks. Comparison between the three surviving known blast walls (Paekākāriki, Bankside and Ormond) shows the Paekākāriki structure is intact and in good condition, a testament to Love Construction Co's skills.

Cultural Significance or Value

The structure is located in a landscape of cultural and historical importance to Māori, being situated on the lower slopes of Wainui maunga beside Te Puka Stream, amidst a landscape of former pā, kāinga, mahinga kai, tracks, urupā, tauranga waka and recorded archaeological pit and midden sites that are the ancestral tapuwae (footprints) of the tangata whenua. Te Puka Stream and Wainui remain important to mana whenua kaitiaki Ngāti Haumia ki Paekākāriki of Ngāti Toa, and also to Ātiawa ki Whakarongotai.

Historical Significance or Value

The structure has historical values as a surviving remnant of the mutual aid agreement between New Zealand and the United States in World War Two, which resulted in the small seaside village of Paekākāriki being touched by the international theatre of war as it hosted three large camps for 15,000 US Marines. Constructed by the Public Works Department as part of a network of enhanced military infrastructure, the structure demonstrates New Zealand's response to the threat of Japanese invasion.

Social Significance or Value

The Brick Fuel Containment Structure has social significance as a valued part of the Kapiti community's heritage, as demonstrated by its conservation requirement in the Transmission Gully motorway consent, protection in the District Plan heritage schedule and feature in exhibitions at the Paekākāriki Station Museum and Kapiti US Marines Trust website. The district's ongoing connection to its World War Two history is regularly demonstrated by commemorative events and development of interpretation signage and memorials.

Technological Significance or Value

The structure has technological values for its solid brick construction, engineered to limit damage from an explosion of the tank it was intended to encircle. It is positioned in a partially excavated, largely hidden location and built with a high degree of precision to cope with the challenges from the substantial water runoff in its location within a stream gully.

3.2. Section 66 (3) Assessment

This place was assessed against the Section 66(3) criteria and found to qualify under the following criteria: a, b, d, e, f, g, j, k. The assessment concludes that this place should be listed as a Category 1 historic place.

(a) The extent to which the place reflects important or representative aspects of New Zealand history

The impact of World War Two reverberated throughout New Zealand and continues to be a major event in New Zealand history. The Fuel Tank Blast Wall has special significance as a direct reflection of the major effort of co-operation between the United States and New Zealand during the Pacific War. Its construction was prioritised in a top-secret programme to boost fuel reserves. The cancellation of its construction before completion reflects the turning points in the Pacific War as Japanese aggression was countered. The Fuel Tank Blast Wall is a rare surviving structure to represent the transformation of New Zealand localities such as Kapiti when they accommodated the US Marines and defence activity.

(b) The association of the place with events, persons, or ideas of importance in New Zealand history

The Fuel Tank Blast Wall has significance as a demonstration of the value New Zealand places on its role in the global community. It is a physical testament to a time of international collaboration and co-operation under the highest stakes. The World War Two Fuel Tank Blast Wall has value for its association with the Public Works Department who employed a major effort to meet the terms of the United States-New Zealand Mutual Aid Agreement, and the Love Construction Co. Both construction agencies have contributed considerably to New Zealand's built heritage landscape.

(d) The importance of the place to tangata whenua

The structure is within the important ancestral landscape of Wainui, significant to mana whenua iwi Ngāti Toa Rangatira and Ngāti Haumia ki Paekākāriki hapū, with shared interests extending to Ātiawa Ki Whakarongotai. The World War Two Fuel Tank Blast Wall is located in the foothills of the ancestral maunga Wainui and Pouawha, and in the valley that was the route taken by Te Rangihaeata when he led his people to safety in 1846 – the gifting of the name Te Ara Nui o Te Rangihaeata demonstrates the great significance of the place to Ngāti Toa Rangatira. The Fuel Tank Wall is also located in an area used for cultivations prior to the land being taken by the Crown, and in the valley of Te Puka Stream which is a tributary to the Wainui Stream. The awa is culturally significant for its lifegiving role in protecting and enhancing the mauri of te taiao (the environment), as a habitat for highly valued mahinga kai species of fish, and for supporting the growth of rongoā plants. The landscape is therefore important to the aspirations and rights of ahikā, papakāinga and kaitiakitanga of mana whenua and tangata whenua.

(e) The community association with, or public esteem for the place

The community's esteem for Kapiti's World War Two history, including the Fuel Tank Blast Wall, is strongly demonstrated by the formation of the Kapiti US Marines Trust who are active in their promotion of the area's heritage features, and the inclusion of the Fuel Tank structure in Paekākāriki Station Museum displays. Kapiti Coast District Council consider the Blast Tank Wall's significance to be worthy of protection in the district plan, and the structure was identified for conservation by the Board of Inquiry for the Transmission Gully motorway. Veterans of the US Marines and representatives of the US Government regularly attend Memorial Day commemorations and events to demonstrate their ongoing connection to the location and its heritage.

(f) The potential of the place for public education

The Fuel Tank Blast Wall has potential as a place to educate the public about New Zealand's collaboration with the United States in World War Two to counter Japanese aggression in the Pacific. The construction of secret defences such as this is a little-known aspect of the war effort. Although not currently accessible to the public, if safe access was secured following the resolution of the Transmission Gully project the site is highly able to be appreciated and used by the public for recreation and education, especially if in conjunction with the former Perkins Farm buildings. The Fuel Tank is a natural candidate for addition to the network of heritage trails and interpretation signage in the nearby Queen Elizabeth and Whareroa Farm parks.

(g) The technical accomplishment, value, or design of the place

The Fuel Tank Blast wall remains authentic to its original design and construction, with high integrity as an intact, representative example of its type. It retains its original form, scale and materials, including remnants of the fuel pipeline, valves and sumps, and has been little, if at all, modified since construction was halted. The good condition of the brick wall, which has no obvious signs of cracking despite the pressure from the enclosing hills, demonstrates the quality workmanship. It is considered to be the most authentic surviving example of its type.

(j) The importance of identifying rare types of historic places

The World War Two Fuel Tank Blast Wall at Paekākāriki has special significance as one of only three confirmed surviving brick blast walls from the network of former Aviation Reserves in New Zealand, with two others possibly still in existence. Amongst the 17 planned AR installations the Paekākāriki example is unusual in that it appears to be the only one built for holding motor spirits for use by the US Marines at the three large camps nearby, instead of aviation fuel. It is also highly authentic and the only example found that has never been even partially filled in, allowing full appreciation of its scale and construction technique.

(k) The extent to which the place forms part of a wider historical and cultural area

The Fuel Tank Blast Wall's heritage values are enhanced by its location within a historical landscape containing Kapiti's only other remaining US Marines building - the Rail Air Goods Shed at Paekākāriki Railway Station - and the network of heritage trails, interpretation and memorials at the adjacent former campsites, now publicly accessible in Queen Elizabeth Park and Whareroa Farm Park. These assist with understanding and appreciation of the former Aviation Reserve (AR17) structure.

Summary of Significance or Values

The Fuel Tank Blast Wall has outstanding heritage significance as a rare surviving structure representing the transformation of New Zealand localities such as Kapiti when they accommodated the US Marines and defence activity. It has special historical significance as a direct demonstration of New Zealand's collaboration with the United States to defend the Pacific from Japanese military aggression. As one of only three confirmed surviving blast walls its physical values show the skill and co-operation of the builders in meeting the

defence demands of this top-secret programme in a short timeframe. It sits within the important ancestral landscape of Wainui, significant to mana whenua Ngāti Haumia ki Paekākāriki, and also to Ātiawa ki Whakarongotai. Its heritage values are enhanced by its location amidst a historical landscape of the former Kapiti camps and their infrastructure, and the ongoing commemorative activities of the community are evidence of its social esteem.

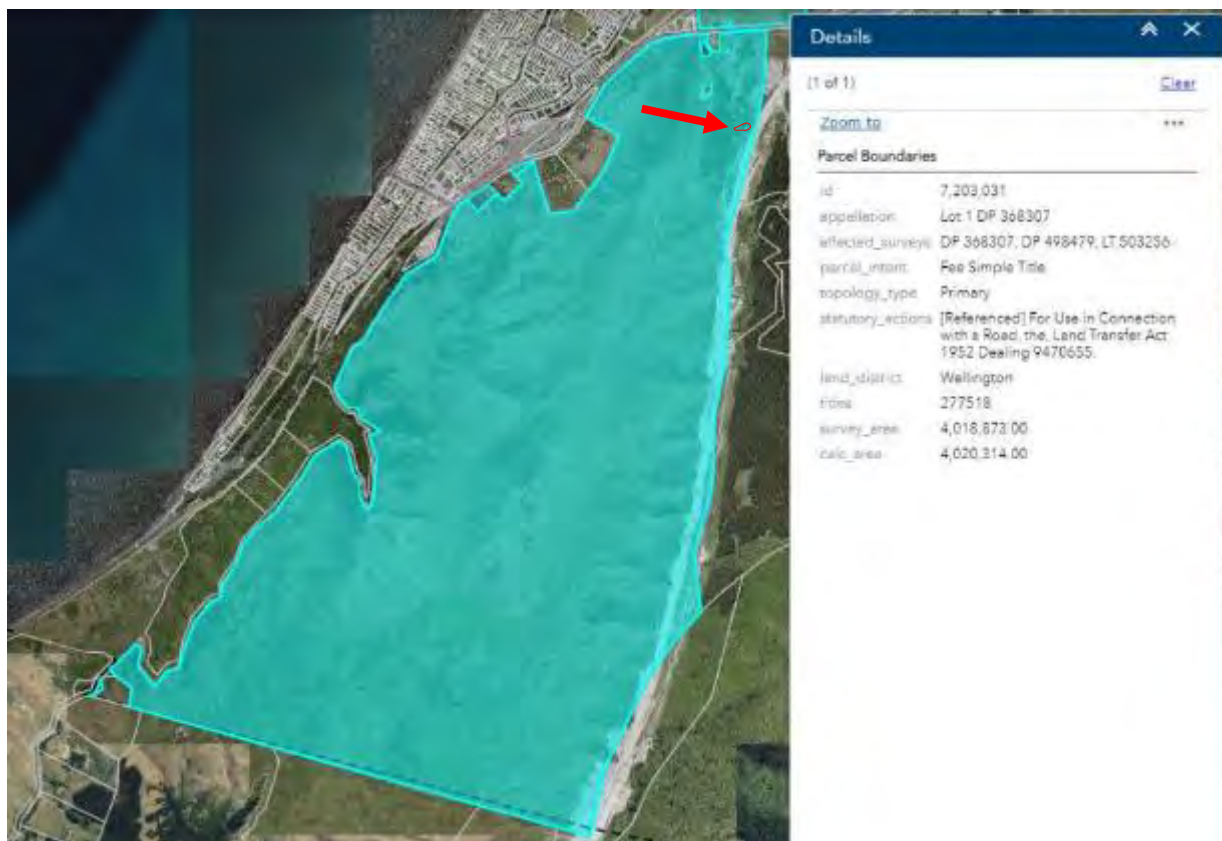
4. APPENDICES

4.1. Appendix 1: Visual Identification Aids

Location Maps



Boundaries of larger land parcel: Lot 1 DP 368307 (RT 277518), Wellington Land District



Details	
[1 of 1] Clear	
Zoom to ***	
Parcel Boundaries	
id	7,203,031
appellation	Lot 1 DP 368307
affected_surveys	DP 368307, DP 498479, LT 503256
partial_interest	Fee Simple Title
topology_type	Primary
statutory_actions	[Referenced] For Use in Connection with a Road, the Land Transfer Act, 1952 Dealing 9470655.
land_district	Wellington
rtos	277518
survey_area	4,018,873.00
calc_area	4,020,314.00

Location and approximate extent of WW2 Fuel Tank Blast Wall marked with an arrow.

Image source: Kapiti Coast District Council Local Maps

Map of Extent



Extent includes part of the land described as Lot 1 DP 368307 (RT 277518), Wellington Land District and the structure known as World War Two Fuel Tank Blast Wall thereon, including a curtilage of 5 metres around the circular structure and extending approximately 20 metres west towards the edge of the farm track near Te Puka Stream, to encompass the outer sump and its outlet pipe, and the approximately 10 metres of remnant fuel pipeline visible north of the outer sump in the track embankment.



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy**



R. W. Muir
Registrar-General
of Land

Identifier 277518
Land Registration District Wellington
Date Issued 26 January 2010
Prior References
WN40C/621

Estate Fee Simple
Area 426.0792 hectares more or less
Legal Description Lot 1, 3-4 Deposited Plan 368307
Purpose for use in connection with a road
Registered Owners
Her Majesty The Queen

Interests

71161 (118/376) Variation of the conditions of the easement created by Deed 62371 (106/680)
Subject to water rights created by Deed 62371 (106/680) (affects Lot 1 DP 368307)
Subject to a right of way (in gross) over part Lot 1 marked B, Z, AA, AB, AC, AG, AH, AI, AJ, AK, AL, AM, AN and AO and a right to convey water (in gross) over part Lot 1 marked AC, AG, AM, AP, AS, AT, AW, AX, AY, AZ, BA and BB on DP 368307 in favour of The Wellington Regional Water Board created by Transfer 855480
Subject to water rights taken under the Public Works Act 1928 - See Misc. 35 (affects Lot 1 DP 368307)
Appurtenant hereto are stormwater drainage rights created by Transfer 326394
Subject to gas pipeline rights (in gross) over part Lot 1 marked Q, AB, AC, AG, AH, AI, AK, AQ, AR, AT, AW, AX, AY, BG, BH, BI, BK, BL, BM, BQ, BR, BU, BV, BW, BY, CA, CB, CC, and CO and over part Lot 3 marked CE and over part Lot 4 marked CI, CJ, CK and CL all on DP 368307 in favour of Natural Gas Corporation of New Zealand Limited created by Transfer 907690.1
2709 Proclamation defining the middle line of portion of State Highway No. 1
5530 Proclamation defining the middle line of portion of State Highway No. 1 (affects Lots 3 and 4 DP 368307)
Subject to the reservations as to coal, gold and silver as set out in Document 516880 (affects Lot 1 DP 368307)
Subject to gas pipeline rights (in gross) over part Lot 1 marked O, Q, W, AA, AB, AG, AH, AK, AL, AM, AN, AR, AW, AY, AZ, BA, BG, BL, BM, BN, BO, BP, BR, BS, BT, BX, BW, BY, BZ, CA, CD and CO and over part Lot 4 marked CG, CH, CI, CL and CM on DP 368307 in favour of Natural Gas Corporation of New Zealand Limited created by Document 754565
826918 Gazette Notice declaring portion of State Highway No. 1 to be a limited access road
666351.1 Variation of Easement created by Document 754565
B003721.1 Variation of Easement created by Document 754565
B065564.1 Variation of Easement created by Document 754565
Subject to a right of way over part Lot 4 marked CF and CG on DP 368307 created by Transfer B217392.7 - 11.2.1992 at 2.49 pm (affects part Lot 5 DP 4269)

Transaction ID 200320
Client Reference bnwagstg001

Search Copy Dated 16/11/22 3:00 pm, Page 1 of 27
Register Only

The easements created by Transfer B217392.7 are subject to Section 309 (1) (a) Local Government Act 1974

Subject to rights to take, convey and lead electric power (in gross) over part Lot 1 marked CN and CP on DP 368307 in favour of Vodafone New Zealand Limited created by Transfer B522073.1 - 7.6.1996 at 11.40 am

8394697.2 Consent Notice pursuant to Section 221 Resource Management Act 1991 - 26.1.2010 at 9:10 am (affects Lot 1 DP 368307)

Subject to Section 241(2) Resource Management Act 1991 (affects DP 368307)

Subject to a right of way over part marked A, B, C, D and E and rights to supply electricity over part marked D and G and water over part marked I, M, O and Q on DP 368307 created by Easement Instrument 8394697.5 - 26.1.2010 at 9:10 am

Appurtenant hereto is a right of way and rights to supply electricity and water created by Easement Instrument 8394697.5 - 26.1.2010 at 9:10 am

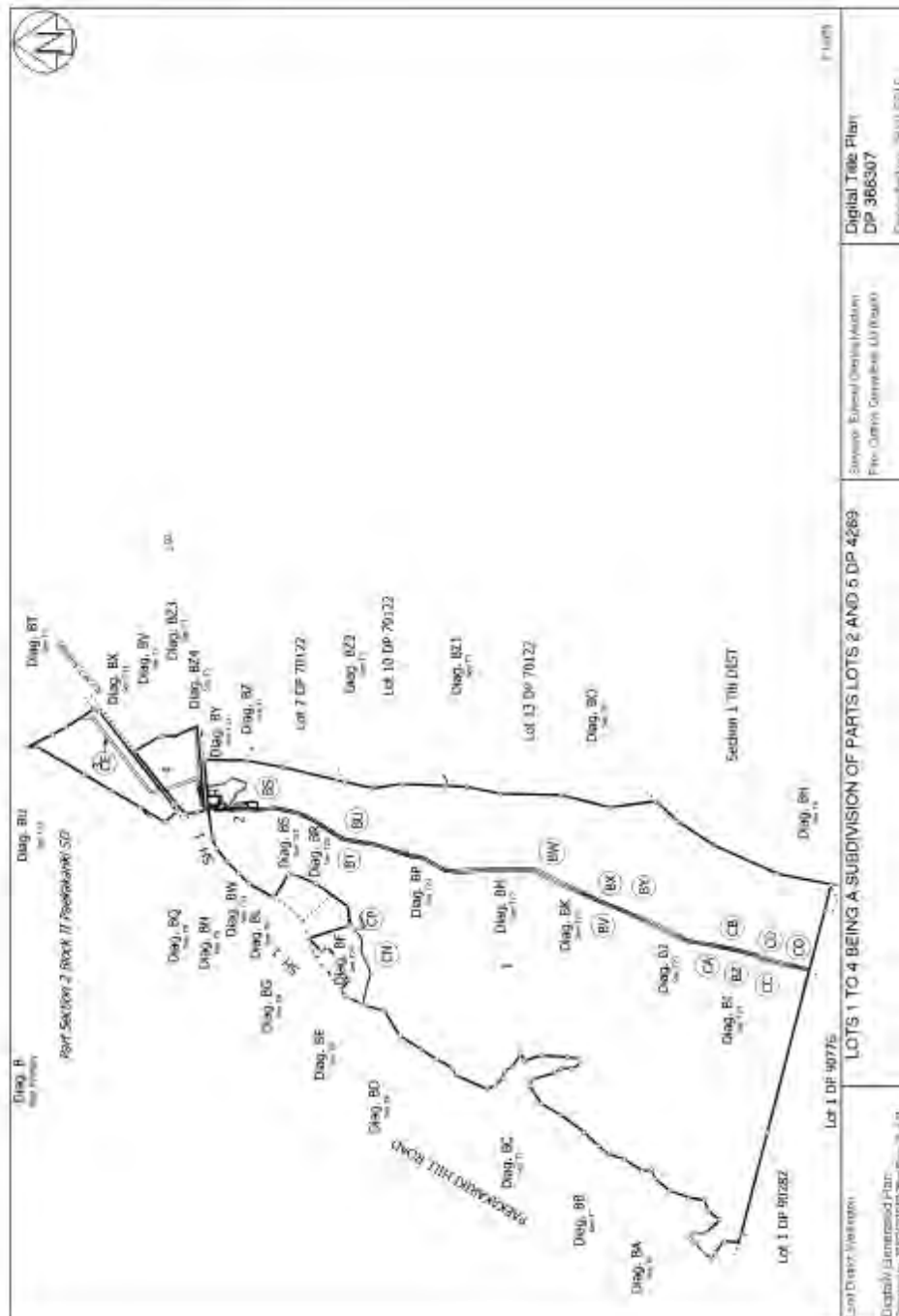
The easements created by Easement Instrument 8394697.5 are subject to Section 243 (a) Resource Management Act 1991 Fencing Covenant in Transfer 8792765.1 - 16.6.2011 at 12:15 pm

Subject to a right to convey telecommunications and computer media in gross over Lot 1 DP 368307 marked CN and CP on DP 368307 in favour of (now) Aotearoa Towers Limited created by Easement Instrument 8792765.1 - 16.6.2011 at 12:15 pm

Subject to a right of way over part Lot 1 DP 368307 marked A on DP 498479 created by Easement Instrument 11946316.1 - 26.2.2021 at 4:34 pm

Subject to a right (in gross) to convey water over part Lot 1 DP 368307 marked AC, AG, AM, AP, AS, AT, AW, AX, AY, AZ, BA, BB on DP 368307 in favour of Kapiti Coast District Council created by Easement Instrument 11946316.1 - 26.2.2021 at 4:34 pm





Transaction ID 100320
Client Reference bmgstaff001

Search Copy Dated 16/11/22 3:00 pm, Page 12 of 27
Register Only

Full copy of Record of Title is available on file.

4.2. Appendix 2: Visual Aids to Historical Information

Historical Plans

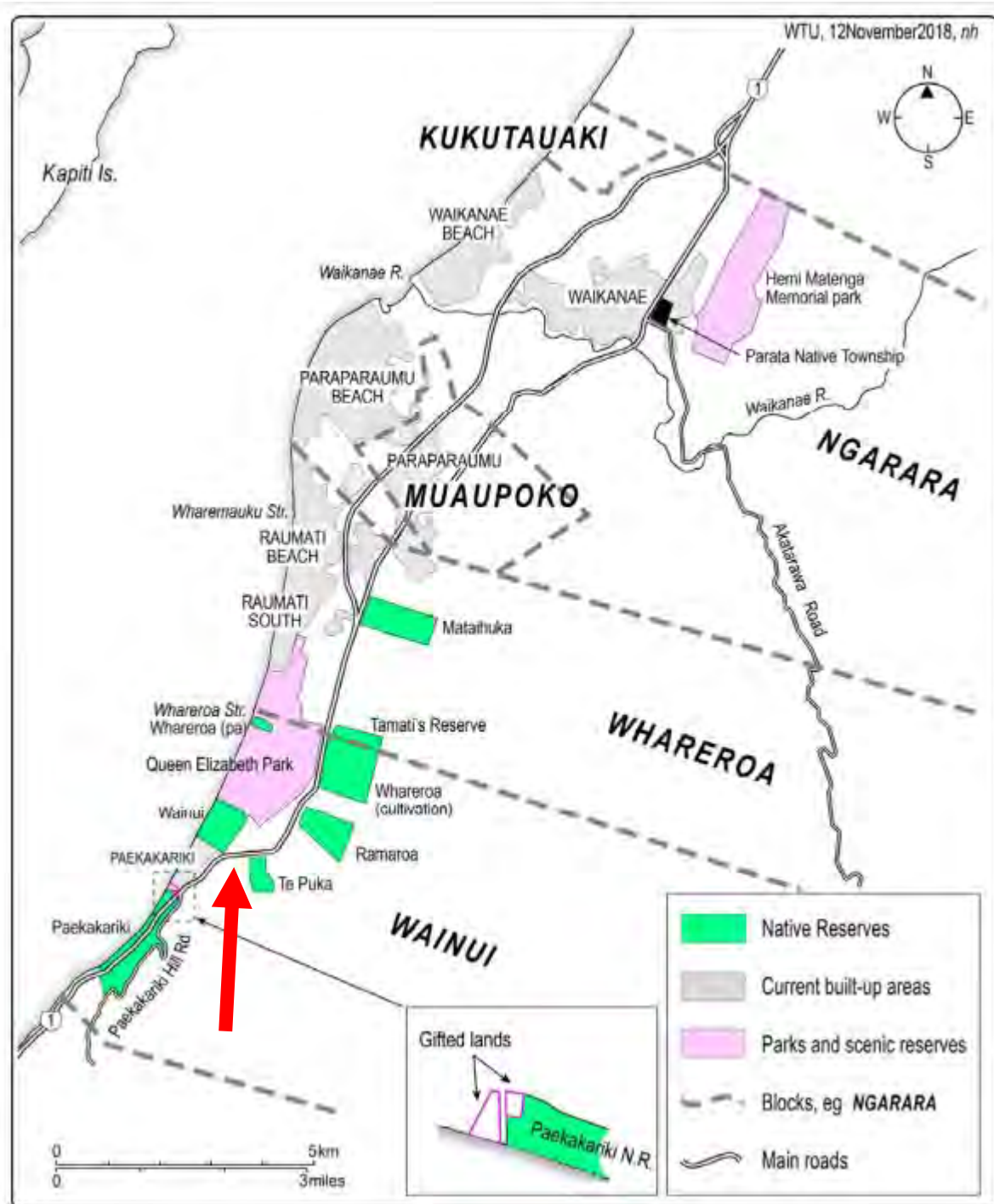


Fig 1: Native Reserves in the Whareroa and Wainui purchases, 1858-1859 shown with current roads and urban areas. Map by Noel Harris, Waitangi Tribunal Unit, reproduced from Kesaia Walker and Barry Rigby, *Te Ātiawa/Ngāti Awa ki Kapiti: Twentieth Century Land and Local Issues Report*, Commissioned by the Waitangi Tribunal for the Porirua ki Manawātū District Inquiry (Wai 2200), Waitangi Tribunal, December 2018, p.32.

Red arrow marking approximate position of the Fuel Tank Blast Wall added by the author.



Fig 4: 'Plan showing proposed pipe layout: AR17', PWD 114701, roughly overlaid on modern Google Earth aerial to map possible pipeline position.



Extent of buildings formerly associated with camp Paekakariki (2017 010m aerial)

Fig.

5: Map of Camp Paekākāriki building sites overlaid in yellow on modern aerial. The Fuel Tank Wall is the circle at lower right. Andy Dodd (Subsurface Ltd), NZAA Site Record R26/328: Camp Paekakariki.



Fig 6: Looking north towards AR17, 12 May 1943. The Brick Fuel Tank Blast Wall is in the dark patch of vegetation roughly in the centre of the photo. The US Marines transport depot lies immediately to its right. In the distance beyond the transport depot, Camps Russell and Mackay can be seen in the top right corner of the image, and Camp Paekakariki is visible at the top left. 'Defence Works and Buildings – Air Department Royal New Zealand Air Force [RNZAF] bulk fuel storage – Site AR17 – Paekakariki 1942-1942', Item ID R21064922, box 796, file 23/553/17, Public Works Department (ACHL), Archives New Zealand



Fig 7: AR17 under construction, 18 December 1942. 'Defence Works and Buildings – Air Department Royal New Zealand Air Force [RNZAF] bulk fuel storage – Site AR17 – Paekakariki 1942-1942', Item ID R21064922, box 796, file 23/553/17, Public Works Department (ACHL), Archives New Zealand



Fig 8: AR17 under construction, 18 December 1942: the excavation is complete and work on the foundation has commenced. 'Defence Works and Buildings – Air Department Royal New Zealand Air Force [RNZAF] bulk fuel storage – Site AR17 – Paekakariki 1942-1942', Item ID R21064922, box 796, file 23/553/17, Public Works Department (ACHL), Archives New Zealand



Fig 9: The structure in 2012, being reclaimed by bush prior to clearance of vegetation. Alison Dangerfield, Heritage New Zealand, January 2021.

Table of New Zealand Aviation Reserves

Table based on Gordon Burns, 'Aviation Reserve Fuel Depots', *Forts and Works*, Issue 9 August 2000, pp.1-3, and Peter Cooke, *Defending New Zealand: Ramparts on the Sea 1840-1950s*, Defence Study Group of New Zealand, Wellington, 2000, p.648, with report author's updates and additions as referenced.

NZDF/PWD site number	Airfield; Location	Capacity (gallons)	Surviving?
AR1	Milson; Atlantic Depot, Palmerston North.	500,000	No.
AR2	Nelson; Shell Depot, Port of Nelson.	350,000	No.
AR3	Woodbourne; Shell Depot, Picton.	345,000	No. No blast wall built.
AR4	Ashburton – Shell Depot.	500,000	No.
AR5	Ohakea; Kakariki/Greatford. Construction halted before complete.	600,000	Tank/blast wall extant in 2000 but filled with gravel; some pipeline fittings remained. ¹³² Not located in 2023.
AR6	Waipapakauri; Okaihau. In disused railway tunnel.	120,000	No. Tanks removed; no blast wall built.
AR7	Whenuapai; Swanson	350,000	Not located in 2023. Blast wall in situ late 1990s. ¹³³
AR8	Seagrove/Ardmore; Wiri Mountain. Construction halted before complete.	700,000	No.
AR9	Rukuhia; Cambridge. In rail yards.	600,000	No. Fuel tank emptied in 1946 and removed in 1950. ¹³⁴ No blast wall extant in 2023; site now highly modified by the construction of townhouses and only remnant of fuel depot is a concrete shed. ¹³⁵
AR10	Gisborne; Ormond.	180,000	Yes. ¹³⁶ Blast wall extant; partially filled in 2003 to stabilise the site.
AR11	Dannevirke; Private land.	-	Not built.
AR12	Masterton; Kopuaranga	180,000	Not located in 2000 or 2023.
AR13	Woodbourne; Blenheim	-	Not built.
AR14	Woodbourne; Picton (Sisters of Mercy land)	350,000	No. ¹³⁷ No blast wall built.

¹³² Gordon Burns, 'Aviation Reserve Fuel Depots', *Forts and Works*, Issue 9 August 2000, pp.1-3

¹³³ *ibid*

¹³⁴ Waipa District Council, 'Secret fuel bunker', <https://www.waipadc.govt.nz/your-waipaa/about-waipaa/waipaa-history/secret-aviation-fuel-bunker-cambridge>, accessed 22 November 2022; Wings Over Cambridge, 'AR9 – The RNZAF Fuel Depot in Cambridge', <https://www.cambridgeairforce.org.nz/AR9%20Fuel%20Depot.htm>, accessed 22 November 2022

¹³⁵ Pers. comm Laura Kellaway to Blyss Wagstaff, Email: 'Cambridge US Fuel tank', 30 January 2023

¹³⁶ Pers comm. Paula Hansen (Gisborne District Council), excerpt from planners report on 2018 consent included in 'Request for official information', 30 November 2022

¹³⁷ Gordon Burns, 2000, pp.1-3

AR14A	Woodbourne; Grovetown. Railway land – across from Hotel	11,000	No.
AR15	Wigram; Hornby	11,000	No. Site now a public park.
AR16	Te Pirita; Bankside. For planned US bomber base.	750,000	Yes. ¹³⁸ Tank removed after 1944; blast wall extant.
AR17	[Paekakariki], Transmission Gully. Construction halted before complete.	350,000	Yes – blast wall extant. Diesel for US camp.

4.3. Appendix 3: Visual Aids to Physical Information

Current Plans

N/A

¹³⁸ List No. 7727, Bankside Fuel Depot (Category 2), <https://www.heritage.org.nz/the-list/details/7727>

Current Photographs of Place

All photographs taken by B.Wagstaff, Heritage New Zealand, 9 February 2023



Fig 10: The Brick Fuel Tank Blast Wall in its secluded bush setting.



Fig11: Looking south from underneath the lintel of the main opening.



Fig 12: The steel rungs of the access ladder.



Fig 13: The 10-metre high World War Two Fuel Tank Blast Wall.

4.4. Appendix 4: Significance Assessment Information

Part 4 of the Heritage New Zealand Pouhere Taonga Act 2014

Chattels or object or class of chattels or objects (Section 65(6))

Under Section 65(6) of the Heritage New Zealand Pouhere Taonga Act 2014, an entry on the New Zealand Heritage List/Rārangi Kōrero relating to a historic place may include any chattel or object or class of chattels or objects –

- a) Situated in or on that place; and
- b) Considered by Heritage New Zealand Pouhere Taonga to contribute to the significance of that place; and
- c) Proposed by Heritage New Zealand Pouhere Taonga for inclusion on the New Zealand Heritage List/Rārangi Kōrero.

Significance or value (Section 66(1))

Under Section 66(1) of the Heritage New Zealand Pouhere Taonga Act 2014, Heritage New Zealand Pouhere Taonga may enter any historic place or historic area on the New Zealand Heritage List/Rārangi Kōrero if the place possesses aesthetic, archaeological, architectural, cultural, historical, scientific, social, spiritual, technological, or traditional significance or value.

Category of historic place (Section 66(3))

Under Section 66(3) of the Heritage New Zealand Pouhere Taonga Act 2014, Heritage New Zealand Pouhere Taonga may assign Category 1 status or Category 2 status to any historic place, having regard to any of the following criteria:

- a) The extent to which the place reflects important or representative aspects of New Zealand history
- b) The association of the place with events, persons, or ideas of importance in New Zealand history
- c) The potential of the place to provide knowledge of New Zealand history
- d) The importance of the place to tangata whenua
- e) The community association with, or public esteem for, the place
- f) The potential of the place for public education
- g) The technical accomplishment, value, or design of the place
- h) The symbolic or commemorative value of the place
- i) The importance of identifying historic places known to date from an early period of New Zealand settlement
- j) The importance of identifying rare types of historic places
- k) The extent to which the place forms part of a wider historical and cultural area

Additional criteria may be prescribed in regulations made under this Act for the purpose of assigning Category 1 or Category 2 status to a historic place, provided they are not inconsistent with the criteria set out in subsection (3)

Additional criteria may be prescribed in regulations made under this Act for entering historic places or historic areas of interest to Māori, wāhi tūpuna, wāhi tapu, or wāhi tapu areas on the New Zealand Heritage List/Rārangi Kōrero, provided they are not inconsistent with the criteria set out in subsection (3) or (5) or in regulations made under subsection (4).

NOTE: Category 1 historic places are ‘places of special or outstanding historical or cultural heritage significance or value.’ Category 2 historic places are ‘places of historical or cultural heritage significance or value.’