

Wiri to Quay Park (W2QP): archaeological desktop assessment

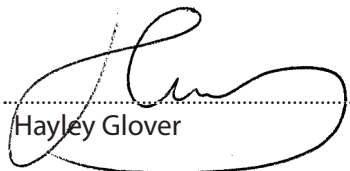
**report to
Kiwirail**

Hayley Glover

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Prepared by:


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Hayley Glover

Reviewed by:


.....
Matthew Campbell

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CFG
HERITAGE

CFG Heritage Ltd.
132 Symonds St
Eden Terrace
Auckland 1010
ph. (09) 309 2426
cfg@cfgheritage.com

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1 Introduction

Kiwirail propose upgrading the North Island Main Trunk (NIMT) between Quay Park and Wiri, including the installation of a third main from Wiri to Westfield Junction, as well as new sections of track at the Quay Park freight yard and part of Tamaki Drive. There are 9 archaeological sites recorded in the New Zealand Archaeological Association (NZAA) Site Recording Scheme (SRS) within 200 m of the proposed works areas. An archaeological assessment of effects is required in support of archaeological authority applications to Heritage New Zealand Pouhere Taonga (HNZPT). Michelle Grinlinton-Hancock of Kiwirail commissioned this assessment from CFG Heritage.

1.1 Statutory Requirements

All archaeological sites, whether recorded or not, are protected by the provisions of the Heritage New Zealand Pouhere Taonga Act 2014 and may not be destroyed, damaged or modified without an authority issued by Heritage New Zealand Pouhere Taonga (HNZPT).

An archaeological site is defined in the Heritage New Zealand Pouhere Taonga Act as:

- (a) any place in New Zealand, including any building or structure (or part of a building or structure), that—
 - (i) was associated with human activity that occurred before 1900 or is the site of the wreck of any vessel where the wreck occurred before 1900; and
 - (ii) provides or may provide, through investigation by archaeological methods, evidence relating to the history of New Zealand; and
- (b) includes a site for which a declaration is made under section 43(1).

The Resource Management Act 1991 (RMA) requires City, District and Regional Councils to manage the use, development, and protection of natural and physical resources in a way that provides for the wellbeing of today's communities while safeguarding the options of future generations. The protection of historic heritage from inappropriate subdivision, use, and development is identified as a matter of national importance (Section 6f).

Historic heritage is defined as those natural and physical resources that contribute to an understanding and appreciation of New Zealand's history and cultures, derived from archaeological, architectural, cultural, historic, scientific, or technological qualities.

Historic heritage includes:

- historic sites, structures, places, and areas
- archaeological sites;
- sites of significance to Maori, including wahi tapu;
- surroundings associated with the natural and physical resources (RMA Section 2).

These categories are not mutually exclusive and some archaeological sites may include above ground structures or may also be places that are of significance to Maori.

Where resource consent is required for any activity the assessment of effects is required to address cultural and historic heritage matters.

1.2 Scope and limitations

This evaluation is a desktop study only and is not intended as a full archaeological assessment of individual sites. All archaeological sites within 200m of the project area were briefly reviewed and assessed. This report is a preliminary evaluation only and where there is a likelihood of archaeological evidence being disturbed, further archaeological assessment may be required. The assessment and



Figure 1. Map showing the path of the railway where works are proposed, and recorded archaeological and heritage sites in the area.

evaluation for all archaeological sites is based on the current information and supporting documentation in Archsite, the online database of the SRS.

This data must be treated as though it were correct and up to date, although even a brief review of the data reveals that some sites which have subsequently been destroyed by development are still recorded as intact and the record has not been updated to reflect this.

Archaeological sites have been recorded since the 1950s and the quality of site information is variable. Sites were initially recorded on 100 yd grid references, which were converted to 100 m grid references as the map data became metricated in the 1980s. Site locations potentially have only a 200 m accuracy. Since the mid-1990s sites recorded by hand-held GPS are generally located to ± 5 m.

While the distribution of recorded archaeological sites indicates areas where pre-European Māori occupation was concentrated, the record is far from complete or comprehensive. A lack of recorded sites cannot be taken to mean that no archaeology will be found during works.

2 Methodology

The NZAA SRS was searched for records of archaeological sites in the vicinity and incorporated into the Project GIS. Archaeological site reports were accessed from the Heritage New Zealand Pouhere Taonga (HNZPT) digital library and old maps and plans held by Land Information New Zealand (LINZ) were accessed using QuickMap. Auckland Council's Cultural Heritage Inventory (CHI) and GeoMaps were examined for information on Historic Heritage.

3 Background

3.1 Quay Park

The Auckland isthmus / Tāmaki Makaurau, 'the land of a hundred lovers' or 'the land desired by many', was densely settled early on in pre-European Māori history, including the area around Quay Park, which had a very different landscape than is seen today. The land had sheltered harbours, fertile volcanic soils, and easy access to marine resources.

The landscape around the Quay Park area is highly modified, with the proposed works largely situated on reclaimed land. Much of the reclamation in the Downtown Auckland / Britomart area was carried out in the 19th century, beginning in 1859, with additional reclamations happening throughout the 20th century. The vast majority of reclaimed land around Mechanics Bay, St Georges Bay, and Judges Bay is from post-1900 operations, with the exception of a small strip of land at the original Mechanics Bay coastline (Figure 2).

Kelly's map of Māori place names in Tāmaki Makaurau also illustrates the pre-1840 coastline as marked in Figure 2 (Kelly 1940). Te Tōangaroa / Mechanics Bay was west of the proposed works area. The Māori name can be translated to 'the dragging of a waka across a long distance.' This refers to the fact that the tide in this bay went out very far, so if a waka was landed at low tide it had to be dragged a long way to the beach. When European settlement began in Auckland, this bay was the location of the dwellings of the first workmen employed by the government, as well as sawmills and boat-yards, giving it the name Mechanics Bay (Campbell n.d.). East of this was Wai o Taikehu / St George's Bay. Taikehu was an ancestor of Ngāi Tai who arrived on the *Tainui*, and the Māori place name can be translated as 'the waters of Taikehu.' The easternmost point along this coastline is at Judges Bay and Taurarua / Point Resolution, where Judge Martin and Attorney General Swainson built houses in 1841. Taurarua has been translated as 'two ropes,' potentially referring to these two men who were supposed to be administrators of British justice (Campbell n.d.)

This coastline was overlooked by elevated land around Parnell and Pukekawa / the Domain, where significant evidence of pre-European Māori settlement has been recorded. Sites at Pukekawa include pā, battlegrounds, terracing, storage pits, midden, and other evidence of settlement both near the pā and the coast. In the 1840s Te Wherowhero had an official house at Pukekawa (Bulmer 1994).

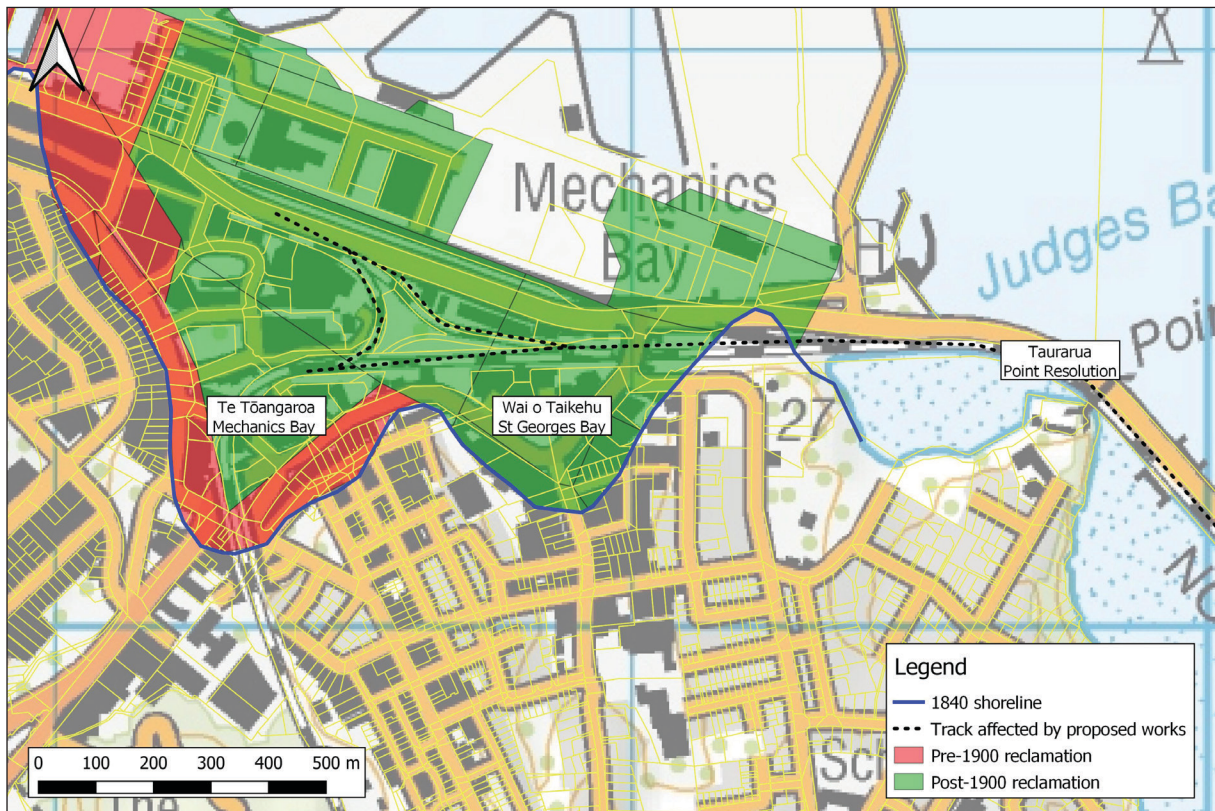


Figure 2. Map of the Quay Park area showing the 1840 coastline and reclamations near the proposed works area.

In 1840 Auckland was founded as the government capital by Governor Hobson, who named it after his patron Lord Auckland. Hobson purchased around 3000 acres of land from Ngāti Whātua in the same year, then in 1841 proceeded to sell the land to settlers at a much higher price than he paid. An influx of settlers arrived in the area and a commercial hub began to build up in the Auckland CBD area (McClure 2007; Stone 2001). By 1843 there were 3000 people recorded living in Auckland, and that number grew to more than 12,000 people by 1870 (Bickler et al. 2005)

A significant amount of archaeological research has been carried out around the Auckland waterfront and surrounding areas, and it is not within the scope of this assessment to describe all of these investigations. A lot of work has occurred with the development of the Britomart and Commercial Bay areas, which are located on pre-1900 reclamations. The Britomart Archaeological Project (Bickler et al. 2005) gathered information on the wharves, jetties, seawall and railway station, investigating how these changed the workings of Auckland Harbour over time. Numerous 19th century artefacts were discovered, but no information directly related to pre-European Māori settlement was encountered (Bickler et al. 2005).

Archaeological monitoring was also undertaken at the Quay Park development in 1996 with the aim of learning more about the pre-1900 reclamation, but only 20th century material was encountered (Clough and Prince 1997). In 2000, at the AMP tower on the corner of Albert and Quay Street, information regarding the 1878 graving dock was recovered and a small section exposed for the first time (Clough et al. 2001). Further monitoring in the Britomart area, in 2001 and 2018, showed that 20th century developments including roading and services have intruded into the upper levels of some of the pre-1900 reclamations (Clough and Prince 2001; Larsen and Clough 2018). With earthworks for the construction of the new shopping centre at Commercial Bay, between 2016 and 2018, brick foundations of the Palmerston Building were located, as well as various other artefacts and building foundations (Judge and Clough 2018).

3.2 Westfield and surrounds

Westfield is situated in Ōtāhuhu, near the Mangere Inlet. Ōtāhuhu was an important strategic location in pre-European Māori history, and was settled from an early period. The narrow strip of land between the Tamaki River and the Manukau Harbour was the location of several portages (Figure 3). Two particularly well-known ones are Te Toangakiotahuhu or Ōtāhuhu, which was one kilometre long, crossing from the head of Ōtāhuhu Creek through to the Mangere inlet, and Karetu, which was two kilometres long, following Anns Creek across the base of Hamlins Hill until it reached the Tamaki River (Furey 1986). The Pukaki portage is located further south in Papatoetoe, at Pukaki Creek. Traditions state that the Ōtāhuhu Portage was first established with the hauling of the *Tainui* from the Tamaki River to the Manukau Harbour, and it remained in use at the time of European contact (Furey 1983). These portages played a vital role in communication and transportation, making the area strategically important, both economically and militarily.

Two prominent volcanic cones were present within 1 km of Westfield; these were Ōtāhuhu / Mount Richmond (R11/13) and Te Apunga o Tainui / McLennan Hills (R11/10), both of which were pā sites. Te Apunga o Tainui / McLennan Hills has been almost entirely destroyed by quarrying (Furey 1986; Campbell and Ross-Sheppard 2013). Soils in the area were fertile, well drained volcanic loams suitable for the cultivation of kumara, and several pre-European Māori settlement sites have been recorded in the general area.

In the 1830s European contact increased and the area became part of the Hamlin Land Grant as land sales began to occur (Furey 1983). With the musket wars in the early 1800s, the Tamaki portages were used frequently. This may have led to occupation of a more intermittent or temporary basis on the Tamaki isthmus until 1840, when European settlement began to occur in the area (Sewell 1992). In the late 19th and 20th centuries, much of the Mangere Inlet foreshore was reclaimed, particularly with the construction of the North Island Main Trunk. The pre-reclamation shoreline of the inlet is visible in an 1845 survey map (SO 683), and is marked on the maps used in this report (Figure 6).

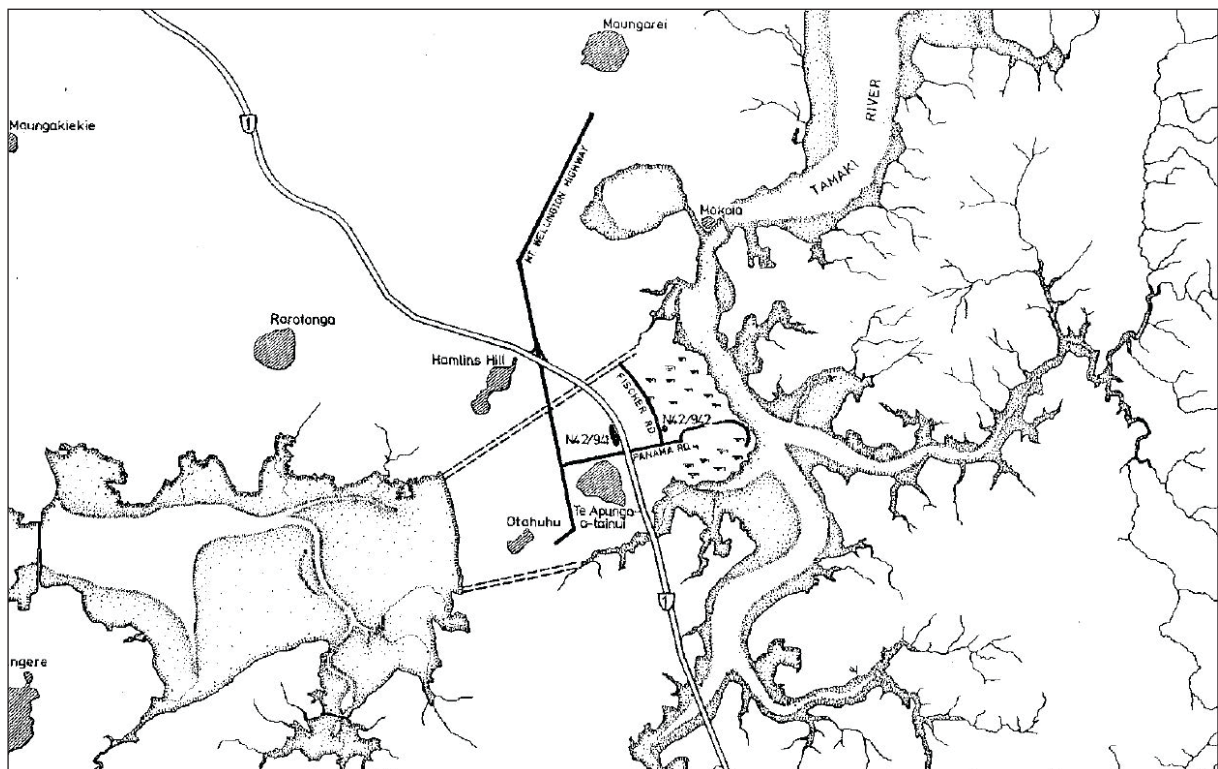


Figure 3. Portion of map from Furey (1986) showing the locations of Te Toangakiotahuhu and Karetu portages (dashed lines) (Furey 1986: 3).

While there are numerous archaeological sites recorded near Tāmaki River and the Manukau Harbour, there is a lack of sites recorded in Ōtāhuhu and around the Mangere Inlet. Given the importance of this area as a location for settlement, cultivation, and crossing the Tamaki Isthmus, this apparent lack of sites likely reflects a lack of targeted archaeological research and destruction of evidence by development, rather than a lack of occupation.

A well known site in the area is R11/898, the Westfield site, which has been subject to several archaeological investigations. This site represents an undefended settlement with archaeological features identified including postholes, pits, evidence of cooking and stoneworking, including midden and various artefacts, probably associated with occupation of the pā at Te Apunga o Tainui (Furey 1983, 1986; Sewell 1992). The site was occupied in the late 16th and early 17th centuries (Sewell 1992). Several investigations at Mutukaroa / Hamlin's Hill have also been undertaken, with a focus on evidence related to European farming (Lawlor 1999; Phillips 2000), while five phases of pre-European Māori occupation were excavated over several seasons on the southern knoll (Pearce and Walton 1983).

3.3 *Wiri and surrounds*

Situated east of the Manukau Harbour, early pre-European Māori settlement in Wiri and surrounding areas would have been intensive. Settlement of the general area can be traced back to the arrival of the *Tainui*, which entered the Manukau Harbour in the 14th century (Murdoch 1990). The harbour is thought to have been first pointed out by a priest aboard the waka, Taikahu, and was named by the *Tainui* captain Hoturoa (Williams 2016).

With its rich volcanic loam soils and the abundance of volcanic rock in the area, Wiri was highly suited for cultivation, and Māori built an extensive stonefield gardening complex in the area, associated with pā at Matukutūruru / Wiri Mountain (Te Manurewa o Tamapahore Pā) and Matukureia / McLaughlins Mountain. The stonefields have been referred to by different names, including the Matukureia Stonefields and the Matukurua Stonefields (Bickler et al. 2013). The gardens formerly covered approximately 500 ha with terraces, stone walls, and stone and earthen mounds (Figure 4). These structures probably served a variety of purposes, including boundary markers, soil temperature/moisture control and wind/frost protection (Bulmer 1983; Rickard 1985). These features enabled successful cultivation in areas with limiting factors like moisture deficits and leaching (Rickard 1985).

One of the first Europeans to settle in the area was McLaughlin, a farmer who bought more than 1000 ha of the Clendon Grant. Lava outcrops and scoria made ploughing impractical, but McLaughlin built dry stone walls in various areas to fence in blocks for grazing, probably destroying and building over pre-European Māori constructions (Cramond et al. 1982).

Extensive quarrying in the area took place from the latter half of the 19th century onwards, with Matukutūruru / Wiri Mountain in particular used as a quarry by the Railways Corporation from 1915 (Foster 1988). This resulted in the destruction of much of the gardening complex and maunga, almost completely levelling it (Cramond et al. 1982).

Archaeological research in Wiri has been largely focussed on the two pā and the stonefield systems, in large part driven by the construction of the Wiri Oil Terminal and the Wiri Railway Station, which destroyed large sections of the stonefields. Various small scale excavations and mapping projects have taken place over the years.

In 1982, ahead of the construction of the Wiri Oil Terminal, Cramond and colleagues carried out survey and mapping of the stonefields (R11/1187) with the goal of identifying and describing each prehistoric feature, with mapping focussed on ensuring the relative positions, alignments and orientations of features were correctly recorded. Seventeen structures identified as being of high archaeological significance were mapped in more detail (Cramond et al. 1982). A brief review of the stonefields was also undertaken in 1983 by Rickard and colleagues as part of their survey of stone structures across South Auckland (Rickard et al. 1983), and a more in depth investigation of the garden system was presented by Bulmer in the same year (Bulmer 1983).

In 1984, prior to quarrying for the Wiri Railway station, Veart and colleagues mapped the area (R11/1188), with the goal of producing a more complete and detailed map than was obtained at the Wiri Oil Terminal site (Veart et al. 1984). As the features encountered numbered well over 1000, it

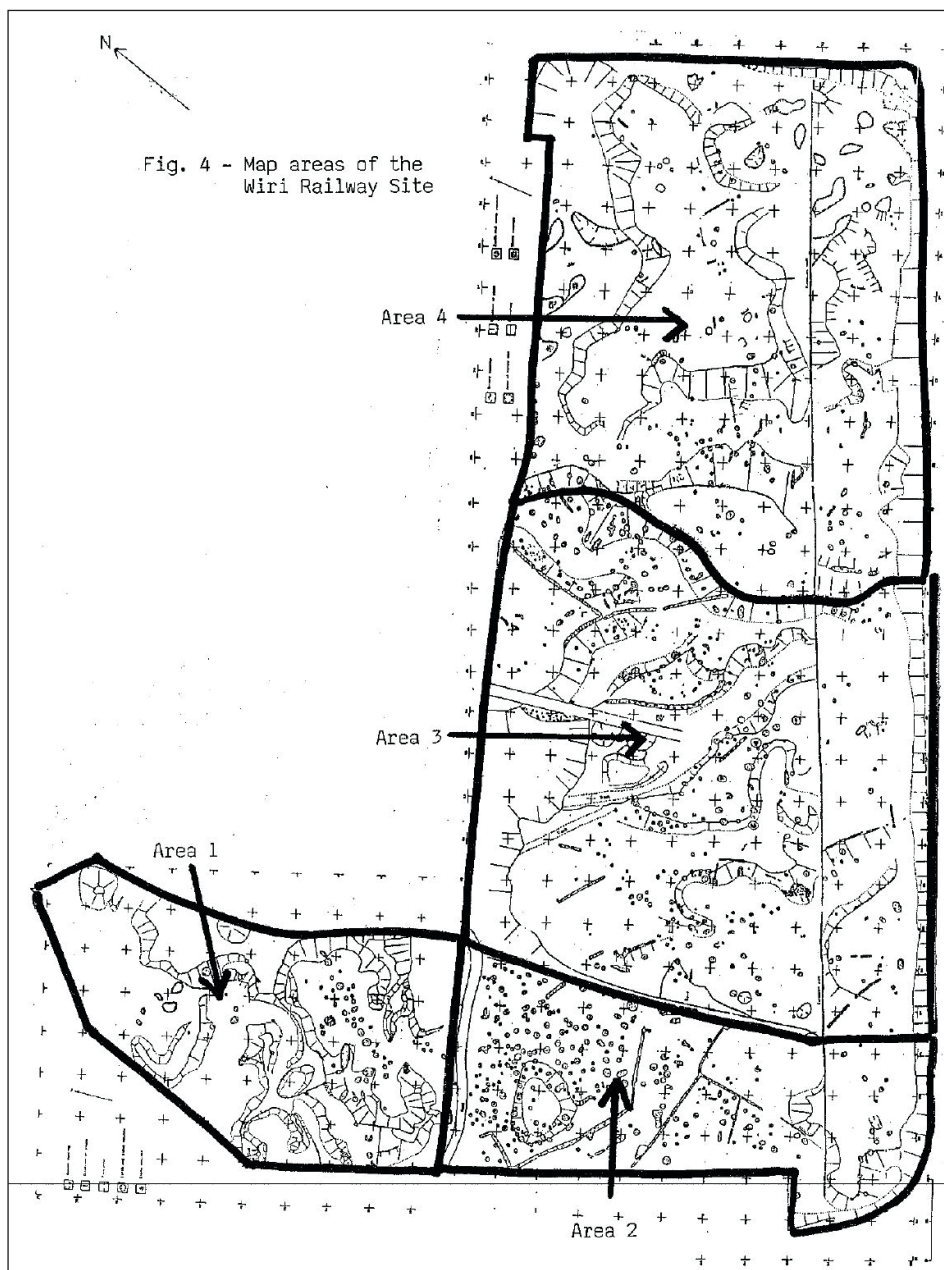


Figure 4. Map of the Matukurua Stonefields near the Wiri Railway Station (Veart et al. 1984:16).

was not possible to map every feature point by point, but the overall area covered by each feature is recorded (Figure 4). Features were categorised as stone walls, stone alignments, mounds, standing stones, stone facing, terraces and platforms, ditches, stone scatters, stone arrangements, fill, shaped depressions, and buried soil horizons. Further investigations at the Wiri Railway Site (R11/1188) were undertaken by Rickard in 1985, including the excavation of several mounds and terraces as well as the construction of experimental mounds (Rickard 1985). Previous excavations had also been carried out on three mounds north of Matukutūru / Wiri Mountain by Sullivan (1974).

In 1988, Foster surveyed and mapped surviving pre-European Māori features at Matukutūru / Wiri Mountain (R11/32), including terraces, depressions, midden deposits, mounds and stone walls. Two key areas where archaeological remains were still present were identified, with one representing domestic occupation, and the other a transitional zone between the pā and the stonefield gardens (Foster 1988). More recently, from 2008 to 2011, Bickler and colleagues undertook an archaeological assessment and subsequent monitoring of quarry extensions at Matukureia / McLaughlins Mountain

(R11/47) (Bickler et al. 2013). Archaeological remains which were exposed included pits, stone alignments, midden and fire cracked rocks representative of food preparation areas, and obsidian flakes. Radiocarbon dates suggested that occupation in the project area was taking place during the 16th and 17th centuries AD (Bickler et al. 2013).

3.4 North Island Main Trunk

From 1870 railway development became a critical infrastructure development project, led by future Premier Julius Vogel. This development was intended to promote growth and immigration (Burgess and Knight 2010). The first part of the North Island Main Trunk (NIMT), which would eventually link Auckland and Wellington, was a 66 km section of track connecting Auckland and Mercer (Cowan 1928).

Preparation for a railway line heading south from Auckland, initially planned to reach Drury, took place from the early 1860s. The first survey for an Auckland to Drury railway was carried out in 1862 by Harding and Stewart (Ball 2009). In 1864, Drury's potential as an important settlement linking Auckland to the Waikato was recognised, with the Waihoihoi coal mine, near-constant military presence from the Waikato Wars, and multiple commercial opportunities. Rail transport was an attractive option to enhance these and improve transport connection with Auckland (Brown and Brown 2017). On 16 February 1865, the first sod for the Auckland to Drury railway was turned (*Daily Southern Cross*, 17 February 1865: 5). However, in 1866 the rail link was cancelled as troops left Drury and the financial situation worsened.

Works did begin on the railway line in Auckland in 1865, from Mechanics Bay to the Auckland Domain, along the route of the Waipapa Stream (Salmon Reed 2009). Planning for the railway south recommenced in 1870 with Vogel's scheme, with a newly proposed terminus at Mercer (Ball 2009). The route was resurveyed by Stewart and Harding and in August 1872 a new contract was made with John Brogden and Sons. The Auckland to Onehunga line was constructed in 1873, and the construction of the Auckland to Mercer line was completed to the Waikato River in April 1875, where the rail service could link up with paddle-steamers (Cowan 1928; Merrifield 2009). Later on, in 1930, the Westfield Deviation was constructed (Salmon Reed 2009).

From Mercer, the NIMT continues southward to Wellington. The last spike of the final track for the entire line, from Auckland to Wellington, was driven on 6 November 1908, marking the formal opening of the line (Atkinson 2010). A two-day service began on 9 November 1908, and an overnight express service began on 14 February 1909.

4 Quay Park desktop assessment

There are seven recorded archaeological sites with points within 200 m of the proposed works at Quay Park. Three of these are pre-European Māori sites, including two pā (R11/84, R11/85) and a midden/oven site (R11/1403). The remaining four sites are a health care site (R11/1558), a brickworks (R11/1696), a military fort (R11/1718), and a house site (R11/2681). The reclamations in the proposed works area are not archaeological sites as they occurred in the 20th century.

There are also six historic heritage extents of places within 200 m of the proposed works in this section. One of these refers to archaeological site Fort Resolution (R11/1718; 1570), and the remainder are 19th and 20th century sites including the Dilworth Terrace Houses (1634), the NZ Loan and Mercantile Wool Store (1889), Auckland Railway Station (2067), St Stephen's Chapel (1707), and the Parnell Baths (1708).

A further seven items are listed in the CHI. These include the Parnell Wharf (577), the Parnell Railway Signal Box (18734), the Parnell Baths (416), Parnell footbridge (19637), the Netherland Memorial (22068), and Pohutukawa trees (12628, 12631). Note that sites dating to the 20th century are not protected by the provisions of the Heritage New Zealand Pouhere Taonga Act 2014, but may be subject to additional controls by Auckland Council if they are to be affected by works.

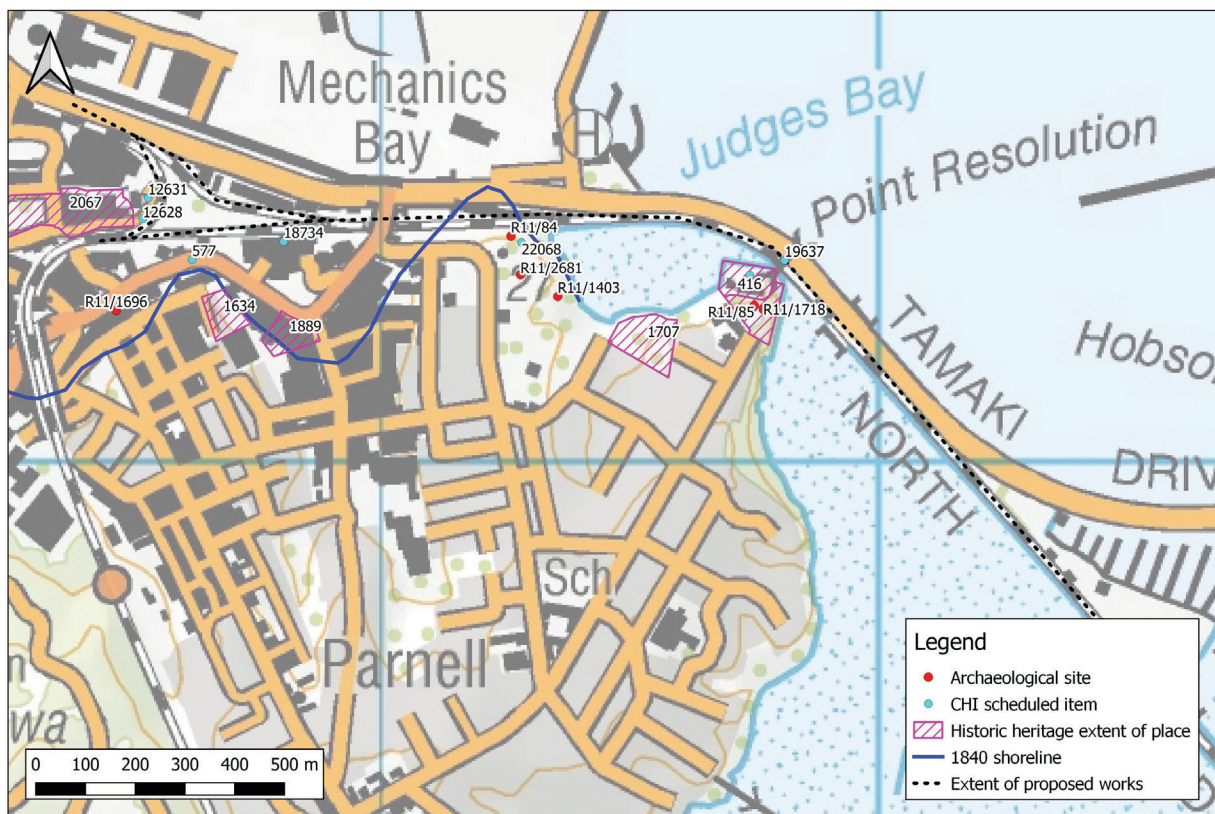


Figure 5. Map of archaeological sites and historic heritage extents of place within 200 m of the proposed works at Quay Park, as well as CHI items in the immediate vicinity of the works.

4.1 Archaeological sites

4.1.1 Mataherehere Pā, R11/84

This site refers to the likely location of Mataherehere, a headland pā. Extensive landscaping of the Dove Myer Robinson Park as well as cuts for the railway mean there is almost no surface evidence present. The only evidence of settlement noted in the SRS is a terrace with midden scatter immediately west of Judges Bay Road. If earthworks are carried out in this area, it is possible that subsurface material could be revealed, as the railway cuts through the location of the original headland.

4.1.2 Pā, R11/85

R11/85 is another pā site, on Point Resolution. Shell midden has been recorded around St Stephens Chapel and cemetery and along the cliff, but no other features related to a pā have been recorded. The site is now occupied by various buildings. This site is outside the scope of works.

4.1.3 Midden/oven, R11/1403

This is a midden site consisting of cockle shell eroding out of a bank next to a track at the Dove Myer Robinson rose gardens. The site is in poor condition, and is outside the scope of works.

4.1.4 Health care, R11/1558

This site refers to a 19th century healthcare building which may have been demolished in 1987. The site was recorded as being at the junction of the Strand and Augustus Terrace but no other information is provided. This site is outside the scope of works.

4.1.5 Commercial, R11/1696

R11/1696 is the location of Frederick Archard and Brown's Brickworks. The site is likely beneath the Strand, approximately 150 northeast of the Parnell Rise intersection and much of it is likely preserved beneath fill. The business was in operation from 1862 to 1874, taken over by Nathan Harker's Patent Brickworks in 1875. The Brickworks closed in the late 1880s. This site should be outside the scope of works.

4.1.6 Fort Resolution, R11/1718

This is the site of Fort Resolution, a military fort built on Point Resolution in 1885. Two guns were mounted 5 m from the cliff edge (one of these is on display in Albert Park), and there were subterranean loading galleries and passages. The site was surrounded by a ditch and bank with a drawbridge. Earthworks are likely intact beneath the fill used to bury the fort in 1914. This site is outside the scope of works.

4.1.7 Kilbryde House, R11/2681

R11/2681 is the location of John Logan Campbell's house, Kilbryde, built in 1881 with an Italianate garden. It was demolished in 1922 after being deemed unsafe. Landscape features are still present within Dove Myer Robinson park, including two broad lateral terraces, path alignments, and trees. The house site is outside of the scope of works.

4.2 *Historic heritage extent of place*

All six historic heritage extents of place within 200 m of the proposed works are outside the scope of works and will not be discussed further or assessed according to the Auckland Council Methodology for Evaluating Historic Heritage Significance (2019).

4.3 *Auckland Council CHI*

4.3.1 Parnell Baths, 416

The Parnell Baths were originally constructed in 1914 with investigations into potential locations beginning in 1912. The location within the bay meant the tide could be utilised to fill the baths, though construction of the railway in this area in 1926 prevented water being drawn directly from the harbour, causing the baths to be closed for some time. In the late 1930s chlorination and filtration plants were installed. This site is outside the scope of works.

4.3.2 Parnell Wharf, 577

The Parnell wharf was likely constructed before 1880 on the point between St Georges Bay and Mechanics Bay and destroyed later when the area was reclaimed. This site is not likely to be affected by works.

4.3.3 Pohutukawa, 12628 and 12631

These are both botanical sites; 12628 is a singular pohutukawa tree which may or may not still be present off Ronayne Street, and 12631 is a group of four pohutukawa trees along Beach Road, noted as being less than 100 years old as of 2012. The trees should all be outside the scope of works.

4.3.4 Parnell Signal Box, 18734

This item refers to the former Parnell Railway Signal Box. It was constructed in 1930 and was renovated in 2009/2010, though many original features were retained including brass levers and the original mimic panels. This item is not automatically protected by the provisions of the Heritage New Zealand Pouhere Taonga Act 2014, but may be subject to additional controls by Auckland Council if they are to be affected by works. This site should be outside the scope of works.

4.3.5 Point Resolution footbridge, 19637

The Point Resolution footbridge was proposed by Auckland City Council in 1928 and designed with a bowstring truss design. The contract for constructing the steel trusses was given to the Mason Brothers in 1929, and the bridge was completed later that year. This site should be outside the scope of works.

4.3.6 Netherlands memorial, 22068

Item 22068 is the Netherlands memorial which was unveiled in 1963 after five months of construction, with different metal badges representing different Netherlands armed forces service units. As a late 20th century site this item is not automatically protected by the provisions of the Heritage New Zealand Pouhere Taonga Act 2014 but may be subject to additional controls by Auckland Council if they are to be affected by works. This site should be outside the scope of works.

4.4 Summary

The only site with a possibility for material to be encountered during works is the probable location of Mataherehere Pā (R11/84). This is the only location in this section of the railway which is situated on part of the original coastline; the remainder of the land was all reclaimed in the 20th century. The rest of the sites/items reviewed should be outside the scope of works. This section of the railway line is likely to be almost entirely of 20th century construction.

5 Westfield Junction to Wiri Station desktop assessment

There are two recorded archaeological sites with points within 200 m of the proposed works between Westfield Junction and Wiri Station. These are a pre-European Māori portage (R11/2147) and a pre-1900 industrial water supply (R11/1635). Additional pre-European Māori sites within 500 m, at Mutukaroa / Hamlins Hill (R11/142), Ōtāhuhu (R11/13), Matukutūruru / Wiri Mountain (R11/32), and the Matukorua Stonefields (R11/1188), were also reviewed as their original extents are significantly larger than the SRS point location and could extend into the proposed works area.

There are also eight historic heritage extents of places within 200 m of the proposed works in this section. One of these refers to pre-European Māori site R11/142 at Mutukaroa / Hamlins Hill (1572), and the remainder refer to 19th and 20th century structures including residences (1477, 1482, 2564), structures associated with the railway (1473, 2578), the Papatoetoe Town Hall (1468), and King's College historic campus (1666).

Fourteen additional CHI scheduled items are present in the immediate vicinity of the rail corridor. These items include the Ōtāhuhu Portage (361), the Papatoetoe Railway Station (12487), parts of which date to 1875, and 11 post-1900 sites related to the railway. An additional two items referring

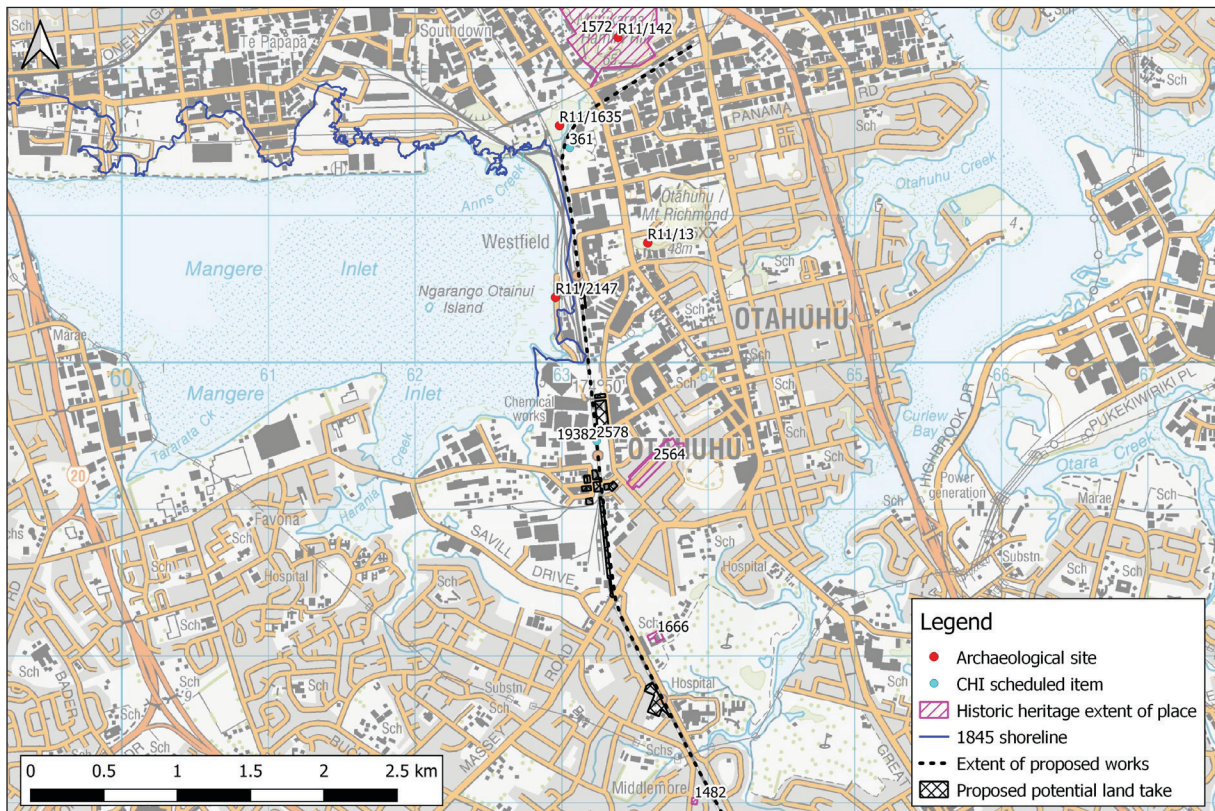


Figure 6. Map of archaeological sites and historic heritage extents of place within 200 m of the proposed works between Westfield Junction and Papatoetoe, as well as CHI items in the immediate vicinity of the proposed works.

to a WW II military base (15944 and 17015) have an extent which is immediately adjacent to Puhinui Station, though one of the markers is in the wrong location, west of the Puhinui interchange. These items have also been included in the assessment. Note that sites dating to the 20th century are not automatically protected by the provisions of the Heritage New Zealand Pouhere Taonga Act 2014 but may be subject to additional controls by Auckland Council if they are to be affected by works.

5.1 Archaeological sites

5.1.1 Ōtāhuhu Pā, R11/13

This is the location of the pā at Ōtāhuhu / Mount Richmond. Beginning in 1870, eight areas on the maunga have been quarried, damaging many of the archaeological features. Archaeological evidence is still present, particularly on the lower slopes on the northern side. This site should be outside of the scope of works.

5.1.2 Matukutūruru Pā, R11/32

This is the location of the pā at Matukutūruru / Wiri Mountain. The vast majority of the maunga and the pā have been quarried away and destroyed. A small section within the Wiri Cave Scientific Reserve has some features remaining, but this is beyond the scope of works.

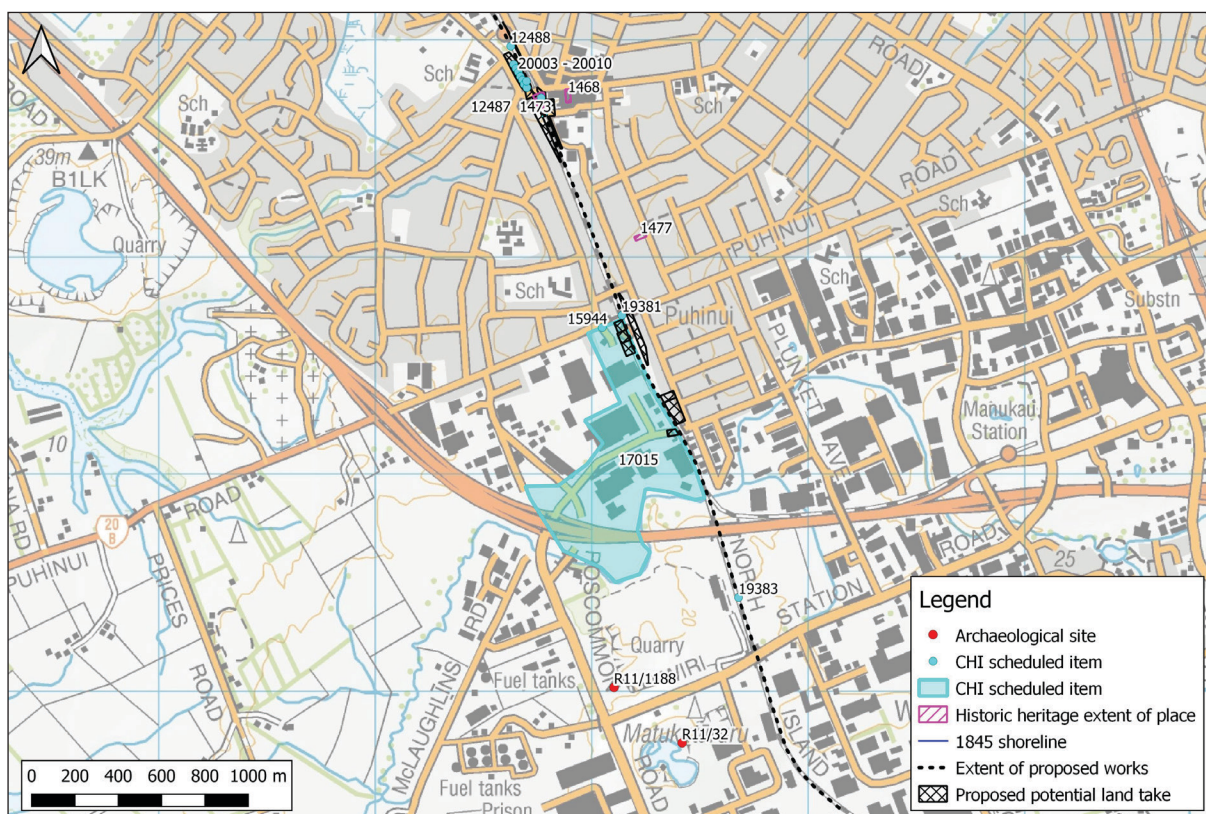


Figure 7. Map of archaeological sites and historic heritage extents of place within 200 m of the proposed works between Papatoetoe and Wiri Station, as well as CHI items in the immediate vicinity of the proposed works.

5.1.3 Pit/terrace, R11/142

R11/42 refers to settlement areas around the pā on Mutukaroa, with at least three occupation areas noted on the spur, and at the northern and southern ends of the main ridge. The site is immediately north of the railway line and if earthworks are undertaken in this area there is a small chance that cultural material may be encountered.

5.1.4 Māori horticulture, R11/1188

This site, sometimes termed the Wiri Railway Site, refers to the section of the Matukorua Stonefields bounded by Wiri Station Road on the south, Roscommon Road on the west, and the railway on the east. The site has largely been destroyed by quarrying in the 1980s with additional damage in the 1990s. Numerous stone structures and mounds were present here, associated with Matukutūru / Wiri Mountain, as discussed above. Only the smallest section of this site remains undeveloped, and this is outside the scope of works.

5.1.5 Industrial, R11/1635

R11/1635 is a rock cut trench which was for water supply to the Taniwha Soap Company. The company was founded in 1878, and this trench is shown on a plan from 1904 so may be of late 19th century construction. The trench is cut into the lava up to 2 m in depth with the spoil stacked adjacent to the trench. The trench, as well as an associated well, are on the eastern boundary of the rail

corridor, but no works are scheduled for this part of the track. This site should be beyond the scope of works.

5.1.6 Te Toangakiotahuhu / Ōtāhuhu Portage, R11/2147

Te Toangakiotahuhu or the Ōtāhuhu Portage crosses the Tamaki isthmus at Ōtāhuhu Creek, reaching the Mangere Inlet near the location of R11/2147. The portage is also recorded as item 361 in the CHI. There is unlikely to be any evidence remaining related to the portage itself, particularly with the extent of development in the area. This site should be outside the scope of works, though there is a very small potential for unrecorded archaeological sites related to pre-European Māori settlement in this area to be encountered where earthworks are undertaken.

5.2 *Historic heritage extent of place*

Of the eight historic heritage extents of place, five are outside the scope of works and will not be discussed further. These are two residences (01477 and 01482), Papatoetoe Town Hall (01468), Kings College and associated buildings (01666), and the Lippiatt Road housing area (02564). The Otahuhu Railway Signal Box (02578) and Mutukaroa / Hamlins Hill (01572) are in the immediate vicinity of the railway corridor (with 02578 within the railway corridor) but works will remain outside of the extent of place. As such, these sites have not been assessed according to the Auckland Council Methodology for Evaluating Historic Heritage Significance (2019).

Works are taking place within the Papatoetoe Railway Station (01473) historic heritage extent of place, though the building itself will not be affected. This item has been assessed under Auckland Council Provisions below.

5.3 *Auckland Council CHI*

Of the sixteen items scheduled in the CHI in the vicinity of the railway corridor, two have already been discussed in the above sections and will not be discussed further in this section (Ōtāhuhu Portage, 361; Papatoetoe Railway Station, 12487).

5.3.1 Papatoetoe railway bridge, 12488

This item refers to the location of the footbridge at Papatoetoe Railway Station. A request for the provision of the overhead footbridge was made in 1913. The bridge was demolished and replaced with a modern concrete overbridge between 2001 and 2006. This site will not be affected by the proposed works.

5.3.2 WWII Cambria Park military base, 15944 and 17015

These two items both refer to the US military temporary camp at Cambria Park which existed between 1942 and 1945. The close proximity of Puhinui Station allowed ease of troop and equipment movement for the camp. The camp is recorded in the CHI on the western side of the Puhinui interchange (CHI item 17015), but this location is incorrect, and the marker on Puhinui Road (CHI item 15944) represents the entrance to the camp off Puhinui Road. The indicative extent of the camp is based on aerial photography from 1939 (Figure 7).

As a post-1900 site, this site is not automatically protected by the provisions of the Heritage New Zealand Pouhere Taonga Act 2014 but may be subject to additional controls by Auckland Council if affected by works. It is unlikely, but possible, that any earthworks taking place on the western edge of the railway corridor could encounter material related to the camp, particularly where the proposed potential land takes intersect this area.

5.3.3 Puhinui Station, 19381

Puhinui Station was established in 1923, originally with a small station building, platform, foot-bridge, siding, goods shed and loading bank. As a post-1900 site, this site is not automatically protected by the provisions of the Heritage New Zealand Pouhere Taonga Act 2014. This site should be outside the scope of works.

5.3.4 Otahuhu signal box, 19382

The Otahuhu signal box at the Otahuhu station was originally constructed in 1913 but has been significantly altered since. As a post-1900 site, this site is not automatically protected by the provisions of the Heritage New Zealand Pouhere Taonga Act 2014 but may be subject to additional controls by Auckland Council if affected by works. This site should not be affected by proposed works.

5.3.5 Wiri Railway Station, 19383

Wiri Station was originally built in 1913 to serve as access for the quarry workers, rather than for general passengers. The 1913 station has no platform and was built directly into the ground, and is the only station in the railway corridor to be constructed in this way. A shelter and platform accessed from Wiri Station Road were later built south of the original station but closed in 2005. As a post-1900 site, this site is not automatically protected by the provisions of the Heritage New Zealand Pouhere Taonga Act 2014. This site should not be affected by works.

5.3.6 Railway cottages, 20003, 20004, 20005, 20006, 20007, 20008, 20009 and 20010

These residences are prefabricated cottages from the late 1920s for railway workers, with one potential worker hut (20010). They are within an Auckland Special Character Area and may be subject to the proposed Kiwirail land take. Further assessment by a built heritage specialist may be required.

5.4 Summary

Overall, the majority of sites and heritage items identified through the desktop assessment of the Westfield Junction to Wiri Station section are outside the scope of works. There is a small likelihood that archaeological evidence related to Mutukaroa Pā (R11/42) could be encountered if earthworks are undertaken in their vicinity. In general, the intensity of settlement in the Ōtāhuhu area means that there is a small possibility for evidence of pre-European Māori settlement to be encountered where earthworks are taking place.

In addition to this, works will be taking place within the Papatoetoe Railway Station (CHI 12487) historic heritage extent of place (01473), though works should not affect the station building itself. CHI items 15944 and 17015, referring to the WW11 Cambria Park military base, are also in the immediate vicinity of the railway and there is a small possibility that material could be encountered if earthworks are undertaken on the western side of the railway corridor in this location. However, as a 20th century site these items are not automatically protected by the provisions of the Heritage New Zealand Pouhere Taonga Act 2014. The items may be subject to additional controls by Auckland Council if they are to be affected by works. Finally, the prefabricated railway cottages (20003–20010) scheduled in the CHI are within a proposed potential land take area and may be affected by works. These cottages are within an Auckland Special Character Area and while not automatically protected by the provisions of the Heritage New Zealand Pouhere Taonga Act 2014 may be subject to additional controls by Auckland Council.

In addition to this, sections of this railway line were originally constructed in the 19th century. It is not known whether original features remain or not, but any original 19th century constructions would constitute archaeological sites and be protected under the provisions of the Heritage New Zealand Pouhere Taonga Act (2014).

6 Assessment

The following assessments of archaeological and heritage value are made under two sets of criteria: pre-1900 archaeological sites are assessed under the Heritage New Zealand Pouhere Taonga Act 2014 while 20th century sites scheduled in the AUP or recorded in the CHI are assessed under the criteria in Chapter D17 of the AUP.

6.1 Assessment under the HNZPTA

The following assessment of values and significance relate only to archaeological values. Other interested parties, in particular mana whenua, may hold different values regarding the site. The following assessment of archaeological values is based on the criteria set out in the HNZPT (2019).

6.1.1 Mataherehere Pā, R11/84

Condition	This pā is in poor condition but in situ subsurface material may still be present.
Rarity	Pā sites are a moderately common site type regionally and nationally.
Context	Pā sites should be considered as having very high contextual values, as they pertain to the wider archaeological context in the area and can be used as indicators of where larger scale archaeological landscapes may exist.
Information	Pā can provide information about the subsistence, resource and dietary patterns, function and the distribution of activities of pre-European Maori populations, along with horticultural distribution in the area. If charcoal or other datable material is found within a secure context within the scope of the pa, they could provide temporal information about the use of features. These sites have the potential for high information values.
Amenity	The area around this site is easily accessible by public (Dove Myer Robinson Park) and could be interpreted with the aid of signage.
Cultural	Cultural values can only be assessed by mana whenua.

6.1.2 Pit/terrace (Mutukaroa Pā), R11/142

Condition	Surface features at this site were in very good condition as of 2010.
Rarity	Pits/terraces and pā sites are moderately common site types regionally and nationally.
Context	This should be considered as having very high contextual values, as it pertains to the wider archaeological context in the area and can be used as indicators of where larger scale archaeological landscapes may exist.
Information	The features identified at this site, including evidence of pits, terraces, midden, hangi, houses, and artefacts, can provide information about the subsistence, resource and dietary patterns, function and the distribution of activities of pre-European Maori populations, along with horticultural distribution in the area. If charcoal or other datable material is found within a secure context within the scope of the pa, they could provide temporal information about the use of features. This site has the potential for high information values.
Amenity	This site is easily accessible by public as the majority of it is a recreation reserve. Features could be easily interpreted with the aid of signage.
Cultural	Cultural values can only be assessed by mana whenua.

6.2 Assessment under AUP Chapter D17

The following assessment of values follows the Auckland Council Methodology for Evaluating Historic Heritage Significance (2019). The main values as stated in the unitary plan for this historic heritage extent of place are its Historical, Social, Physical Attributes, Aesthetic, and Context values. These are described below.

6.2.1 Papatoetoe Railway Station, Scheduled item 01473

Papatoetoe Railway Station is scheduled as a Category A* historic heritage place (item 01473) in the Auckland Council Unitary Plan. The station is also recorded in the CHI as item 12487.

Historical	Papatoetoe Railway Station is an important part of Auckland's rail history. It was originally built in 1875 between May and August. It was a booking station with a resident porter in charge and operated as the first Papatoetoe Post Office from 1879. Changes to the Papatoetoe Station were made from 1914, with the island station formally reopening in 1919.
Social	Papatoetoe Railway Station is held in high esteem by the community for its historic, symbolic, and traditional value. The construction of the station guided the formation of the Papatoetoe community and remains a marker of the history in this area.
Physical	Original components of Papatoetoe Railway Station are representative examples of a fourth-class Vogel Station, with modifications in the early 1900s conforming to Troup Period architecture. Papatoetoe Station remains a representative example of the Troup Island Station.
Aesthetic	Papatoetoe Railway Station is distinctive for its aesthetic qualities as a restored Troup Era island station. The aesthetic qualities of the structure serve as a symbolic reminder of railway heritage and history in Auckland.
Context	Papatoetoe Railway Station contributes to the wider historical context of Papatoetoe. The station served as a central zone for the growing township in the late 1800s and early 1900s and remains an important part of Papatoetoe's history.

6.2.2 WW II Cambria Park military base, CHI 15944 and 17015

Historical	The military base is part of WWII history in New Zealand, as a US military temporary camp between 1942 and 1945. This site has moderate historical value.
Social	The majority of this site is not visible to the public, apart from a commemorative plaque. This site has little social value.
Mana whenua Knowledge	Only mana whenua can comment on the value of the site to them. There is likely little physical evidence remaining as this would have been a relatively ephemeral site and has been developed since. If any intact subsurface material is present it could provide limited information regarding the use of this site. This site has little knowledge value.
Technology	There is unlikely to be any technological attributes remaining at this site. This site has no technology value.
Physical	There is unlikely to be any physical attributes remaining at this site. This site has no physical value.
Aesthetic	This site has been built over and has no physical value.
Context	This site has contextual value in terms of its place within WWII history and the history of Papatoetoe / Puhinui / Wiri area. This site has moderate context value.

This site has moderate values based on its highest values, which are its historical and context values. Retention of these values is desirable but it does not warrant any special protections and any loss of heritage values can be mitigated.

6.2.3 Railway cottages, CHI 20003, 20004, 20005, 20006, 20007, 20008, 20009 and 20010

This assessment considers the prefabricated railway cottages as a group.

Historical	The cottages are part of the 20th century railway history in this area. These sites have little historical value.
Social	There are no known social associations with these cottages. These sites have no social value.
Mana whenua Knowledge	Only mana whenua can comment on the value of the site to them. These cottages are still standing, though many have likely been modified, and would provide information regarding early to mid 20th century railway housing. These sites have moderate knowledge value.
Technology	The cottages do not demonstrate particular technical accomplishment or innovation. These sites have no technology value.
Physical	These cottages are representative examples of different prefabricated dwellings in the late 1920s. Architectural features represented include Dutch Gable roofing, with a range of stylistic influences including Japanese style roofing, a Gothic / Art Nouveau influence, and a California Bungalow design. The cottages have moderate physical value.
Aesthetic	Many of the cottages are in poor condition or have been modified. These sites have little aesthetic value.
Context	This site has contextual value in terms of its place within WWII history and the history of Papatoetoe / Puhinui / Wiri area. This site has moderate context value.

These sites have moderate values based on their highest values, which are their knowledge, physical attributes, and context values. Retention of these values is desirable but it does not warrant any special protections and any loss of heritage values can be mitigated.

6.3 Assessment of effects

A full assessment of effects can not be carried out until finalised plans are developed. At this stage, there is a possibility for archaeological sites R11/84 (Mataherehere Pā) and R11/142 (Pit/terrace / Mutukaroa Pā) to be affected by works if earthworks are carried out in their vicinity. Works in the general Ōtāhuhu area also present a small possibility that evidence related to pre-European Māori settlement could be encountered where earthworks are carried out. South of Westfield Junction, there may still be original components of the pre-1900 railway, though this was not able to be confirmed through the desktop assessment. If any original components remain, they may be affected by works.

Potential land takes near CHI items 15944 / 17015 (Cambria Park WWII military camp) and 20003–20010 (railway cottages) could also have affects on these items, though the extent of works in these locations is not yet confirmed. Works are scheduled to take place within the Papatoetoe Railway Station (12487) historic heritage extent of place (01473), but should avoid the building itself.

7 Recommendations

These recommendations are only made on the basis of the archaeological values that have been outlined above. Any other values associated with special interest groups, including tangata whenua, can only be determined by them. It is recommended that:

- a full archaeological assessment, including in depth historic research and a field assessment, is carried out for the route, including sites R11/84 and R11/142, in support of an archaeological authority application to Heritage New Zealand Pouhere Taonga;
- further historic and built heritage assessment is carried out for CHI items 12487, 15944, 17015, 20003, 20004, 20005, 20006, 20007, 20008, 20009, and 20010;
- since archaeological survey cannot always detect sites of traditional significance to Māori, or wahi tapu, the appropriate tangata whenua authorities should be consulted regarding the possible existence of such sites, and the recommendations in this report.

References

- Atkinson, N. 2010. Railways, *Te Ara – The Encyclopedia of New Zealand*. <http://www.TeAra.govt.nz/en/railways> (accessed 18 March 2020).
- Ball, A. 2009. *The Auckland to Drury Railway*. Auckland Council Libraries: Auckland.
- Bickler, S., R. Clough, B. Baquié, and B. Pick. 2013. McLaughlins Quarry, Wiri: Final report on archaeological investigations (site R11/47).
- Bickler, S., B. Baquié, R. Clough, T. Mace, D. Prince, M. Plowman, and M. Turner. 2005. Excavations at Britomart, Auckland (R11/1379). Unpublished report for Auckland City Council.
- Brown, J. and A. Brown. 2017. Historic heritage topic report: Drury structure plan. Unpublished report.
- Bulmer, S. 1983. Prehistoric Polynesian gardens at Wiri. Unpublished report.
- Bulmer, S. 1994. Maori sites in and near the Auckland Domain. Unpublished report.
- Burgess, G. and L. Knight. 2010. Pukekohe Railway Station: Heritage Assessment. Unpublished report.
- Campbell, M. and C. Ross-Shepperd 2013. Springpark, Panama Road, Otahuhu – Te Apunga o Tainui McLennan Hills: archaeological assessment. Unpublished CFG Heritage report to Redwood Group and Barker and Associates.
- Campbell, N. n.d. Auckland City Heritage Walks: Auckland's Original Shoreline. Auckland: Auckland Council.
- Clough, R. and D. Prince. 1997. Quay Park Development: Archaeological monitoring. Unpublished report.
- Clough, R. and D. Prince. 2001. Quay Street / Britomart Place / Custom Street East stormwater diversion: Archaeological monitoring. Unpublished report for Britomart Projects Group.
- Clough, R., D. Prince, and T. Mace. 2001. Old Sailors and Auckland's Graving Dock: The archaeology of the AMP waterfront tower. Unpublished report for AMP.
- Cowan, J. 1928. Romance of the rail; through the heart of New Zealand: The North Island Main Trunk Railway; A descriptive and historical story. Govt Printer: Wellington.
- Cramond, B., S. Bulmer, and K. Lilburn. 1982. Archaeological survey of the Wiri Oil Terminal Site (N42/1224). Unpublished report.
- Foster, R. 1988. Science and Research Internal Report No. 4: Archaeological survey of the remnant of Wiri Mountain (Matukutūru), Manukau City. Unpublished report for Science and Research Directorate, Department of Conservation.
- Furey, L. 1983. Excavation of N42/941: Westfield, South Auckland. Unpublished report for New Zealand Historic Places Trust.
- Furey, L. 1986. The exca Westifeld (R11/898), South Auckland. *Records of the Auckland Institute and Museum* 23: 1-24.
- Harris, J. 2011. Wiri North Quarry, Roscommon Road, proposed subdivision of Wahi Tapu land: archaeological assessment. Unpublished CFG Heritage Ltd report to Ngati Te Ata and Winstones Aggregates Ltd.
- Judge, C. and R. Clough 2018. Commercial Bay Development, Downtown Auckland: Interim archaeological monitoring report in accordance with HNZPT Authority No. 2016/80. Unpublished report for Precinct Properties Ltd.
- Kelly, L. 1940. Tamaki-Makau-Rau: Map of the Tamaki Isthmus with Maori place names.
- Larsen, B. and R. Clough. 2018. Quay Street seismic strengthening test trenching: Archaeological monitoring report, in accordance with HNZPT Authority No. 2018/639. Unpublished report for Auckland Transport.
- Lawlor, I. 1999. Mutukaroa (Hamlin's Hill): Recommendations regarding the hedgerow, stone wall and track (CHI site 11956). Unpublished report.
- McClure, M. 2007. Auckland region, *Te Ara – The Encyclopedia of New Zealand*. <http://www.TeAra.govt.nz/en/auckland-region> (accessed 22 March 2020)
- Merrifield, A. 2009. New Zealand's North Island main trunk railway: 1870-1908. *Engineering History and Heritage* 162(EH4): 207-219.
- Murdoch, Graeme. 1990. A brief history of the human occupation of The Slippery Creek catchment. Prepared for the Regional Water Board. Planning Department of the Resource Management Division, Auckland Regional Council.
- Pearce, P. and A. Walton 1983. Radiocarbon dates from Hamlins Hill (N42/137). *New Zealand Archaeological Association Newsletter*, 26(4): 276–278
- Phillips, C. 2000. Assessment of the cultural significance of European farming structures, Mutukaroa Regional Park (Hamlin's Hill), Auckland. Unpublished report.
- Rickard, V. 1985. Preliminary report Wiri excavation: Environmental and experimental section, permit no. 1985/14. Unpublished report.
- Rickard, V., D. Veart, and S. Bulmer. 1983. A review of archaeological stone structures of South Auckland. Unpublished report.

- Salmon Reed Architects Ltd. 2009. Auckland Metro Rail Network Electrification: Heritage assessment. Unpublished report for Barker and Associates.
- Sewell, B. 1992. Further excavations at the Westfield Site (R11/898), Tamaki, Auckland. Unpublished report to the Department of Conservation.
- Stone, R. 2001. From Tamaki-Makau-Rau to Auckland: A History of Auckland.
- Sullivan, A. 1974. Scoria mounds at Wiri. *New Zealand Archaeological Association Newsletters* 18: 206-207.
- Veart, D., R. Foster, and S. Bulmer. 1984. Archaeological Mapping of the Wiri Railway Site (N42/1225). Unpublished report.