



ARCHAEOLOGICAL EXCAVATIONS AT DEACON POINT (29 DINNING ROAD), RIVERHEAD, AUCKLAND Final Archaeological Investigation Report

By Sarah Phear
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Report prepared for
Cabra Developments Limited
In accordance with HNZPT
Authority Nos. 2017/207 and 2017/377

CABRA
LAND & PROPERTY DEVELOPMENT

With contributions by Nick Sutton, Karen Greig, Jessie Hurford,
Tristan Russell, Monica Tromp and Rod Wallace

November 2023

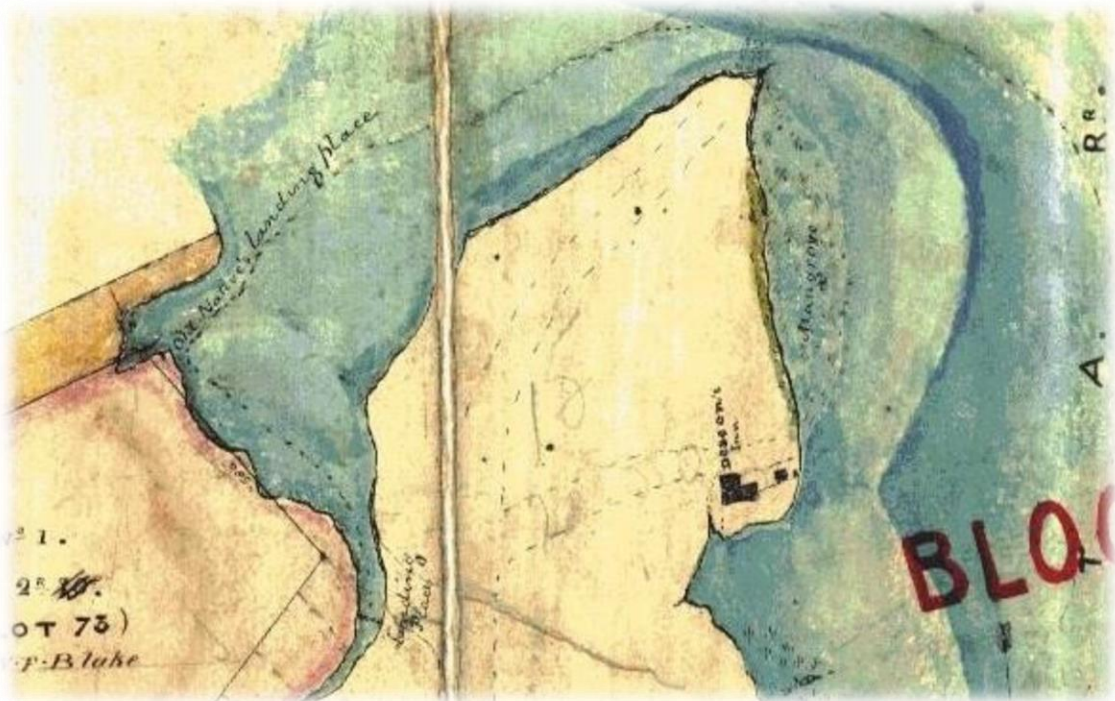
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ARCHAEOLOGICAL EXCAVATIONS AT DEACON POINT (29 DINNING ROAD), RIVERHEAD, AUCKLAND: FINAL ARCHAEOLOGICAL INVESTIGATION REPORT

Prepared for Cabra Developments Limited and Heritage New Zealand Pouhere Taonga

In accordance with HNZPT Authority Nos. 2017/207 and 2017/377

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EXECUTIVE SUMMARY

Cabra Developments Limited carried out earthworks in 2016 for a residential subdivision called ‘Deacon Point’ on previously undeveloped rural land at 29 Dinning Road, Riverhead. The development consisted of 65 house lots; four new roads and an access way; stormwater reticulation; a reserve with car park at the north-eastern point, and an esplanade walkway around the coastal strip of Deacons Point. Substantial landscaping and planting were also undertaken across the subdivision area.

An archaeological assessment completed for the project identified six archaeological sites on the property – five shell midden sites (R10/1407, R10/1408, R10/1409, R10/1410, and R10/1411) and the site of the mid-19th century Deacon’s Inn (R10/1377). The archaeological assessment established that the earthworks associated with the residential subdivision and esplanade reserve walkway had the potential to affect the sites, as well as additional unidentified subsurface remains relating to Māori settlement.

An authority was therefore applied for under section 44(a) of the Heritage New Zealand Pouhere Taonga Act (HNZPTA) and was granted by Heritage NZ on 3 October 2016 (Authority No. 2017/207). This covered only the northern half of the development area and the coastal strip. An additional authority was applied for and granted for works within an area that had been excluded from the original application but was subsequently found to contain subsurface archaeological evidence which could not be avoided by the works. Authority no. 2017/377 was granted on 24 November 2016.

The archaeological investigations and monitoring works were undertaken by the Clough & Associates archaeological team from October 2016 to late December 2016 in accordance with HNZPT Authority Nos. 2017/207 and 2017/377. The archaeological investigations were undertaken over a number of stages and followed the development programme. Deacon’s Inn (R10/1377) was investigated in two phases. There was an initial phase to identify the nature and extent of subsurface remains relating to the site. This information was then used by Auckland Council to decide whether they would acquire Lot 47 as part of a Historic Reserve, and to determine the final location and design of the boardwalk and final planting plan. As the Deacon’s Inn site did not extend within Lot 47, the land was not purchased and a Historic Reserve was not created. The archaeological features were investigated following accepted archaeological practice.

In total, 12 archaeological sites were recorded, six of which were those identified at the assessment stage (R10/1377 and R10/1407–R10/1411); five of which were new sites exposed during earthworks carried out under authority 2017/207 (R10/1545–R10/1548 and R10/1551); and one (R11/1425) which was exposed by works outside the original authority area and was investigated under a separate authority (2017/377). Eleven of the sites were investigated, while site R10/1407 was contained entirely within the esplanade reserve and left in situ. Parts of sites R10/1377, R10/1408, R10/1409, R10/1411 and R10/1545 also fell within the esplanade reserve and were protected in situ.

In total 242 contexts relating to Deacon’s Inn (R11/1377) were recorded during the investigation and were predominantly postholes – 21 postholes demarcated the outer walls with 22 postholes likely forming internal floor supports. Approximately 19 postholes related to a larger outbuilding, and another 5 related to a smaller outbuilding. Other more isolated postholes likely relate to fencing and horse tethering posts. No posts remained in situ and there were no demolition deposits, suggesting that the structure was likely to have been relocated.

Site R11/1547 is considered to represent the Deacon's Inn store, which might also have been a house. Here 32 features were recorded that consisted of square and rectangular postholes representing the bearer post supports for a structure 14.7m in length by 5.90m wide (approximately 48 by 19.5 feet), oriented north-northwest to south-southeast. An alignment of four postholes set offset but parallel to the northern face of the structure was considered to represent a verandah with a north-northwest facing aspect which would have provided clear views directly over the Rangitopuni Creek. A large number of artefacts were collected from a likely demolition layer which included pieces from up to 14 dinner services, as well as glassware, buttons/personal attire, two silver coins, and children's marbles. The sheer number of artefacts and their range suggest this structure was Deacon's Store.

At least eight alignments of postholes were observed in the northern half of the property cut through the subsoil and into the natural alluvial clay which were recorded as R11/1548. The form of the postholes and their sides suggested that the original excavation of the features began with a spade before utilising a digging pry bar (or similar) at depth. Some were long alignments, up to 19.2m long, and others were oriented in east-west directions. It is interpreted that the postholes alignments with their substantial size and depth were part of a stock control system with holding paddocks, where cattle were kept prior to embarkation onto steamers at the point.

One midden site appeared to be an historic period midden (R10/1410). This midden site was located outside of the main area of works and was to be avoided by the walkway on the northwestern extent of the development area. The original extent of the midden was avoided during works. However, additional archaeological features were exposed within the works area including firescoops/hangi, a bin pit and 3 historic hangi, with some postholes also recorded.

Midden R10/1408 consisted of 99 contexts including midden, firescoops/ovens, rakeout, a paleosol, postholes and stakeholes. A substantial amount of this site remains in situ subsurface within the esplanade reserve, where a wooden boardwalk was built rather than a concrete path to lessen the adverse effects on the surviving midden, with selective planting demarcating the site from the surrounding vegetation. Midden R11/1409 was also partially protected from development within the reserve. Features excavated included two midden deposits, ovens and postholes.

The majority of midden R11/1411 was also preserved within the esplanade reserve to the south of the Deacon's Inn site. However, during topsoil stripping, two ovens and 4 postholes were identified in close proximity to the midden and have consequently been grouped with this site. Some additional postholes were also recorded with this site, located slightly further to the north.

A total of 64 archaeological features relating to Māori occupation and settlement were recorded in a similar footprint to, but predating, Deacon's Inn and were recorded as R11/1545. These features were interspersed with Deacon's Inn features (R10/1377). The features consisted of hangi, firescoops, postholes, stakeholes, board and slot/post and board features, two bin pits and other pits.

Site R11/1546 consisted primarily of a large shell midden deposit that was 11.69m wide (north-south), up to 18.87m in length (east-west) and up to 0.10m thick. The midden consisted predominantly of fragmented and whole cockle shell within a blackish to dark brown ashy silt matrix that contained frequent charcoal and moderate heat fractured rock inclusions. There were two oval and one sub-rectangular earth ovens associated with the

shell midden. No artefacts were observed or recovered during the excavation of the shell midden and hangi.

There were also a large number of sub-circular and oval postholes and stakeholes probably related to activity associated with the formation of the shell midden. These likely represented drying racks for curing fish for consumption elsewhere, and perhaps small temporary shelters. The site was situated some 130m south of the entrance/exit to the Te Taonga Waka – Kaipara-Waitemātā Harbour portage. Two small historic period shell middens were located a few metres to the west of the large midden deposit.

Over 80 features (board/slots, stakeholes and postholes, and 10 bin pits) were recorded and investigated on a former knoll that overlooked the majority of the development property (R10/1551). However, there was clear evidence of truncation through ploughing, with plough marks visible during topsoil stripping and vertical truncation evident in many of the features during excavation. Shell was observed in 7 of the posthole fills, indicating that midden had been present in the area when the postholes were backfilled (naturally and/or intentionally) but was no longer present during the investigation.

One further Māori site (R10/1425) was located in the southwest extent of the property on higher ground, consisting of midden, hangi/ovens, bin pits, and one posthole. There was evidence of some vertical truncation of the area also.

The majority of artefacts recovered were typical of 19th century settlement sites, although the variety and range of artefacts is of interest, including marbles, dentures, silver coins and cricket belt buckles. Glass bottles and the like were expected around Deacon's Inn, and were found. Māori artefacts were quite limited, with 274 lithic pieces recovered from seven of the sites, and represented informal tools and manufacturing debris. Source materials included chert, obsidian, basalt, greywacke and sandstone.

Midden was typical of estuarine source areas, which fits with the local environment, although there was an absence of fish and animal bone. Analysis of tree species represented in the charcoal collected from features suggests that the vegetation in the local area had a high level of kanuka and manuka scrub accompanied by shrubs, with some broadleaf trees. Conifers were predominantly represented by kauri across all but one of the archaeological sites (R10/1546). There was no evidence of the burning of mangrove wood, a species that dominates the muddy upper harbour environment at present. It is of note that hardwood species dominated the R10/1411 samples from the large ovens/firescoops, and the size of the ovens suggests food cooking for a good number of people.

In terms of settlement, the majority of the archaeological remains of Māori occupation are likely to relate to temporary camps linked to resource procurement and overland travel, as mentioned above. The fact that there are two recorded Te Taonga Waka portages located either side of the peninsula cannot be ignored, with tangata whenua heading to the Kaipara, and likely stopping overnight or for a few days first on the peninsula before the inland crossing and/or continuing by waka further up or down the Waitemātā Harbour. The larger midden sites may represent repeated stops, or larger groups on the move leaving a larger footprint.

Overall, the dating fits with other Māori settlement sites located in the upper Waitemātā Harbour, which indicate that the area was utilised by Māori primarily for resource procurement from the latter half of the 1400s to the late 18th century. The dates obtained from the Riverhead investigation are generally similar in age range. However, many more dates are required from the Upper Waitemātā Harbour to allow a more detailed understanding of the settlement history of the area by Māori.

Authority No.	2017/207 and 2017/377
Authority holder	Cabra Developments Ltd
NZAA site no(s)	R10/1377; R10/1407–R10/1411; R10/1545–R10/1548; R10/1551; R11/1425
Address of works	29 Dinning Road, Riverhead
Local Authority	Auckland Council
Iwi/hapū	Te Kawerau a Maki & Ngā Maunga Whakahii o Kaipara
Sec 45 approved person	Sarah Phear
Feature types	Postholes, hangi/ovens, firescoops, midden, drains
Dates of fieldwork	October to December 2016
Archaeological Management Plan and research strategy reference	Phear, S. August 2016; Archaeological Management Plan: 29 Dinning Road, Riverhead. Prepared by Clough & Associates for Cabra Developments Ltd
Title and author of assessment report	Shakles, R., Z. Burnett and S. Phear. Proposed Residential Development, 29 Dinning Road Riverhead, Auckland: Preliminary Archaeological Assessment. Clough & Associates report prepared for Cabra Developments Ltd. November 2015; updated March, May, July and August 2016 Phear, S. Residential Development, 29 Dinning Road, Riverhead, Auckland: Archaeological Assessment Addendum. October 2016. Clough & Associates report prepared for Cabra Developments Ltd

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1 INTRODUCTION

1.1 Project Background

Cabra Developments Limited carried out earthworks in 2016 for a residential subdivision on previously undeveloped land at 29 Dinning Road, Riverhead (Part Allotment 15 Parish of Paremoremo; Figure 1-1 and Figure 1-2). The residential development, named Deacon Point, comprises the land that was identified as Precinct 6 of the Riverhead South Outline Plan on the former Auckland Council District Plan: Operative Rodney Section (2011). It is located on the western side of the Rangitopuni Creek, to the south of Kaipara Portage Road and east of the Coatesville-Riverhead Highway (Figure 1-2). At the time of the initial development the land consisted of some 8.0937 ha, bounded by the Rangitopuni Creek to the north, west and south, and by Dinning Road and a rural residential property at 32 Dinning Road to the west (Figure 1-3). The property contained a house with outbuildings and a swimming pool accessed by a tree lined driveway, and fenced paddocks grazed by horses (Figure 1-3).

The development consisted of 65 house lots; four new roads and an access way; stormwater reticulation; a reserve with car park at the north-eastern point; and an esplanade walkway around the coastal strip of Deacons Point (Figure 1-4). Substantial landscaping and planting were also undertaken across the subdivision area (Figure 1-5).

Clough & Associates were commissioned by Cabra Investments Ltd to undertake an archaeological assessment of the property which was completed in November 2015 (Shakles et al. 2015, updated March & April 2016). The assessment report identified six archaeological sites on the Dinning Road property, consisting of five shell midden sites (R10/1407-1411) and the site of the mid-19th century Deacon's Inn (R10/1377). The archaeological assessment also established that the earthworks associated with the residential subdivision, and in particular the esplanade reserve walkway, would have the potential to affect the six sites and that there was potential for additional unidentified subsurface remains relating to Māori settlement to be present in the northern half of the development property and, in particular, along the coastal zone (Shakles et al. 2015).

An authority was therefore applied for under section 44(a) of the Heritage New Zealand Pouhere Taonga Act (HNZPTA) and was granted by Heritage NZ on 3 October 2016 (Authority No. 2017/207). This covered only the northern half of the development area and the coastal strip. The authority was granted conditional on earthworks being monitored by an archaeologist in accordance with the archaeological management plan provided with the application (Phear August 2016).

An additional authority was applied for and granted for works within an area that had been excluded from the original application which was subsequently found to contain subsurface archaeological evidence which could not be avoided by the works. Authority no. 2017/377 was granted on 24 November 2016.

This report has been completed in accordance with authorities 2017/207 and 2017/377 and provides the final archaeological monitoring results for the subdivision earthworks as per condition 6 of both authorities.

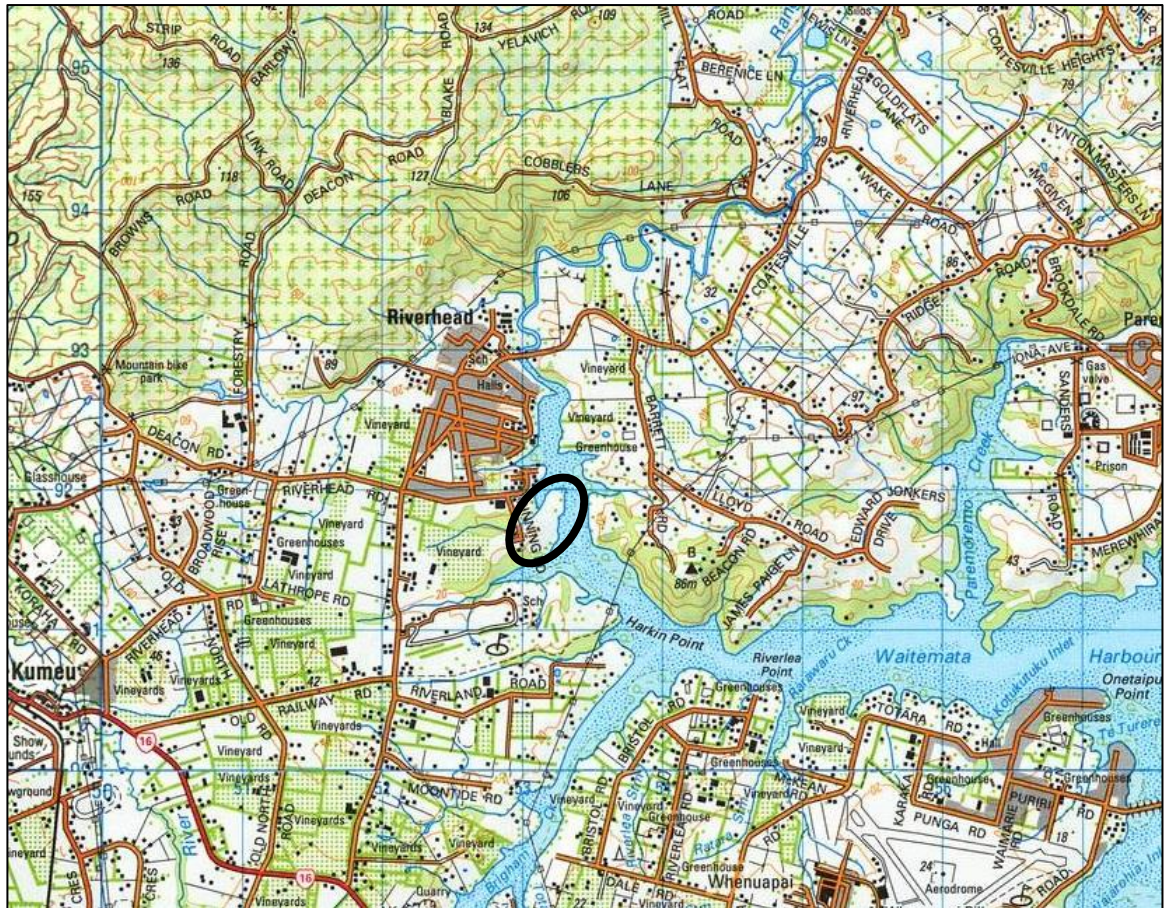


Figure 1-1. Map showing location of the project area at 29 Dinning Road, Riverhead with the development area circled. Source: Map Toaster

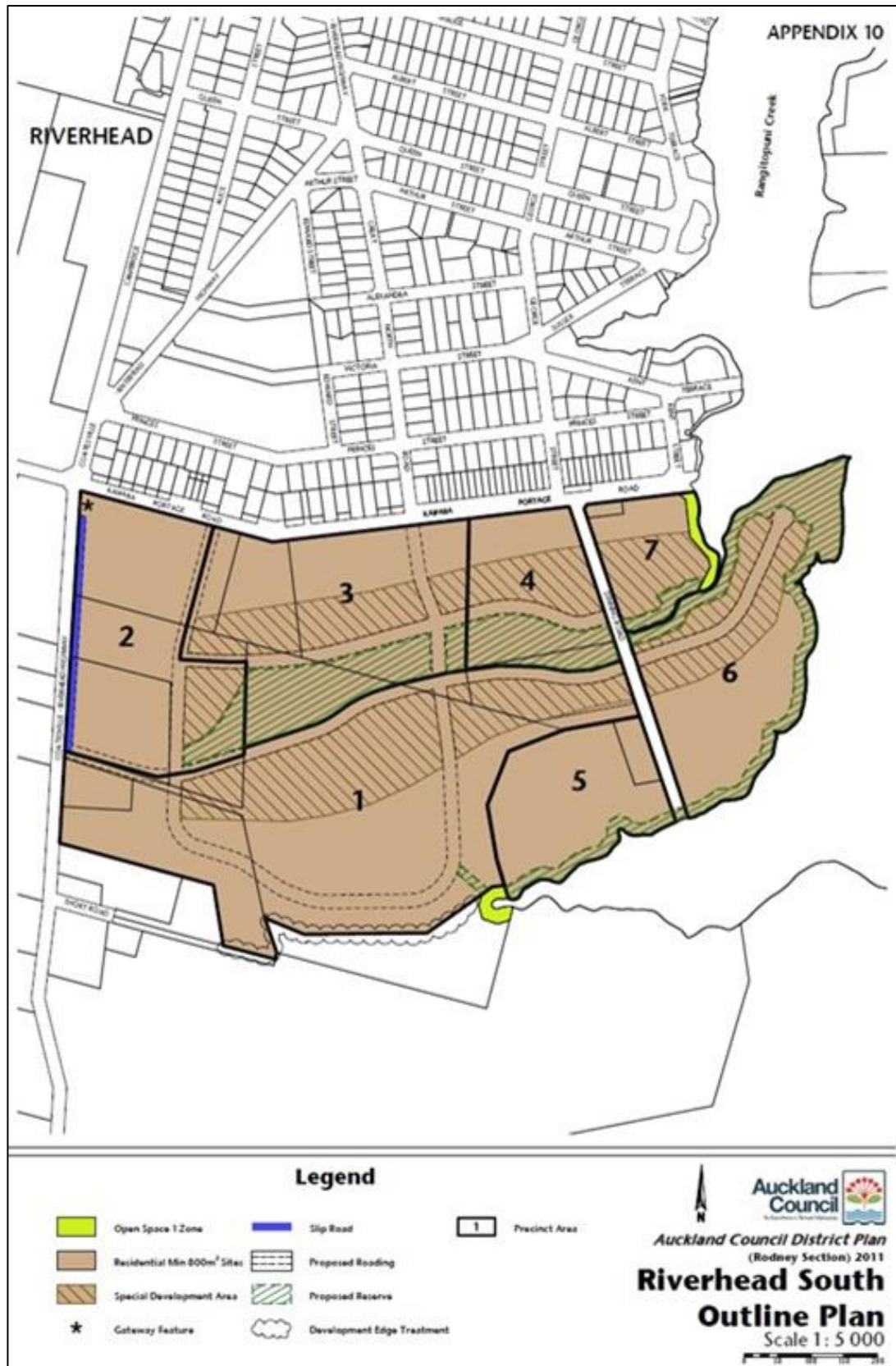


Figure 1-2. Map of the Riverhead South Outline Plan precincts. The Cabra development site is Precinct 6



Figure 1-3. Aerial view of the 29 Dinning Road property (outlined) prior to development. Source: Auckland Council GeoMaps

1. Introduction

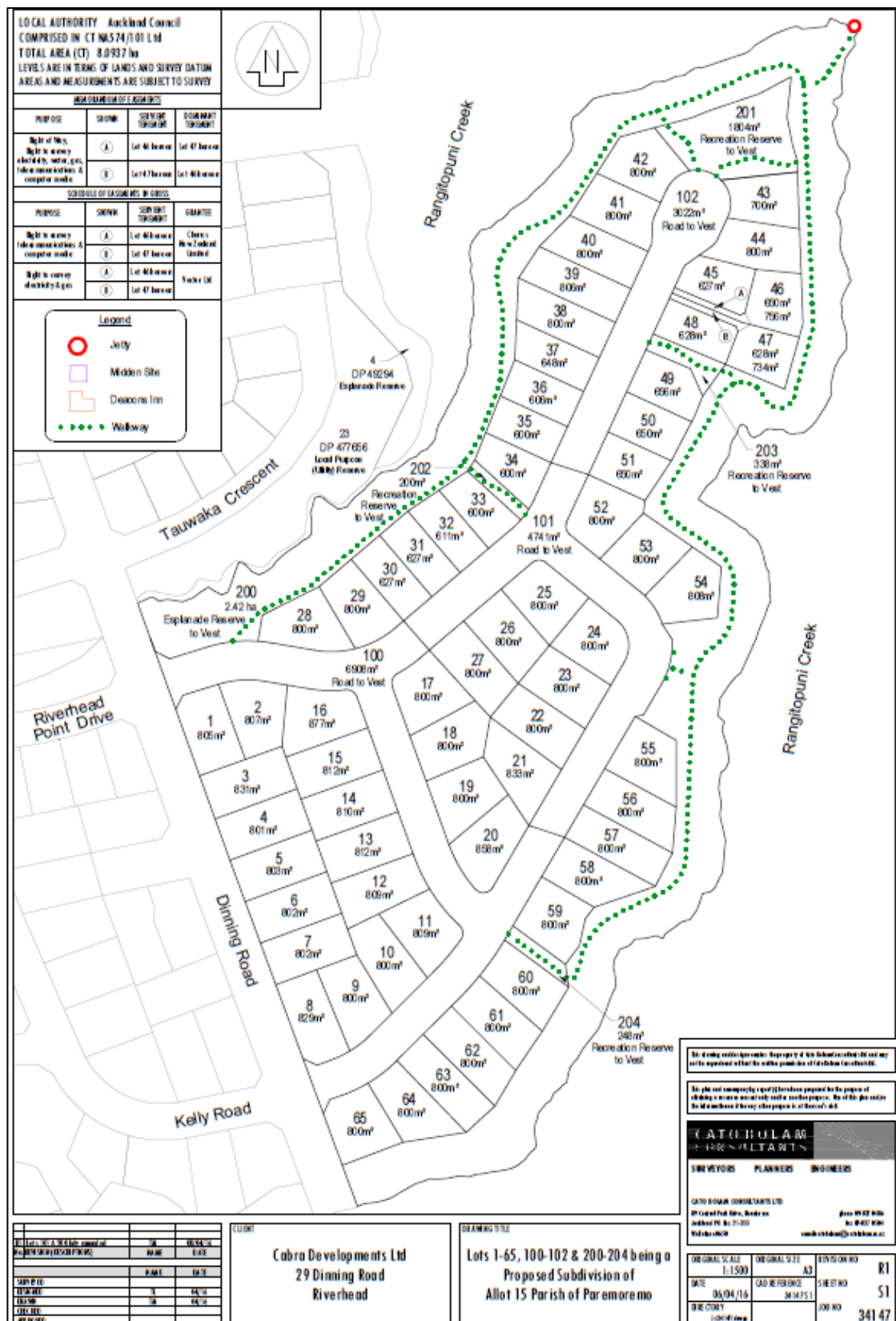


Figure 1-4. Scheme plan of the 29 Dinning Road residential development (source: Cato Bolam)

1. Introduction

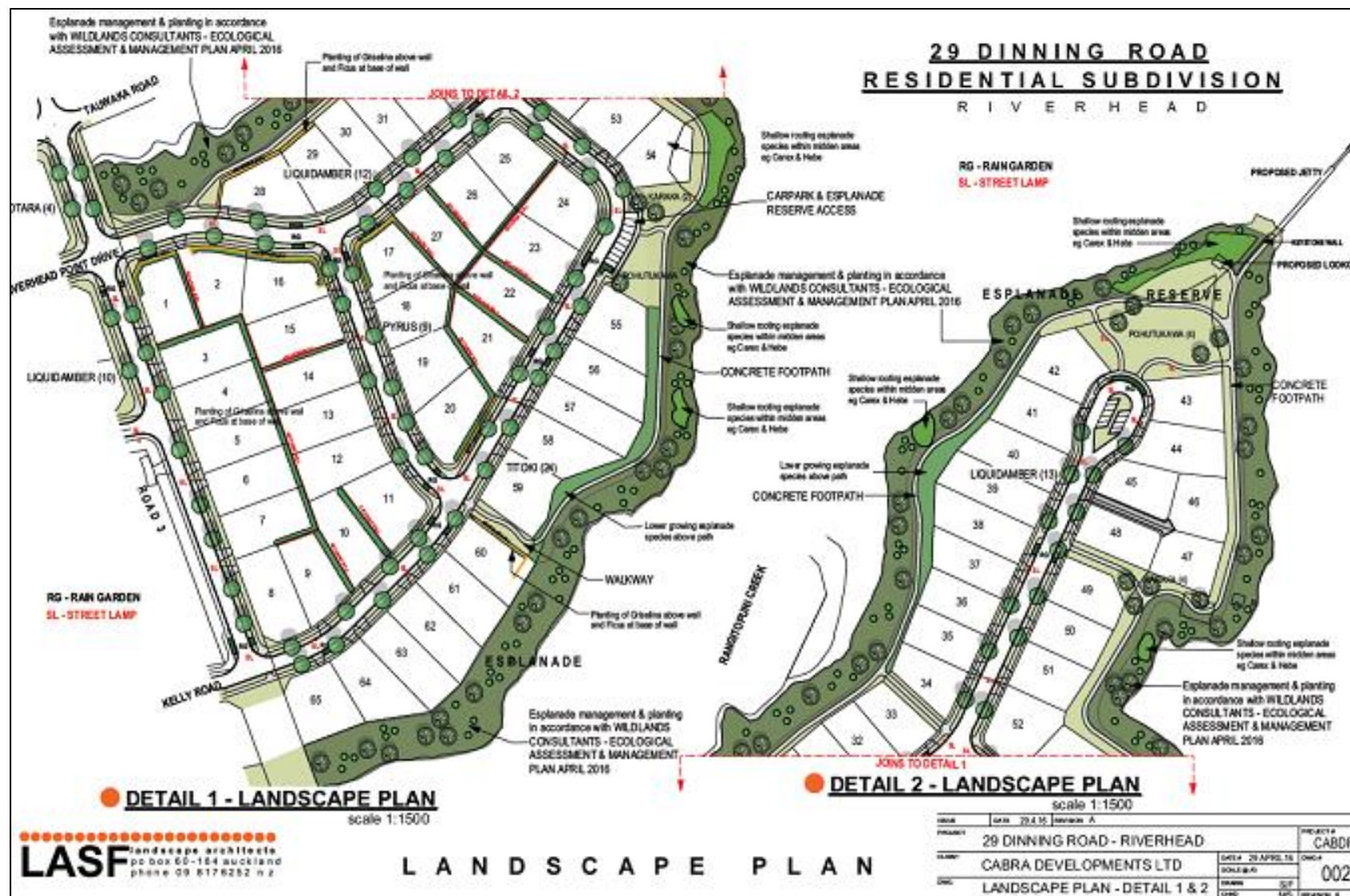


Figure 1-5. Subdivision Landscape and Planting Plan showing the esplanade walkway and location of house lots at 29 Dinning Road, Riverhead. Source: LASF Landscape Architects

1.2 Tikanga Statement

Te Kawerau a Maki and Ngāti Whātua o Kaipara (Ngā Maunga Whakahii o Kaipara) were consulted as part of the authority application and we are grateful for their willingness to provide cultural support to the archaeologists. The archaeologists followed the Tikanga protocols included in the authority. As part of the project a presentation was also given at Rewiti Marae, Woodhill on 11 June 2017 by Sarah Phear and Richard Shakles. The presentation covered what had been found and recorded during the archaeological investigation and the analysis that was taking place. There was also a discussion on future management of the archaeological midden sites still extant on the point.

1.3 Excavation Methodology

The archaeological investigations and monitoring works were undertaken by the Clough & Associates archaeological team from October to late December 2016 in accordance with HNZPT Authority Nos. 2017/207 and 2017/377. The archaeological investigations were undertaken over a number of stages and followed the development programme. Detailed descriptions of the methodology followed for the excavations of the various archaeological sites exposed during the Deacon Point subdivision works is presented in Section 4.1.3.

1.3.1 Excavations Protocols

Specific protocols were in place in relation to the investigation of Deacon's Inn R10/1377; midden R10/1408; and for planting and erosion control. These are provided in Appendix 2. In summary, Deacon's Inn was investigated in two phases. The initial phase was to identify the nature and extent of subsurface remains relating to the site. This information was then used by Auckland Council to decide whether they would acquire Lot 47 as part of a Historic Reserve, or not, and also to determine the final location and design of the boardwalk and final planting plan. As the site did not extend within Lot 47, the land was not purchased and a Historic Reserve was not created. The archaeological features were investigated following accepted archaeological practice.

1.4 Project Personnel

The archaeological excavations were undertaken over a number of stages from October to late December 2016, and involved eight Clough & Associates field archaeologists. A number of Clough & Associates staff and external specialists were also involved in the post-excavation analysis and reporting stage of the project. Table 1-1 provides a full list of personnel involved in the project.

Table 1-1. The Clough & Associates team and external specialists who contributed to both the excavations and post-excavation analyses of the archaeological investigations in the Deacon Point subdivision

Clough & Associates Excavation Team	Responsibilities
Rod Clough	Director – overall direction of project
Sarah Phear	S45 archaeologist. Co-lead archaeologist in field & report authorship
Richard Shakles	Co-lead archaeologist in field & report authorship
Carly Mailhot	Field archaeologist
Dave Carley	Field archaeologist
Ellen Cameron	Field archaeologist
Ben Jones	Field archaeologist
Jennifer Low	Field archaeologist
Tom Clough-Macready	Field archaeologist
Bernie Larsen	Drone photography
Wesley Maguire	Total station survey
Clough & Associates Post-Excavation Analysis	
Jennifer Low	Midden analysis and European artefacts
Richard Shakles	Numismatic and Militaria artefacts
Sarah Phear	Illustrations & survey plans
Zarah Burnett	Historical research
Sarah Macready	Editor
External Specialists	
Nick Sutton (SPAR) - University of Otago	Lithic and XRF analysis
Dr Karen Greig (SPAR) - University of Otago	Lithic, XRF and faunal analysis
Jessie Hurford (SPAR) - University of Otago	Lithic and XRF analysis
Monica Tromp (SPAR) - University of Otago	Lithic and XRF analysis
Tristan Russell (SPAR) - University of Otago	Lithic, XRF and faunal analysis
Associate Prof. Fiona Petchey - University of Waikato	Radiocarbon dating analysis
Dr Rod Wallace	Charcoal identification

1.4.1 Acknowledgements

We would like to acknowledge Cabra Developments Ltd for their constant support during the project and production of the final report and iwi for their support, particularly from Rewiti Marae through the duration of the project.

2 HISTORICAL BACKGROUND

Archaeological surveys and assessments previously undertaken in the wider area have provided a general historical background outlining the major changes in occupation, and the expansion of various industries and transportation developments. The following historical summary is taken from a previous report by Shakles and Clough (2012) relating to a residential subdivision to the north of the present survey area (Precinct 6), which in turn derived much of its historical information from other assessments within the Riverhead South Outline Plan Area as well as assessments in areas to the north, including the Duke Street and Applemoors Way subdivisions (see Bibliography). Additional research was also undertaken relating directly to the development property.

2.1 Māori Settlement

It is thought that the Māori name for Riverhead was Rangitopuni, derived from the presentation of a dog-skin mat (topuni) to the warrior Maki during a peace-making ceremony (Graham 1925: 21, cited in Campbell et al. 2013: 8). The area was occupied at various times by a number of different tribes, the names and rohe of which were subject to great fluidity throughout pre-European times.

During the 1820s the musket-armed Ngāpuhi attacked various tribal groups throughout Northland and down into Auckland, resulting in a general retreat to the south, leaving much of the area around the Kaipara largely uninhabited. It was not until the mid-1830s that these areas were repopulated (Kawharu n.d.). During the period of warfare local Māori are said to have established small settlements at a number of places, including nearby Kumeu (Dunsford 2002: 17).

The portage route from Riverhead to the Kaipara was a traditional portage used for many centuries. It remained a major canoe and walking portage and was of importance during the European settlement of the Kaipara until the construction of the first rail link in 1875 (Clough and Baquié 2000: 2). The Kumeu–Kaipara River forms a natural pathway between the Kaipara and Waitematā Harbours. Canoes were paddled up the Waitematā to the Riverhead inlet, dragged across land to the Kumeu River and then paddled down the Kumeu–Kaipara River to the Kaipara Harbour (Dunsford 2002: 16).

Māori archaeological site distribution focuses on the coastline around the upper Waitematā Harbour. Shell midden sites located along the coast are by far the most common site type as people set up temporary encampments and associated gardens while exploiting the rich marine resources of the harbour (Clough and Prince 1999:10). At Riverhead these sites are also likely to relate to groups camping as they transited between the Waitematā and Kaipara Harbours via the Riverhead portage. The low-lying and poorly drained soils inland would not have been attractive for Māori settlement and use (Tatton 2001:58).

2.2 European Settlement

Organised pioneer groups never systematically settled Riverhead. Kauri timber was being exploited in the area as early as 1841 but no specific date can be ascribed to a first European community (Madden 1966:11). The Crown acquired the vast Mahurangi Block from Māori in April 1841, which included the Riverhead area north and east of the Kaipara portage and

2. Historical Background

the Paremoremo and Lucas Creek areas. Then from 1851 to 1867 the land to the west and north of the portage was acquired. The land was surveyed into sections and granted by the Crown to various individuals (Madden 1966:34). The Riverhead township area (Allotment 75) was granted to James Williamson in 1858, but by 1860 had been acquired by J.S. McFarlane. The Riverhead Township lots were put up for auction in February 1863 (see Figure 2-2).

The portage route used by Māori from Riverhead to the Kaipara remained an important walking route for European travellers until the 1860s, when coaches serviced it. In 1866 Ngāti Whātua promised a stretch of land 3 chains wide from Riverhead to Helensville for the construction of a railway line, closely following the old canoe portage route. Work began in 1871 and was finally completed in 1875 (Dunsford 2002: 30-32; Murdoch 1988:13).

It would appear that for the most part the wider Riverhead area followed a classic pattern of rural land use similar to that found in the greater West Auckland area. This involved the primary clearance of kauri forest by logging companies, followed by gum diggers working the ground to excavate the kauri gum deposits. Riverhead contributed to the £20 million worth of gum exported from the Auckland gum fields from 1845 to 1925. The Riverhead region was readily accessible to Auckland and received early attention, which is why £10 million was exported before 1900 (Madden 1966:111).

By March 1868 Mr Gardner and Mr Houlton of Sunnyside, Riverhead, were amongst the first growers of clover seed, to be followed in the 1920s by the developments of the Levy Bros. Tobacco growing in the former gum fields was also undertaken from the 1920s, brought about by the early tobacco pioneer Gerhard Husheer (Madden 1966:175-77). In the 1920s the Harkin Point area (southeast of the project area) was used by the Auckland City Council as a horse farm.

2.3 Riverhead Mill

Timber, then flour and subsequently paper milling were key to the early development of Riverhead.

2.3.1 Blake's Timber Milling and Brigham's Waitemata Flour Mill

In January 1855 John Brigham acquired 94 acres of land on the Riverhead foreshore from fellow Auckland Harbour Board Commissioner William Farley Blake for £230, and an adjoining 88 acres from the Crown in August 1855 for £40. Blake had been a landowner in the Riverhead district from the 1840s, and his landholdings included the project area (see below). He is reputed to have built and run a timber mill in Riverhead (Madden 1966). The timber mill was listed on the purchase deeds when John Brigham purchased the property, and an 1854 survey map of the Upper Waitematā Harbour conducted by Commander Byron Drury of the HMS *Pandora* notes a 'Mill' at Riverhead (Figure 2-1). To achieve the purchase Brigham had borrowed £450 from John Logan Campbell and in March 1856 he also received an advance of £300 at an interest rate of 20% from Auckland settler Benjamin Evans Turner (Madden 1966:79).

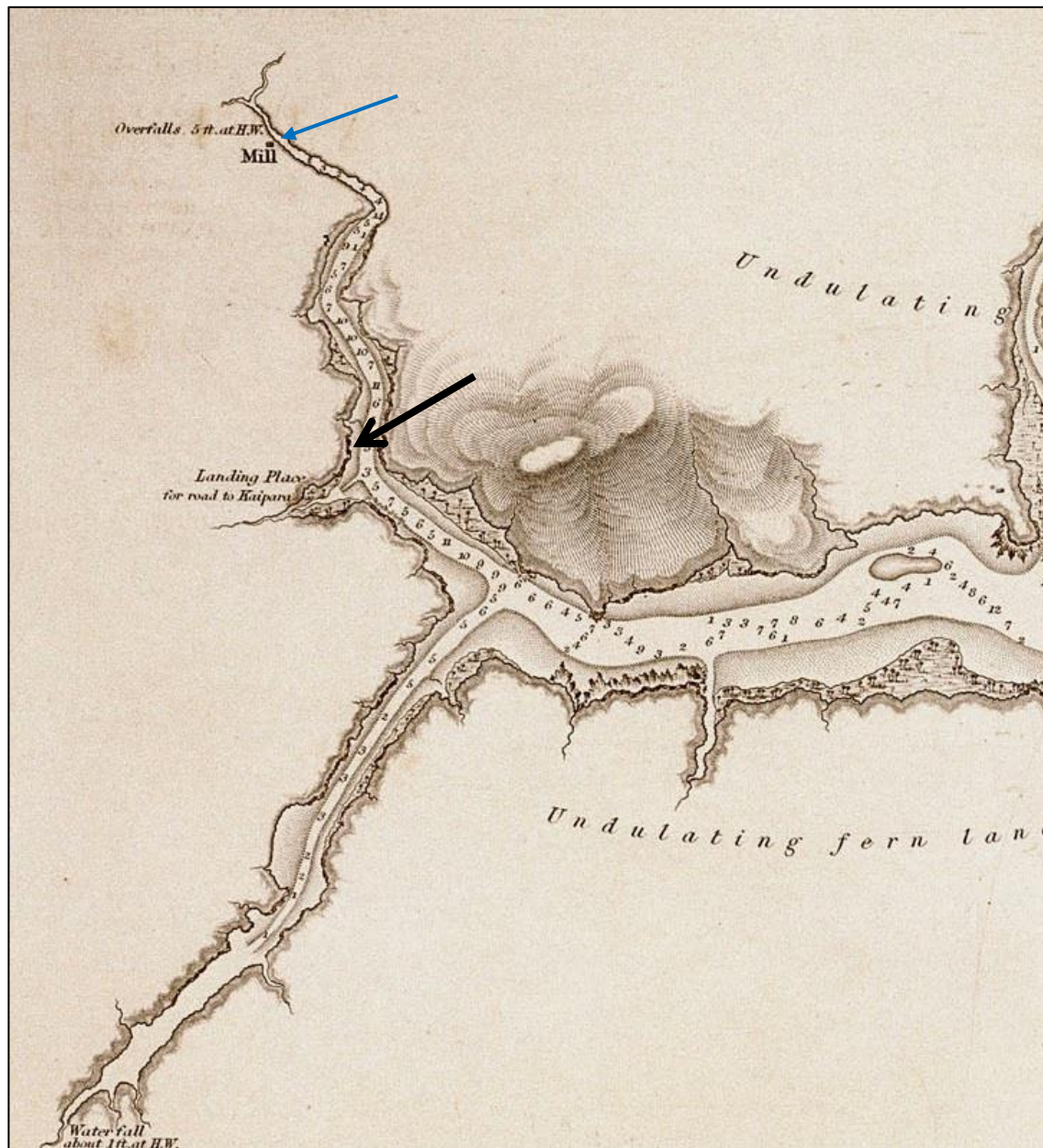


Figure 2-1. 1854 map showing a 'Mill' (blue arrow) and a 'Landing place for road to Kaipara' (version of 'Waitemata River from Kauri Point Auckland Harbour to its Sources, surveyed by Comr. B. Drury and the officers of H.M.S. Pandora 1854'. Source: Auckland Libraries Heritage Collections, NZ Map 3909). NB. The black arrow points to the development property while the 'Landing Place for road to Kaipara' is located to the southwest of the project area

Blake, meanwhile, continued his timber milling and from 1857 to 1865 he obtained financial assistance from Thomas Weston, William Hobson, Thomas Mercer King and John Salmon of Auckland. His timber mills made a significant contribution to the 154,080 feet output recorded from 1859 which included undisclosed amounts from Maxwell's Bush and Titirangi (Madden 1966:49).

Back on the site of the new flour mill, Brigham employed Charles Trick, a Cornish miller, and his nephew Charles Trick Hosking, who both spent over a year erecting the flour mill. By April 1856 Brigham had built and established the Waitemata Flour Mill, grinding local wheat. Legal evidence indicates that Brigham may even have commenced to erect his mill

2. Historical Background

as early as 7 August 1855 (Madden 1966:79). In July 1857 Brigham obtained an additional £1000 at 14% from William Dover and Robert Bent, which allowed him to repay his earlier loans in full (Madden 1966:80).

With the departure of Charles Trick and his nephew in 1859, Brigham was joined by two other millers, Alexander Adam Melvin and John Lamb (Madden 1966:80). By this time Brigham's resources were stretched to their limit. While the mill had been completed, Brigham found himself financially over-committed and his creditors were pressing for payment. As a result, William Dover transferred his interest in the company to Samuel Browning, the Director of the Bank of New Zealand and of the Loan and Mercantile Agency. Then in October Andrew Rooney and John Sangster Macfarlane took possession of the mill, successfully bidding £430 at an enforced auction. Before long Browning's interest was also acquired by Rooney and Macfarlane and an agreement dated 20 October 1859 was implemented. By this, as joint trustees, they were directed to let the property for five years or sell the property in order to satisfy outstanding creditors (Madden 1966:85).

2.3.2 Lamb's Flour Mill

John Lamb and Alexander Melvin, still employed at the mill, now acquired an interest in the flour mill company (though not in the ownership of the mill) and continued to work there. In 1861 Macfarlane's place as co-owner was taken by James Williamson of Remuera (Madden 1966: 85). In 1863 Melvin died of consumption. This left Lamb as the sole owner of the company despite a large debt, while the freehold of the mill site remained in the hands of others. Figure 2-2 shows the location of the mill in relation to the planned new town of Riverhead at this time.

By 1 February 1860 Lamb and Melvin were supplying considerable quantities of flour, sharps, bran and maize at their Queens Street premises. Lucrative contracts to European-run mills to supply biscuits to the growing military population as a result of the New Zealand Wars of the 1860s and the closure of many Māori-owned flour mills helped reduce Lamb's debt and enabled the expansion of the mill (Waterson 1959). Both Lamb's Mill and Partington's Mill in Auckland City were working around the clock during this period to meet demand.

Despite the presence of 10 other mills in the Auckland district, Lamb was competing favourably, exporting products and doing well from his Queen Street shop in central Auckland. From 1868 Lamb was exporting a large quantity of biscuits to the Pacific Islands by means of Messrs.' Henderson and Macfarlane's cutters (Madden 1966:85).

During the 1860s and 1870s Lamb constructed a village around the mill. By this time Lamb was employing 30 staff and supporting a growing local community in Riverhead. Besides his own two-storey house the village comprised staff accommodation consisting of a men's dormitory (two single storey houses 24 by 12 ft (c.7.3 by 3.7m) in size) and family cottages (four built in 1872 and six built in 1878), blacksmith's and tinsmith's shops, a general store and post office, a bakery and a school (Madden 1966:89, 91).

There was strong competition within the Auckland region from other flour mills – namely, from Messrs.' Thornton, Smith and Firth and the Star Mill operated by Thomas Barraclough on Oakley Creek. There was also the steady influx of flour from the South Island and imported wheat and flour from Australia into Auckland. By 1877 the South Island mills exported 200 times more flour than Auckland mills and therefore were in the strategic position of being able to undersell all Auckland competitors (Madden 1966:85).

2. Historical Background

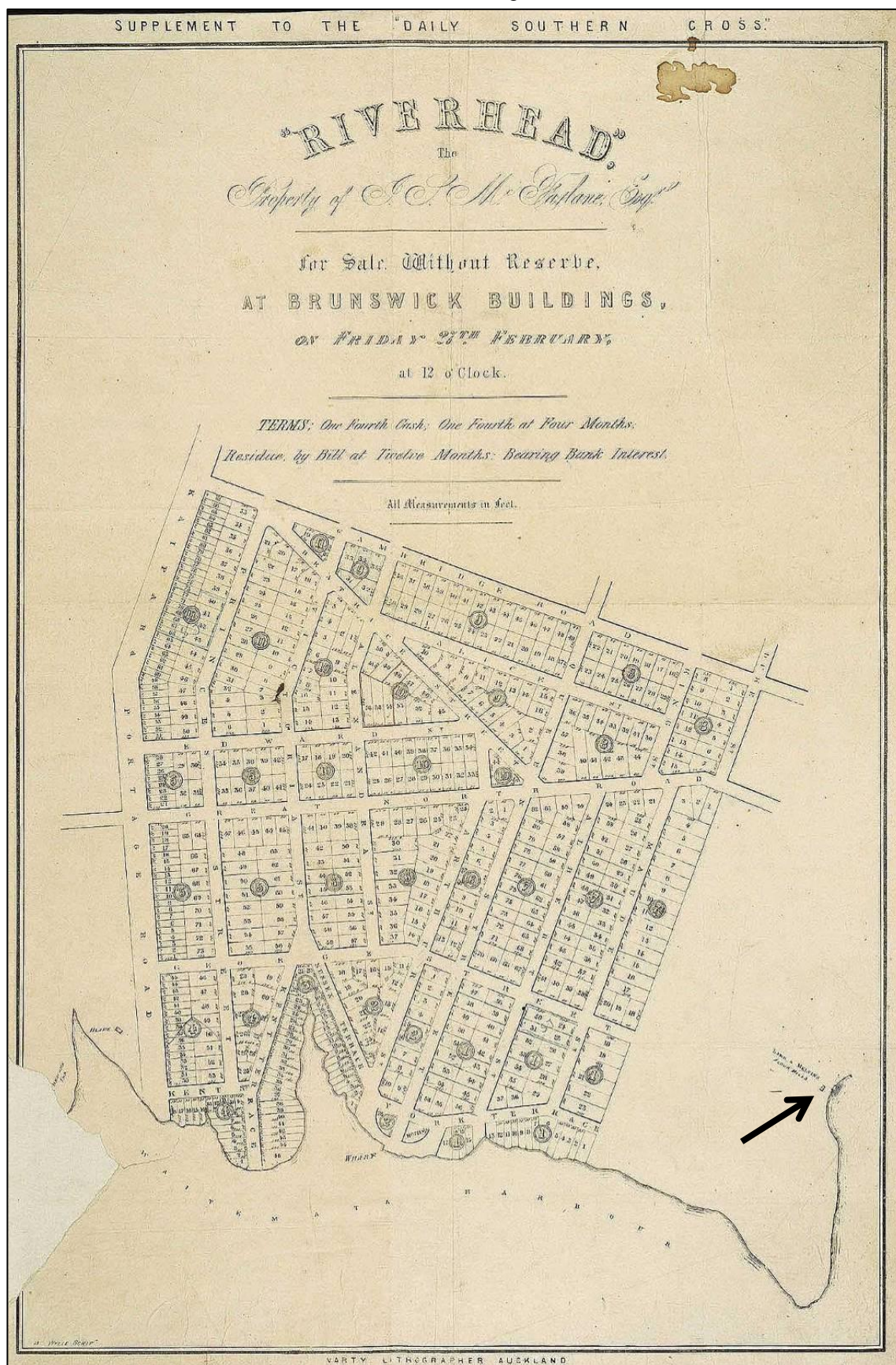


Figure 2-2. 1863 advertisement from a supplement in the *Daily Southern Cross*: 'Riverhead. The Property of J.S. McFarlane Esquire. For Sale ...' (Auckland Libraries Heritage Collections, NZ Map 4498.7). Showing site of Lamb & Melvin's Flour Mills (arrowed)

2. Historical Background

Lamb encouraged and supported local farmers, aware that it was economically detrimental for Aucklanders to be dependent on imports, while also importing large quantities of grain from Canterbury (Madden 1966:85, 89). Lamb's Mill reached its zenith in 1879.

The advent of the roller mill process in the 1880s marked the end of many rural mills that could not afford the changeover. Lamb had anticipated a move to Auckland City as freight costs were a significant expense at the Riverhead location and were affecting his profit margins. In 1875 he purchased a Fort Street property for £1,027. Situated on Auckland's old shore line, the site proved a difficult and expensive one. Extensive excavations and retaining walls were necessary and in 1883 a large section of the 50 ft high retaining wall collapsed. However, Lamb rebuilt and began milling at the Fort Street site in 1888 using the latest roller methods (Madden 1966:97).

Lamb had gone into considerable debt in the process, borrowing heavily from many persons and institutions, including the Bank of New Zealand, which intervened to relieve him of all liability in 1888. A new company, the Auckland Roller Mills Co. Ltd, was incorporated in November 1888, and John Lamb died less than a year later on 31 August 1889. However, the new company did not last long and went into liquidation in 1890. Following an amalgamation of the Waitemata Mills with Firths Roller Mill Co. a new company, the Northern Roller Milling Co. Ltd, was incorporated in January 1890. This company later became Champion Flour, and is still in operation today.

2.3.3 Riverhead Paper Mill

In October 1898 a group of prominent Auckland businessmen had mooted the idea of setting up a paper mill in Auckland. During the 1890s there was an increasing demand for paper and ever since the 1870s Auckland had been largely dependent upon southern paper mills (Madden 1966:137). After examining a number of sites they finally decided on Lamb's Waitemata Mill at Riverhead because it had many of the attributes of a good papermaking site, namely, a plentiful supply of freshwater, access to cheap harbour transport and proximity to the Auckland market. The Riverhead Paper Mill Company was incorporated as a public company in January 1899, with a capital of £15,000 from £1 shares, and George Morris sold the property to the Company for £600 in April 1899. The original directors of the company were Joseph Cochrane Macky, John Brown, Col. Henry Burton, Nathan Alfred Nathan, Wm. Scott Wilson, John Henry Upton and John Owen. The Chairman was Joseph Macky and the Secretary was George Elliot (Madden 1966:139; Angus 1976:67).

John William Greenhalgh from the Matura Paper Mill in the South Island was enticed into becoming the manager of the Riverhead Mill. In March 1899 he was promptly sent to England to acquire the appropriate equipment. Meanwhile major reconstruction of the site was undertaken in preparation for the new machinery. The main mill buildings were built of concrete and corrugated iron, with engine mounts of concrete (Figure 2-3).

The advent of the Riverhead paper venture had a profound effect in the employment field. Apart from attracting staff from the Matura Mill in the South Island, it largely compensated for the departure of many gum diggers from the Riverhead region (Madden 1966:141). As a result the mill operations again fostered a flourishing local community as more workers' cottages and service industries were established.

2. Historical Background

The Riverhead operation became part of the New Zealand Paper Mills Company Ltd in March 1905. George Elliot, John Henry Upton and John Brown represented the Riverhead Company (Angus 1976:71).

With the advent of the First World War paper imports from abroad were halted and the Riverhead Mill prospered, making record profits, which continued up until the economic depression of the 1920s. Riverhead in its heyday was the only kraft paper mill in the country (almost 80% of the production at Riverhead was kraft). New Zealand's paper mills were major units in New Zealand industry, using modern sources of power and employing quite large numbers of workers (Angus 1976:99).

However, in September 1923 the New Zealand Paper Mills Company decided to close the Riverhead Mill, consolidate their operation and base it solely in the South Island. The machinery from the Riverhead Mill was packed up and sent to the Mātaura Mill, to be used until as late as 1964 to maintain the Mātaura output (Angus 1976:103), and several of the paper mill's houses were sold off and moved (Madden 1966:149).

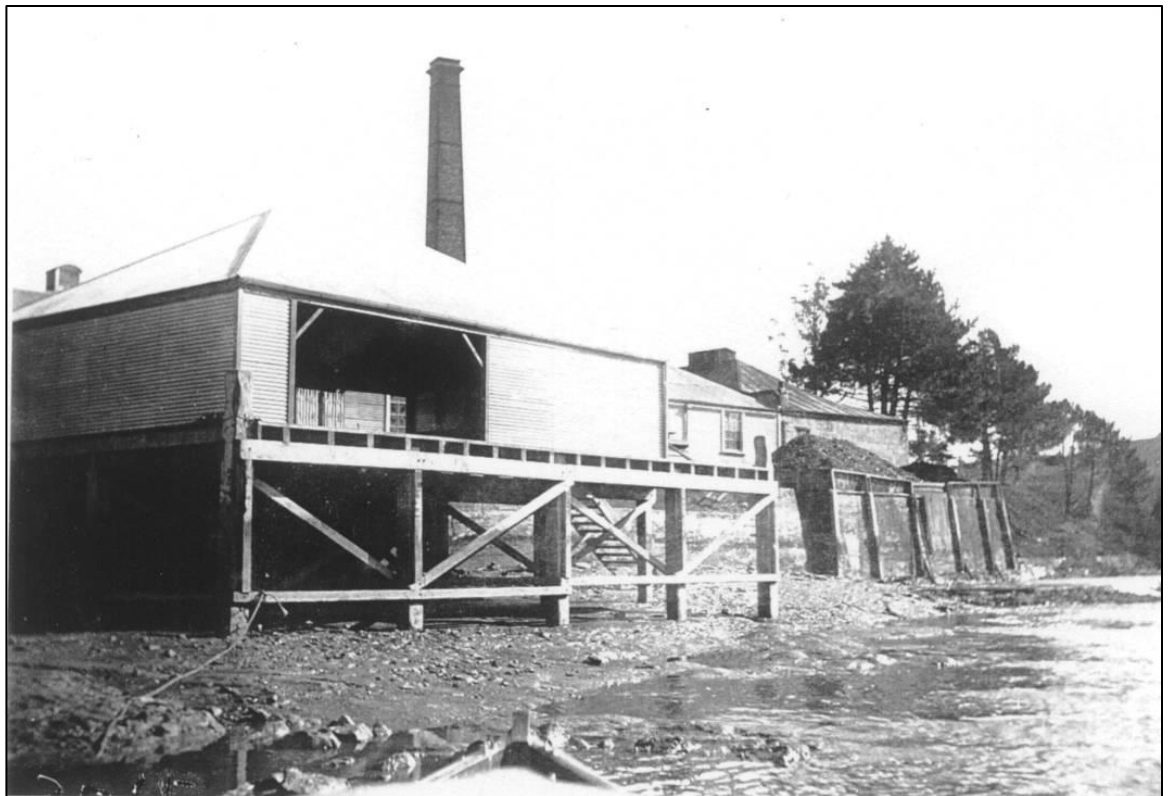


Figure 2-3. Riverhead Paper Mill 1900-1910. Charles Bailey photo (Auckland Libraries Heritage Collections, 37-3065)

2. Historical Background

2.3.4 Deacon's Inn, Allotment 15, Parish of Paremoremo

The site of Deacon's Inn (recorded in the NZAA database as R10/1377 – see next section) was located on part of Allotment 15, Parish of Paremoremo (the project area), which was awarded by Crown Grant to William Farley Blake on 29 July 1851 (Figure 2-4; Table 2-1).¹ Blake paid the sum of £20 for the land, which comprised 20 acres and was 'bounded on the east, north and north-west by the Waitemata River and by a stream...'.²

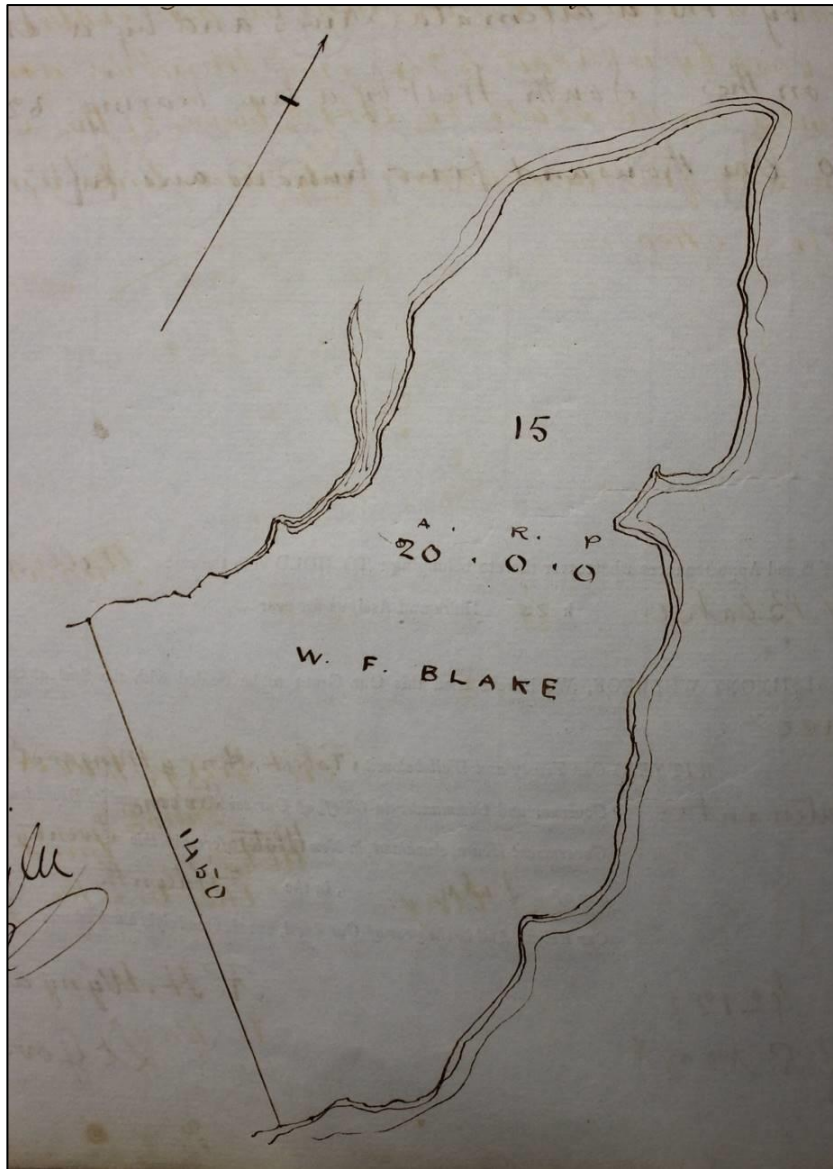


Figure 2-4. Sketch plan, dated 1851, showing the boundaries of Allotment 15, Parish of Paremoremo, awarded by Crown Grant to William Farley Blake (source: Crown Grant 1G/1042, BAJZ A1660 23663 951/a, Archives New Zealand)

¹ Crown Grant 1G/1042, BAJZ A1660 23663 951/a, Archives New Zealand.

² Ibid.

2. Historical Background

Table 2-1. Ownership history for 29 Dinning Road – Allotment 15 Parish of Paremoremo

Instrument	Parties	Date of Instrument	Where Recorded
Crown Grant (Allotment 15, 20 Acres)	William Farley Blake	29 July 1851	A2/491 & 1G/1042
Conveyance	W.F. Blake to Patrick Dignan and James Thomas Boylan	26 October 1859	A2/491 & 9D/364
Conveyance	Dignan & or to John Thomas Blake	16 November 1887	A2/491 & R25/703
Conveyance	Blake to Thomas William Deacon	18 November 1887	A2/491 & R25/704
Probate	T.W. Deacon (deceased)	8 June 1918	A2/491 & R299/571
Conveyance	Richard Percival Kinloch (trustee) to Blanche Brigham	12 August 1921	A2/491 & R366/258
Letters of Administration	B. Brigham (decd)	20 April 1931	A2/491 & R572/320
Conveyance	Public Trustee to Blanche Patullo & ors	21 April 1931	A2/491 & R572/321
Brought Under the Land Transfer Act	Blanche Patullo, Dorothy Bartran, Constance Patullo, Sarah Fogarty, John Brigham, Christie Brigham, tenants in common	11 June 1934	NA574/101
Transfer	Patullo & ors to Herbert Robotton	12 March 1937	NA574/101
Transfer	Robotton to Eric Nicholl	25 March 1942	NA574/101
Transfer	Nicholl to Iris Hewitt	20 September 1951	NA574/101
Transfer	Hewitt to Thomas Barry and Gloria Barry	21 February 1973	NA574/101
Transfer	Barry & ux to Lewis Baker and Elizabeth Baker	20 January 1987	NA574/101
Transfer	Baker & ux to Rodpak Limited	6 July 1999	NA574/101

Deeds Indexes record no lease agreements between Blake and other parties for Allotment 15. However, by the mid-1850s Thomas William Deacon had acquired use of part of the eastern end of the headland as a site for a public house. The earliest reference to Deacon's Inn is dated October 1855 when it was selected as a polling place for the Northern Division. The inn was described to potential voters as being at 'Kaipara, landing place, at the head of the Waitemata River', although no other information was given.³ This date appears to

³ *Daily Southern Cross*, 12 October 1855, p.3.

2. Historical Background

corroborate the approximate arrival of Deacon in Riverhead given by *The Cyclopedia of New Zealand [Auckland Provincial District]* in 1902:

‘Mr. Thomas William Deacon, Hotelkeeper and Storekeeper, was born in Cornwall, England, in the year 1823, and joined the Royal Navy at an early age. He came to Auckland in 1843 in H.M.S. “Calliope,” commanded by Captain Edward Stanley, and was stationed with her at the Bay of Islands until the end of the war with Heke. After that the “Calliope” proceeded to Wellington, where she had Te Rauparaha, the celebrated Maori chief, on board as a prisoner of war. Mr. Deacon then left the “Calliope” and joined a barque going to Hokianga to load spars; Dr. Logan Campbell was on board the same barque. On his return to Auckland Mr. Deacon left the sea, and after travelling around the country for a considerable time, he settled at Riverhead, where he started storekeeping and built his present hotel, which was the first in the district.’⁴

The position of Deacon’s Inn is shown on undated plan SO 1579A (Figure 2-5), and on SO 1114B (Figure 2-6), dated 1857, and that same year the establishment gained some notoriety as the polling place of double and treble voters, absentee personaters (persons impersonating absentee eligible voters), and dead men.⁵

In May 1859 the inn was mentioned in connection with a boating accident, involving a vessel which had been hired to transport Mr Blake from Queen Street Wharf to Brigham’s Mill. The *Daily Southern Cross* later reported: ‘We are happy to state that...tidings of the safe arrival of Mr. Blake and his party, at Deacon’s Inn, have been received.’⁶ Blake retained ownership of Allotment 15, including the land on which Deacon’s Inn was sited, for only a further five months before he conveyed the property to Patrick Dignan, innkeeper, and James Thomas Boylan, merchant, on 26 October 1859 (Table 2-1).⁷

Deacon (Figure 2-8) continued to operate his public house under the change of ownership and in February 1863 the inn was identified on a map showing the sale of town lots in the newly named ‘Riverhead’ (Figure 2-7). It is worth noting that in January that same year Lot 57, Section 1, situated at the junction of Queen Street and York Terrace, and with a frontage onto the Waitematā Harbour, had been purchased by William Good.⁸ Good established a hotel on the land (later known as the Riverhead Hotel) and this can be seen on the aforementioned map, only a few inlets along from Deacon’s Inn.

By 1866 the inn was utilised as a venue for the Riverhead Races and participants and spectators were advised: ‘The second annual race meeting at Petoitoi [sic], Riverhead, will take place on Monday next; the racecourse being reached by the North Road, or by boat to Deacon’s inn.’⁹ A fuller description of the event was provided in the *Daily Southern Cross* two years later which read:

‘The long-expected races came off at Riverhead yesterday, on the flat, near Mr. Deacon’s hotel...The “Gemini” left that Queen-street Wharf at a few minutes after nine o’clock, with a good number of passengers; and after a pleasant passage past

⁴ Cyclopedia Company Limited, *The Cyclopedia of New Zealand [Auckland Provincial District]*, Christchurch, 1902, p.645.

⁵ *Daily Southern Cross*, 24 April 1857, p.3.

⁶ *Daily Southern Cross*, 17 May 1859, p.3.

⁷ Deeds Register 9D/364, BAJZ A1660 23641 678/a, Archives New Zealand.

⁸ Deeds Index 11A/591, Archives New Zealand.

⁹ *Daily Southern Cross*, 6 March 1866, p.4.

2. Historical Background

the Watchman – or, for it may be worthwhile to put the Maori name on record, Motungaingai – into the lake-like expanse of the Upper Waitemata, and then into the narrow creek to Deacon’s Wharf – reached the destination before eleven o’clock...when all had congregated there were present about 100 Europeans and 200 Maoris...There was a large tent on the ground, in which accommodation was given to Mr. Giles and the stewards, and in which Mr. Deacon dispensed refreshments liberally enough.’¹⁰



Figure 2-5. Detail from plan SO 1579A, undated, showing Crown Grant blocks at Riverhead. The position of Deacon’s Inn within Allotment 15, Parish of Paremoremo is circled (source: Quickmap)

¹⁰ *Daily Southern Cross*, 14 April 1868, p.3.

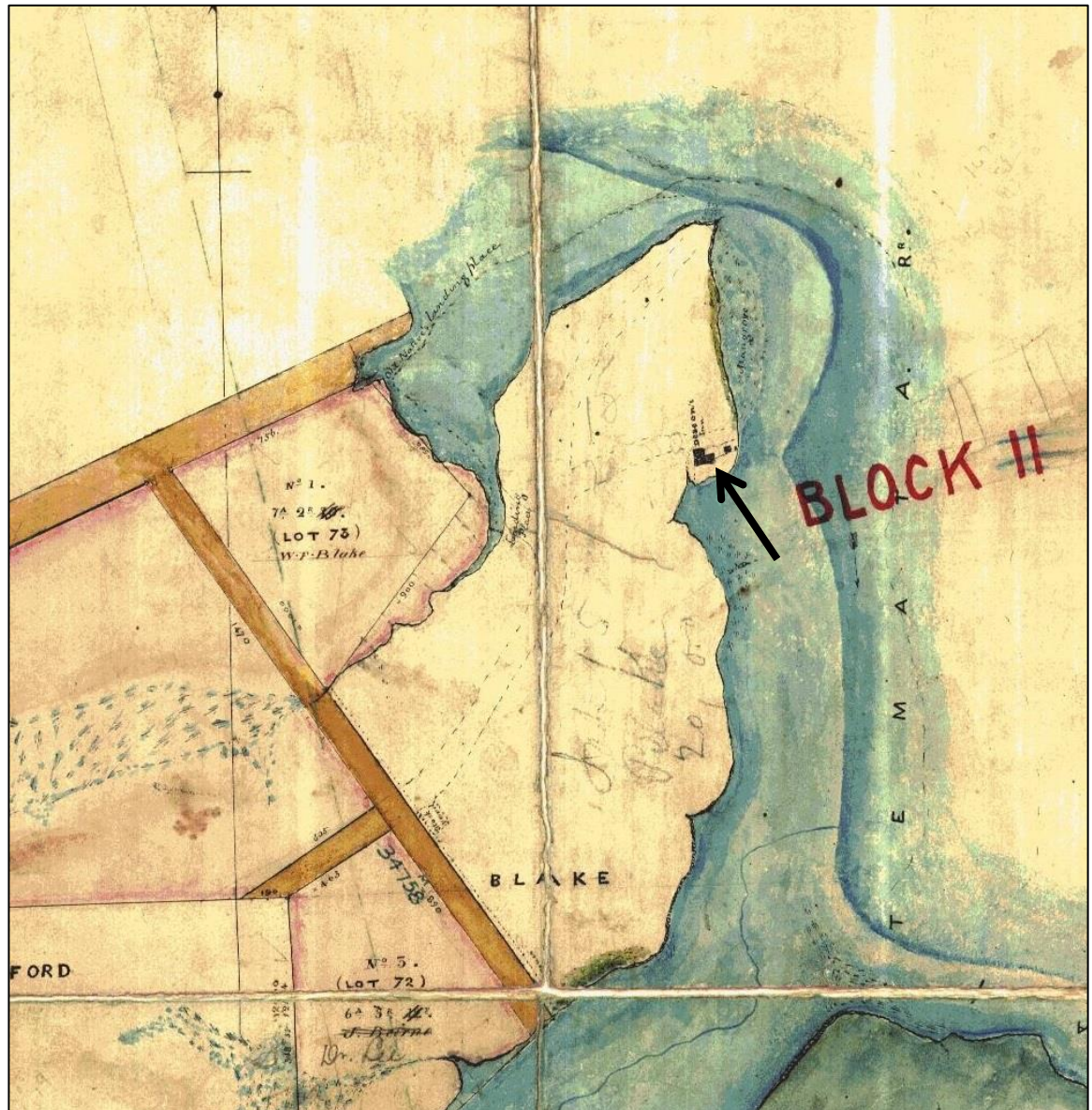


Figure 2-6. Detail from plan SO 1114B, dated 1857, showing Deacon's Inn (arrowed) within Allotment 15, Parish of Paremoremo. NB. Two outbuildings are also depicted between the 'L'-shaped inn and the creek bank, the larger of which is likely to have been Deacon's original storehouse (source: Quickmap)

2. Historical Background

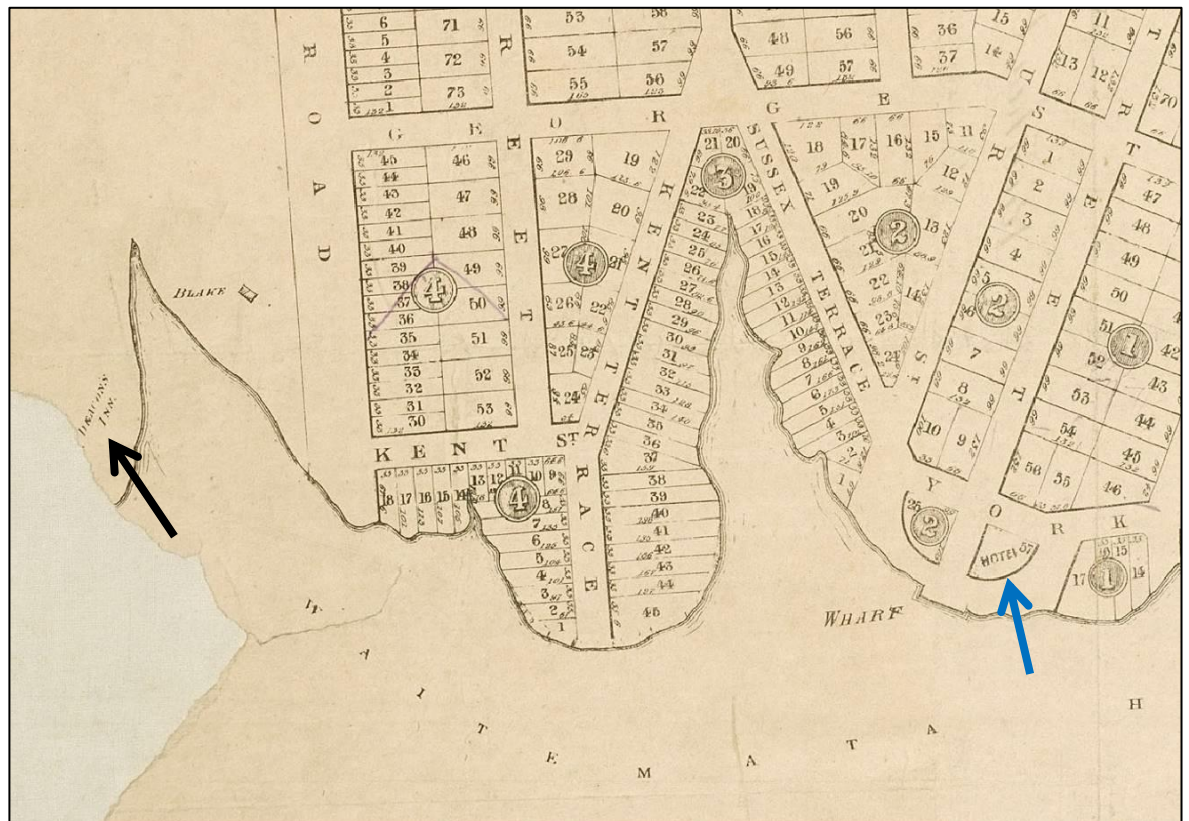


Figure 2-7. Detail from 1863 map, showing Deacon's Inn (arrowed in black) and the later named Riverhead Hotel (arrowed in blue) (source: Auckland Libraries Heritage Collections, NZ Map 4498-7)



MR. T. W. DEACON.

Figure 2-8. Thomas Deacon taken in his later years (The Cyclopedia Company Limited, 1902, Christchurch)

3. Archaeological Background

Deacon's Inn catered to a range of patrons throughout the mid-19th century and in April 1866 it was reported that a 'serious affair' had taken place at the establishment.¹¹ Following the incident the *Daily Southern Cross* warned that 'Riverhead is becoming notorious for disturbances of a serious character' and related the following:

'On Friday evening last, the police received a communication from Mr. Lamb, informing them that a brawl had taken place at Deacon's public house, late on the night of the previous Tuesday, in which a man named Messenger, a baker at Lamb's Mill, had been seriously injured. The affair arose out of the following circumstances. On Tuesday afternoon, Messenger's wife left Auckland for Riverhead in the boat, there being also on board three bushmen, named John Roach, George Phillips, and George Norman. It seems that on the passage up the bushmen got somewhat excited with drink, and one of them behaved in a rude and insulting manner to Mrs. Messenger. On reaching Riverhead, the men, who were employed at Blake's bush, went into Deacon's public-house, -whither Mr. Messenger, who had been informed by his wife of the treatment she had received, followed them. It is said that Messenger struck Roach, and that thereupon Phillips hit Messenger with a bottle, cutting his face in a shocking way. The other man, Norman, then, it seems, stabbed Messenger on the back of the head with a knife, inflicting a severe wound. Messenger was then taken away by some persons who were in the house. Information was sent from Riverhead to the police that Roach was likely to come to town, which he did on Friday, when he was immediately arrested. Sergeant Jervis and constable Harnett, of the water police, then went to Riverhead, and reached Blake's bush on Saturday morning, where, from the descriptions they had received, they arrested Phillips and Norman, who were identified by Mr. Messenger at Lamb's Mill, and brought to town yesterday.'¹²

The men were subsequently brought before the Police Court; however, the case was eventually dismissed.¹³

In April 1869 the annual meeting for hearing license applications was held in the Resident Magistrate's Court, Auckland. The results of the meeting were duly published by the *New Zealand Herald*, which listed Deacon twice – first under an old bush license, 'Deacon William, Deacon's Inn, Riverhead', and secondly under a new bush license, 'Deacon Thomas Wm., Riverhead Hotel, Riverhead'.¹⁴ This confirms that Deacon had taken over the proprietorship of the Riverhead Hotel by the late 1860s and that the family managed both the hotel and the original inn simultaneously for a time.

Thomas Deacon was formally conveyed the land on which the Riverhead Hotel was sited (Lot 57, Section 1) on 5 April 1870 and following the purchase it is thought likely that the family's attention shifted away from Deacon's Inn and towards their new venue/venture.¹⁵ Bush licenses were taken out for both premises that same year, although an addendum to the list of licensees noted: 'The following Bush License was transferred from Deacon to Edward Ellis, Deacon's Arms, Riverhead.'¹⁶ It is unclear whether the 'Deacon's Arms'

¹¹ *Daily Southern Cross*, 23 April 1866, p.5.

¹² Ibid.

¹³ *Daily Southern Cross*, 25 April 1866, p.6.

¹⁴ *New Zealand Herald*, 21 April 1869, p.6.

¹⁵ Deeds Index 11A/591, Archives New Zealand.

¹⁶ Note: Edward Ellis was the step-son of Thomas William Deacon, being the youngest son from his wife's previous marriage with the late Captain Ellis. *New Zealand Herald*, 20 April 1870, p.4.

3. Archaeological Background

was a separate establishment or whether Ellis intended to rename Deacon's Inn; however, no further record of the former could be found in any of the historical sources consulted for this project and by 1871 a bush license for the Deacon Inn was issued under Ellis' name.¹⁷

Ellis' proprietorship of the inn proved brief, and in 1872 a license for the premises was refused as it was deemed 'not requisite for the district'.¹⁸ Evidence given by the inspector was related by the *Daily Southern Cross*: 'Inspector Brohan stated that the house was not licensed last year. It had been formerly licensed, but not so for several years. He did not consider it was necessary to have the house licensed.'¹⁹ The decision was supported by Mr. Dignan, owner of Allotment 15, and no further license applications for Deacon's Inn appear after this date.²⁰

The success of the Deacon's Riverhead Hotel appears to have made their original inn obsolete, and the last references to the inn are dated 1873, when John Blake's electoral record describes his property as 'adjoining Deacon's Inn, Riverhead.'²¹

Thomas William Deacon eventually purchased Allotment 15, Parish of Paremoremo, from John Thomas Blake in 1887, although no mention of extant buildings is made in the deed of conveyance (Table 2-1).²² Deacon retained ownership of the land until his death in 1918, aged 95 years.²³

¹⁷ *Daily Southern Cross*, 19 April 1871, p.3.

¹⁸ *Auckland Star*, 16 April 1872, p.2.

¹⁹ *Daily Southern Cross*, 17 April 1872, p.3.

²⁰ *Auckland Star*, 16 April 1872, p.2.

²¹ *Daily Southern Cross*, 10 May 1873, p.4.

²² Deeds Register R25/704, BAJZ A1660 23641 48/a, Archives New Zealand.

²³ Deeds Index A2/491, Archives New Zealand; *Auckland Star*, 10 May 1918, p.2.

3 ARCHAEOLOGICAL BACKGROUND

3.1 Physical Environment

The project area is situated on a promontory that extends on a north-eastward alignment into the Rangitopuni Creek, which surrounds the property on three sides (north, east and south). Prior to development, the property was largely in pasture and divided into six paddocks defined by post and wire fencing. There was a single dwelling, driveway, swimming pool and associated outbuildings (see Figure 1-3). The topography of the site varied from relatively flat ground some 5-8m above mean sea level in the northern half of the project area, while the southern area rose to approximately 18m above mean sea level and was characterised by an area of relatively flat-topped high ground from which slopes descended to the creek banks, approximately 5m above the foreshore.

The underlying geology of the project area consists of Tauranga Group Holocene Age alluvial soils over Waitemata Group sandstone/siltstone and occasional conglomerates.

3.2 Archaeological Sites Recorded within the Project Area

The development site is located to the south of the main Riverhead Township and a search of the NZAA Site Record File in April 2016 as part of the assessment (Shakles et al. 2015, updated 2016), revealed that there was one recorded archaeological site located on the proposed development property: the site of Deacon's Inn, R10/1377.

In addition to the recorded site of Deacon's Inn, the field survey undertaken at the assessment stage identified a further five previously unrecorded archaeological sites. All of the sites discovered during the field survey were shell middens located on the coastal scarp, and were recorded on the NZAA ArchSite Database as sites R10/1407, R10/1408, R10/1409, R10/1410, and R10/1411 (Figure 3-1). The sites are discussed below.

R10/1377 Deacon's Inn

The site was located immediately to the north of, and adjacent to, an approximately rectangular shallow inlet on the eastern creek bank of the property. The site was first recorded in September 2013 based on the depiction of the inn on the 1857 plan SO 1114 (see Figure 2-6, above). The historical research indicated that the building would have been fairly substantial, with at least two storeys, and it was considered highly likely that a significant number of subsurface archaeological features were present in the location of the inn. These features were thought likely to include postholes/beam slots, chimney foundations, a well/(s), refuse pits and latrine and potentially a significant amount of artefactual material.

R10/1407 Midden

This site consisted of two spatially distinct concentrations of shell midden which were observed in two areas eroding out of the creek bank some 25m apart (Figure 3-1). Both deposits consisted of fragmented and crushed cockle shell in a silty dark brown matrix with occasional inclusions of charcoal and small heat fractured rock fragments. Probing established that the northern deposit (the smaller of the two) was present subsurface and in situ for some 4m (north-south) along the bank top, extended only up to a maximum of 0.5m

landward and was up to 0.08m thick. The midden deposit to the south was more substantial and probing established that in situ deposits were present subsurface along the bank top for some 7m, extended up to 5m inland from the bank and were up to 0.12m thick.



Figure 3-1. Aerial image showing the location of archaeological sites recorded within the project area at 29 Dinning Road, Riverhead prior to the commencement of the Deacon Point subdivision

R10/1408 Midden

This site consisted of whole, fragmented and crushed midden shell that was observed eroding out of the coastal scarp approximately 25m south of a roughly rectangular-shaped indentation in the creek bank (Figure 3-1). The midden was predominantly composed of cockle with some oyster also present and was within a dark brown silty matrix containing inclusions of charcoal and fragmented heat fractured rock. Probing established that intact and subsurface deposits were present beneath the topsoil, extended over an area of approximately 30m x 30m and were up to 0.20m thick.

R10/1409 Midden

Recent tree clearance had exposed shell midden in situ amongst macrocarpa and pine roots on the northern end of the promontory extending into the Rangitopuni Creek (Figure 3-1). Exposed midden deposits consisted of crushed and fragmented cockle in a blackish-brown ashy silty matrix that contained frequent inclusions of charcoal and occasional heat-fractured rock fragments (Figure 3-2). Probing established that the midden extended for some 27m east-west by 18m north-south. The thickness of the deposit could not be determined due to the presence of frequent large tree roots and hard ground conditions in the area.



Figure 3-2. Exposed crushed and fragmented cockle in shell midden site R10/1409 among the roots of recently cleared vegetation at the north-western tip of the property

R10/1410 Midden

Shell midden was seen eroding out of a small slope directly above the edge of the coastal scarp on the north-western point of the promontory just as it turned to the south along the edge of the inlet opposite the Kaipara Portage landing place (Figure 3-1). The midden consisted of fragmented and crushed cockle in a silty soil matrix with occasional charcoal inclusions and was sealed beneath 0.20m of topsoil under turf. Probing established the presence of an in situ subsurface midden deposit that was 4m x 2m in size and up to 0.10m thick.

R10/1411 Midden

A small midden shell scatter was seen eroding out of and spilling down the coastal bank approximately halfway along a rectangular-shaped bay 60m in length in the east facing creek bank (Figure 3-1). Probing established that in situ midden deposits extend over an area of 4.5m (northeast) by 3m (southwest) and extend up to 3m inland from the bank edge. The probing established that the subsurface deposits were up to 0.12m thick. The midden

consisted of whole and fragmented cockle in a dark brown silty soil matrix that contained occasional inclusions of heat fractured rock (oven stones), and small fragments of charcoal.

3.3 Information from Early Plans and Historic Aerials

In addition to the historic plans and maps discussed in the historical background, some further historical information relating to the project area can be gleaned from SO 1114B (Figure 3-3). In addition to the depiction of Deacon's Inn and the two outbuildings adjacent to it (Figure 2-6, above), a stockyard, fence, 'Landing Place' and the outline of a wide track (with an offshoot that heads to the inn) are also depicted on the plan (Figure 2-6 and Figure 3-3). Due to the rather improbable size of the track features they are unlikely to have been 'roads' and are more likely to represent stock tracks for moving cattle, probably to or from the wharf at the Inn or perhaps from the point of the promontory where the tidal creek channel is closest to land.

No other plans were found that illustrated land use or structures on the property.

A search of historic aerial images on the Alexander Turnbull Library and Auckland Council GIS Viewer provided images of the project area taken in 1963, 1986 and 1996 respectively. In the Whites Aviation oblique aerials taken in 1963 and 1986 the project area can be seen beneath pasture with mangroves present along the southern creek banks and with mature trees/bush in the south-western area (Figure 3-4 and Figure 3-5). The former house on the property can be seen in the 1986 aerial but not on the 1963, though it is possible that it was present but screened by the mature trees present in the southwest of the property (Figure 3-4 and Figure 3-5). Lastly, a 1996 vertical aerial taken from the Auckland Council GIS Viewer shows the house, access way and the remaining property beneath pasture, much as it was prior to the commencement of the subdivision development works (Figure 3-6).

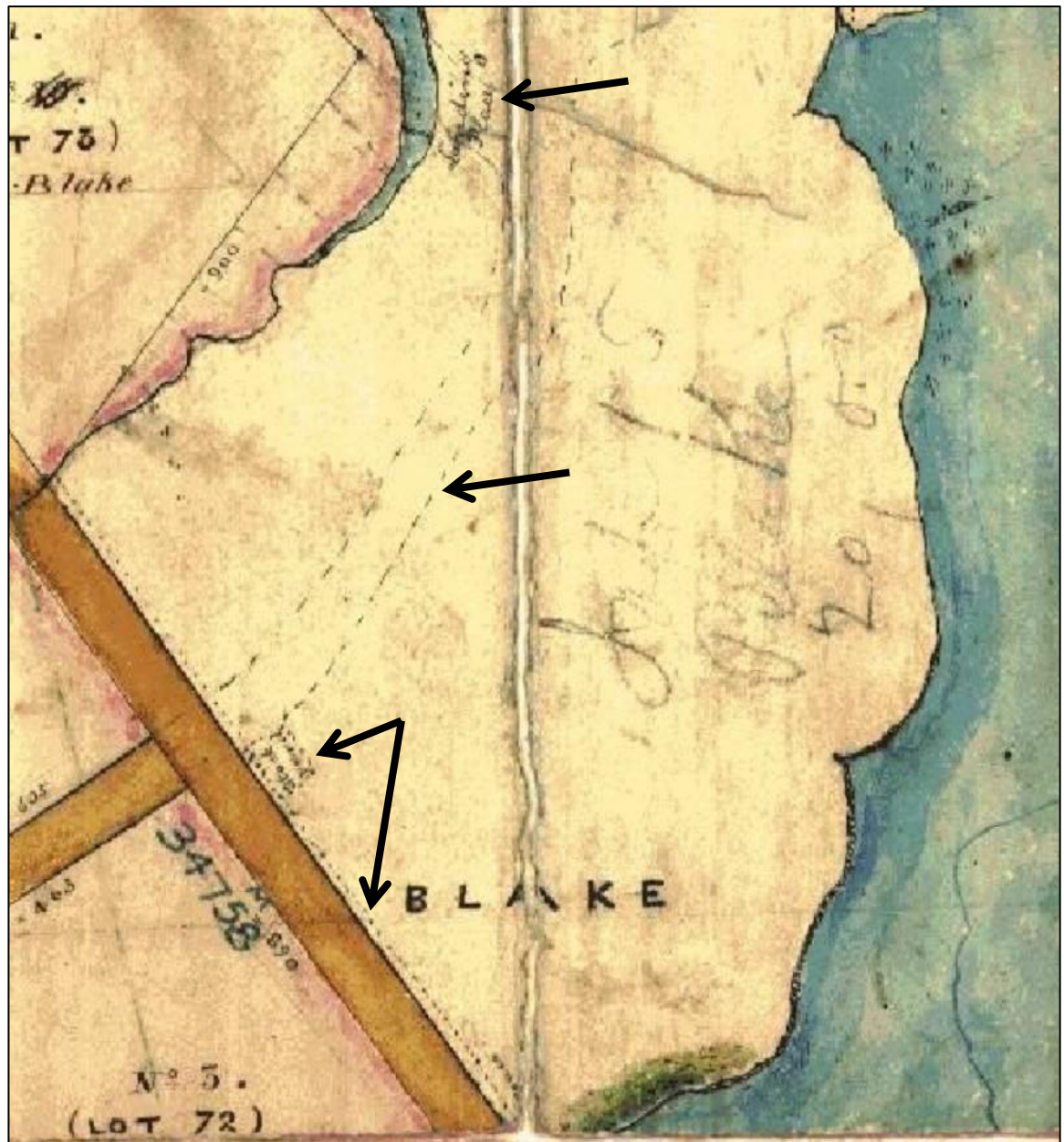


Figure 3-3. Detail from SO 1114B (see Figure 2-6) illustrating the stock yard, fence line, trackway and 'Landing Place' (arrows)

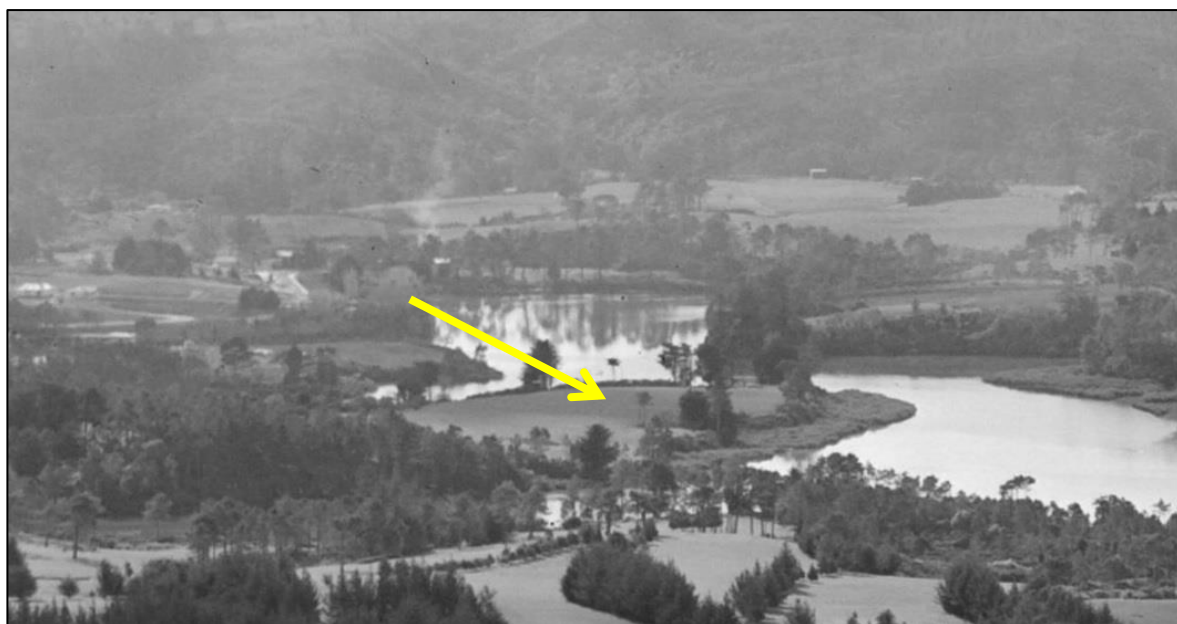


Figure 3-4. Detail from oblique aerial photograph taken by Whites Aviation Ltd on 27 August 1963 and titled ‘A.A. Corban and Sons, Riverlea Block, Riverhead, Auckland’. The project area is in the centre (arrowed). Source: Whites Aviation Collection, Alexander Turnbull Library - reference: WA-60619-G



Figure 3-5. Detail from oblique aerial photograph taken by Whites Aviation Ltd on 18 Nov 1986 and titled ‘Riverhead, Rodney District, Auckland’ showing the project area fringed with mature trees with the former house visible (arrowed). Source: ‘Whites Aviation Collection, Alexander Turnbull Library’ - reference: WA-79036-F



Figure 3-6. Vertical aerial photograph dated 1996 illustrating that the property at 29 Dinning Road was much the same then as prior to the commencement of the subdivision development. Source: Auckland Council GIS Viewer

3.4 Wider Context

3.4.1 Archaeological and Historical Context

Within 1km of the project area boundaries a further seven archaeological sites and four other sites of heritage significance are recorded on the NZAA ArchSite database and Auckland Council Cultural Heritage Inventory (CHI) (Figure 3-7; Table 3-1). The seven archaeological sites consist of three historic structures: the Riverhead Mill (R10/721 = CHI no. 10), the Riverhead Wharf (R10/888 = CHI no. 644) and the Harkins Point to Helensville Railway (R10/1487 = CHI 15093); two historic midden sites (R10/1342 and S10/1448 = CHI no. 17686); and, lastly, two shell midden/oven sites (R10/238 = CHI no.5565 and R10/1336) (Figure 3-7; Table 3-1). With the exception of shell midden site R10/238 the archaeological sites are all located to the north of the project area (Figure 3-7).

The four remaining historic heritage sites recorded on the CHI consist of Harkins Wharf (CHI no. 9) located to the southeast of the project area; the Riverhead Portage/Te Taonga Waka to the north (CHI no. 141); the Riverhead Hotel/Riverhead Tavern (CHI no. 13233),

also to the north; and a canoe portage also described as Te Taonga Waka (CHI no. 15092) (Figure 3-7; Table 3-1).

The Riverhead township to the north and the wider Rangitopuni Creek have an interesting history relating to both Māori and European settlement. As discussed above, Māori archaeological site distribution in the upper Waitematā Harbour is focused on the coastline and shell midden are by far the most frequent site type (Clough and Prince 1999:10). In the Riverhead area these sites are likely to relate to groups camping as they transited between the Waitematā and Kaipara Harbours via the Riverhead portage.

Table 3-1. Archaeological and other historic heritage sites recorded on the NZAA ArchSite database and Auckland Council CHI within a 1km radius of the Dinning Road project area

CHI No.	NZAA No.	Site Type	Description
9	n/a	Historic Structure	Landing Wharf – Harkins Point
10	R10/721	Historic Structure	Waitemata Flour Mill/Brigham's Mill / Lamb's Flour Mill / Riverhead Paper Mill / Pitoitoi Landing
141	n/a	Portage	Riverhead Portage / Te Taonga Waka
644	R10/888	Historic Structure	Riverhead Wharf
5565	R10/238	Midden/Oven	Shell Midden
13233	n/a	Historic Structure	Riverhead Hotel / Forrester's Arms / Riverhead Tavern
15092	n/a	Canoe Portage	Te Taonga Waka
15093	R10/1487	Railway	The route of the first rail link from Riverhead to Kumeu and the Kaipara
17686	R10/1448	Historic Midden	European settlement period midden
n/a	R10/1336	Midden/Oven	Shell midden containing cockle of very small size
n/a	R10/1342	Historic Midden	European settlement period midden



Figure 3-7. Archaeological and other historic heritage sites recorded on the NZAA and Auckland Council CHI within 1km of the development property (outlined in red). Note that only previously recorded site R10/1377 is shown within the project area

3.4.2 Previous Archaeological Survey and Excavation

There have been relatively few archaeological surveys within the wider Riverhead area. Those undertaken include a survey and assessment for a proposed gas pipeline (Bioresearches 1996; Clough and Prince 1998). Most of the previous archaeological work has focused on the site of the Riverhead Flour and Paper Mill (R10/721), an archaeological assessment of which was initially undertaken by Phillips (1994). An archaeological assessment of the effects of a proposed walkway at the Riverhead Mill Reserves was undertaken by Opus International Consultants Ltd (Plowman 2009), and a conservation plan was prepared for the Riverhead Mill for Auckland Regional Council by Clough & Associates (Clough et al. 2005).

More recently, Clough & Associates have undertaken three other archaeological assessments of the effects of proposed residential subdivisions within the Riverhead South Outline Plan Area, neither of which identified any archaeological features on those

3. Archaeological Background

properties (Phear and Shakles 2014 and 2015; Shakles and Clough Apr. and Nov. 2011). An assessment was also completed for the proposed Riverhead Structure Plan and Plan Change area (Shakles and Clough 2023), which identified two archaeological sites within the project area – the Riverhead Mill Race (part of the Riverhead Mill Site R10/721) and the location of a late 19th century house with possible outbuildings (R10/1537). The race that forms part of the mill site was also part of an assessment for a private residential subdivision at 1003 Coatesville-Riverhead Highway (see Judge et al. 2017; Shakles 2023), and an authority has been granted for the works.

On land to the west of the township at Duke Street an assessment identified features associated with water management that were consistent with a mill site (Shakles et al. 2012). The site was subsequently excavated under archaeological Authority 2013/379 and determined to be a previously unknown timber mill site probably relating to the mid-19th century occupation of the site by William Farley Blake (Shakles et al. 2013; Shakles et al. 2022).

Several minor archaeological investigations have also been carried out on properties located partly within the Riverhead Mill site (Clough et al. 2011). In 2012 Shakles and Clough also identified a historic midden site (R10/1342) located within the subdivision area to the east (Precinct 7).

4 EXCAVATION RESULTS

4.1 Introduction

4.1.1 Sites Investigated

The archaeological excavations at Deacon Point were undertaken from October to late December 2016 and followed the programme of subdivision earthworks. In total, 12 archaeological sites were recorded, six of which were those identified at the assessment stage (R10/1377 and R10/1407–R10/1411); five of which were new sites exposed during earthworks carried out under authority 2017/207 (R10/1545–R10/1548 and R10/1551); and one (R11/1425) which was exposed by works outside the original authority area and was investigated under a separate authority (2017/377) (Figure 4-1). Eleven of the sites were investigated, while site R10/1407 was contained entirely within the esplanade reserve and left in situ. Parts of sites R10/1377, R10/1408, R10/1409, R10/1411 and R10/1545 also fell within the esplanade reserve and were protected in situ.



Figure 4-1. NZAA Map showing the 12 sites within the project area (source: NZAA ArchSite)

4.1.2 Excavation Methodology

Two 20-ton mechanical excavators equipped with smooth-edged ditching buckets were utilised to remove the turf and modern topsoil overburden across the excavation areas until archaeological deposits and features were exposed. All machine work was carried out under continuous archaeological supervision until archaeological levels were reached. Archaeological surfaces and features were then cleaned with hand tools by the archaeologists in advance of archaeological excavation.

The excavation of archaeological features was undertaken with trowel, mattock and spade. The archaeological features and/or deposits were assessed, investigated, recorded and sampled in accordance with accepted archaeological practice and the requirements of the Heritage NZ Authorities (Authority Nos. 2017/207 and 2017/377).

The single context recording system was used, with each cut, deposit, layer and structure given an individual context number and recorded on a pro-forma context sheet, which enabled the determination of occupation phasing on site (the context records are presented in Appendix 1). Individual features were planned at scales of 1:10; 1:20, and 1:50, while deposits were drawn in section at scales of 1:10 and 1:20. A photographic record was compiled of all deposits and features with a digital SLR camera.

All artefactual and faunal material relating to the occupation of the project area was collected, sorted, and labelled per context number on site and retained for specialist analysis.

Additionally, a site survey of the excavation areas and archaeological features was undertaken by Wesley Maguire utilising a robotic Leica Total Station. Aerial photography via drone was undertaken by Bernie Larson.

The excavation was led by Richard Shakles and Sarah Phear assisted by Carly Mailhot, Dave Carley, Tom Clough-Macready, Benjamin Jones, Ellen Cameron and Jennifer Low and was carried out under the overall direction of Rod Clough.

4.2 Excavation Results

4.2.1 Site R10/1377 Deacon's Inn

The topsoil of the area of the recorded estimated extent of site R10/1377 that could not be protected within the esplanade reserve was stripped by mechanical excavator. Once stripping had ceased it was noted that there were both Māori and European settlement features present, indicating clear two phases of settlement for this one location within the peninsula. As such, two sites were recorded here – R10/1377 for Deacon's Inn, and R10/1545 for the Māori features (Figure 4-2 and Figure 4-3). A drainage ditch and fence line from an additional site (R10/1548) also partially extended within this area, the features having been exposed during topsoil stripping. Figure 4-4 illustrates the features from all three sites, showing the density of the features that underwent investigation.

In total 242 contexts relating to Deacon's Inn were recorded during the investigation (Figure 4-5). The majority of features recorded consisted of postholes (n=120) with a few stakeholes (n=3) and beam slots (n=2) (Figure 4-5; Figure 4-6). At least three structures were identifiable from the posthole layout, consisting of the main Inn and two outbuildings, as shown in the 1857 plan (Figure 2-6). For the Inn, 21 postholes demarcated the outer walls with 22 postholes likely forming internal floor supports. Approximately 19 postholes

4. Archaeological Excavation Results

related to the larger outbuilding, and indicated a possible entrance and exit, while another 5 related to the smaller outbuilding (context group 1287). A group of six postholes (context group 1285) between the two outbuildings might represent a tethering post structure, and many of the other postholes may have related to similar features or represent informal fencing. While initially it was thought the store was represented by the structural remains/outbuildings, the artefact assemblage associated with site R10/1547 suggests that the store was likely located just north of the inn (see section on R10/1547).

Of note is that none of the postholes retained posts or portions of posts, and no demolition deposit was present either covering the postholes or as part of the backfill. This could suggest that the building was relocated, most likely to the present site of the Riverhead Tavern when Deacon took over the pub licence there, and continued its original use.

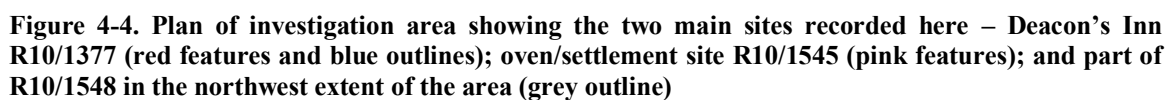
A number of artefacts associated with the inn were recovered, many from within posthole fill, although the majority were recovered from the topsoil in this location.



Figure 4-2. Location of site all the archaeological sites as shown on 2017 aerial during subdivision works (source: Auckland Council GeoMaps)



Figure 4-3. Pre-excavation photo, facing south, with some of the square postholes relating to Deacon's Inn (R10/1377) circled. Note two ovens relating to R10/1545 are indicated by the arrows



4. Archaeological Excavation Results

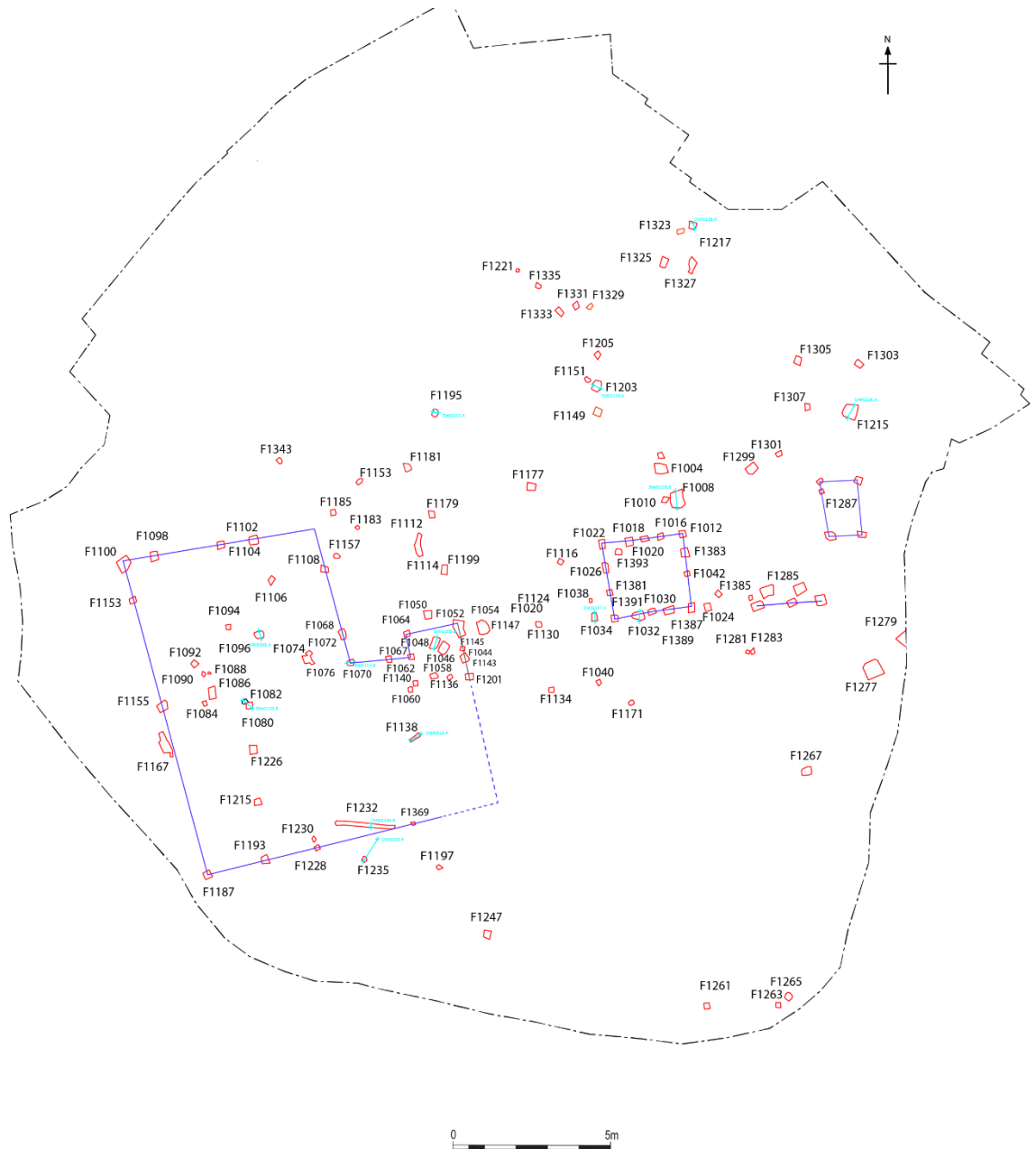
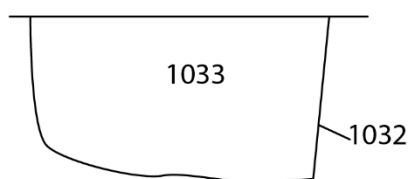
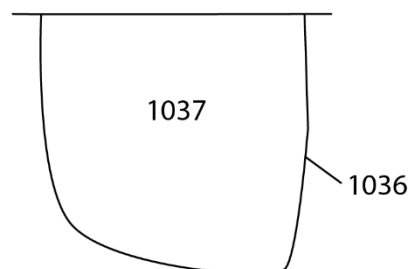


Figure 4-5. Plan of Deacon's Inn features recorded during the investigation, with the three structures outlined in blue

DWG 106 East facing section of posthole 1032



DWG 107 West facing section of posthole 1036



DWG 108 West facing section of posthole 1048

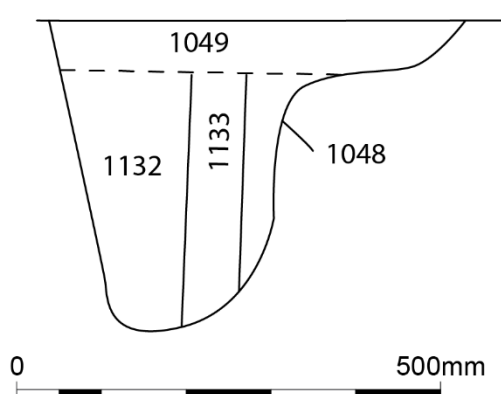


Figure 4-6. Typical sections through the postholes related to Deacon's Inn R10/1377

4.2.2 Site R10/1408 Midden

The topsoil of the area of the recorded estimated extent of site R10/1408 (Figure 4-2) that was not being protected within the esplanade reserve was stripped by mechanical excavator.

In total 99 contexts were recorded as part of R10/1408. These included the midden, and features such as firescoops (n=4), ovens (n=3), rakeout (n=2), paleosol (n=1), postholes (n=27) and stakeholes (n=13) (Figure 4-7).

The main midden deposit (2449) consisted of a charcoal matrix, frequent cockle shell, frequent FCR, occasional pipi, occasional mudsnail, occasional chert, occasional greywacke and occasional basalt flakes (Figure 4-8). It was thicker towards the eastern river bank, thinning out to west. The midden covered multiple features and some were cut through the base of the midden, such as a firescoop (2478) (Figure 4-8). The extent of the midden excavated was some 12m east-west by 16m north-south, with the remaining midden (about a third of the site) extending within the esplanade reserve and not affected. Test trenches were excavated through the deposit, and one section wall in particular provided evidence of multiple firescoops and postholes located at the base of the midden (Figure 4-9).

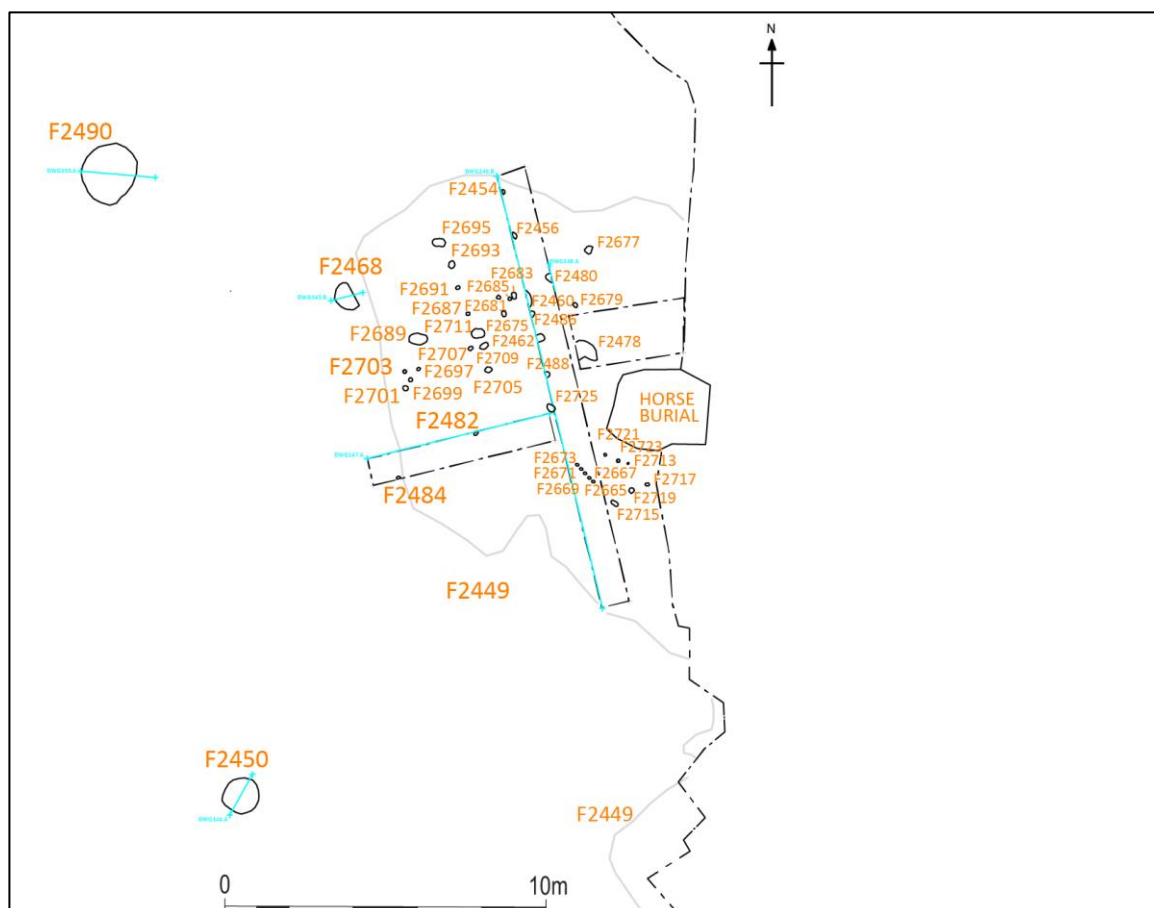
The midden (2449) was above a paleosol (2498) which comprised a mix of mottled black soil, shell, fire cracked rock and charcoal inclusions (Figure 4-9). The majority of features

4. Archaeological Excavation Results

were therefore located at the interface with 2499, thus truncating 2498. Midden 2449 was truncated by three postholes only (2454, 2494, 2496) and a modern horse burial.

One oven (2490) and one firescoop (2450, fill 2451) were located to the northwest and southwest of midden 2449 respectively (Figure 4-7; Figure 4-10).

A substantial amount of this site remains in situ subsurface within the esplanade reserve, where a wooden boardwalk was built rather than a concrete path to lessen the adverse effects on the surviving midden, with selective planting demarcating the site from the surrounding vegetation.



4. Archaeological Excavation Results



Figure 4-8. Cleaning back midden 2449 (left); commencing slot through 2449 where oven 2478 was located (centre); oven stones from rake-out layer 2453 (right), scale:1m

DWG 146 East Facing Section of midden 2449 with ovens 2492, 2464, 2460, 2456 and postholes 2501, 2488, 2462, 2486, 2494, 2496, 2454

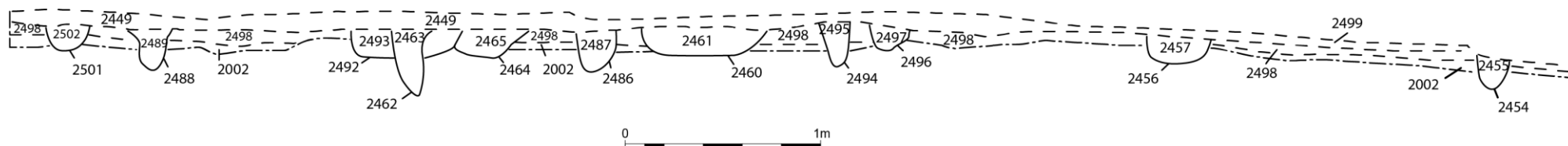


Figure 4-9. Section drawing through midden 2449 showing the paleosol 2498 and multiple features truncating the layer



Figure 4-10. Firescoop 2450 (pre-excavation), with edge of 2449 indicated by the arrow (scale: 1m)

4.2.3 Site R10/1409 Midden and Ovens

The topsoil of the area immediately to the south of the recorded estimated extent of site R10/1409 (Figure 4-2) was stripped by mechanical excavator.

Two areas of the main shell midden deposit were exposed, the largest of which was 12m long by 8.6m wide, while the smaller area was 16.4m in length by up to 2.15m wide (Figure 4-11). Both midden deposits consisted predominantly of fragmented, crushed and whole cockle shell with occasional mudsnail in a blackish-brown ashy silt matrix with moderate charcoal inclusions and occasional heat fractured rock. The depth of the two deposits varied across their extent from as little as 0.04m to a maximum of 0.10m. The midden deposits were excavated, recorded and sampled for species analysis and radiocarbon dating. The larger of the two areas of the midden excavated produced two chert flakes. Four postholes were located beneath the midden (2829) which are not shown on the plan (Figure 4-11).

Approximately 8m to the west of the smaller, western shell midden deposit, a relatively large sub-circular firescoop/oven feature (2825) and a smaller oval oven (2823) were situated. The larger sub-circular oven feature was 1.90m by 1.68m and 0.30m deep. The feature contained a single fill that consisted of a dark greyish-black ashy silt that contained frequent charcoal and frequent heat fractured oven stones, mainly fragmented (Figure 4-12; Figure 4-11).

The smaller oval oven was 1.4m in length by 1.12m wide and 0.29m deep. The feature contained a single fill that consisted of a dark grey ashy silt with frequent charcoal and heat fractured rock inclusions. Three chert flakes were also recovered from the fill.

Additionally, a straight alignment of postholes (2271-2273) close to the larger, eastern midden deposit probably indicates drying racks for curing fish. A small number of postholes in isolation were also recorded as part of this site (see Figure 4-11).

Figure 4-12 also illustrates the proximity of R10/1409 to the 19th century sites – R10/1547 and the stock fencing R10/1548.

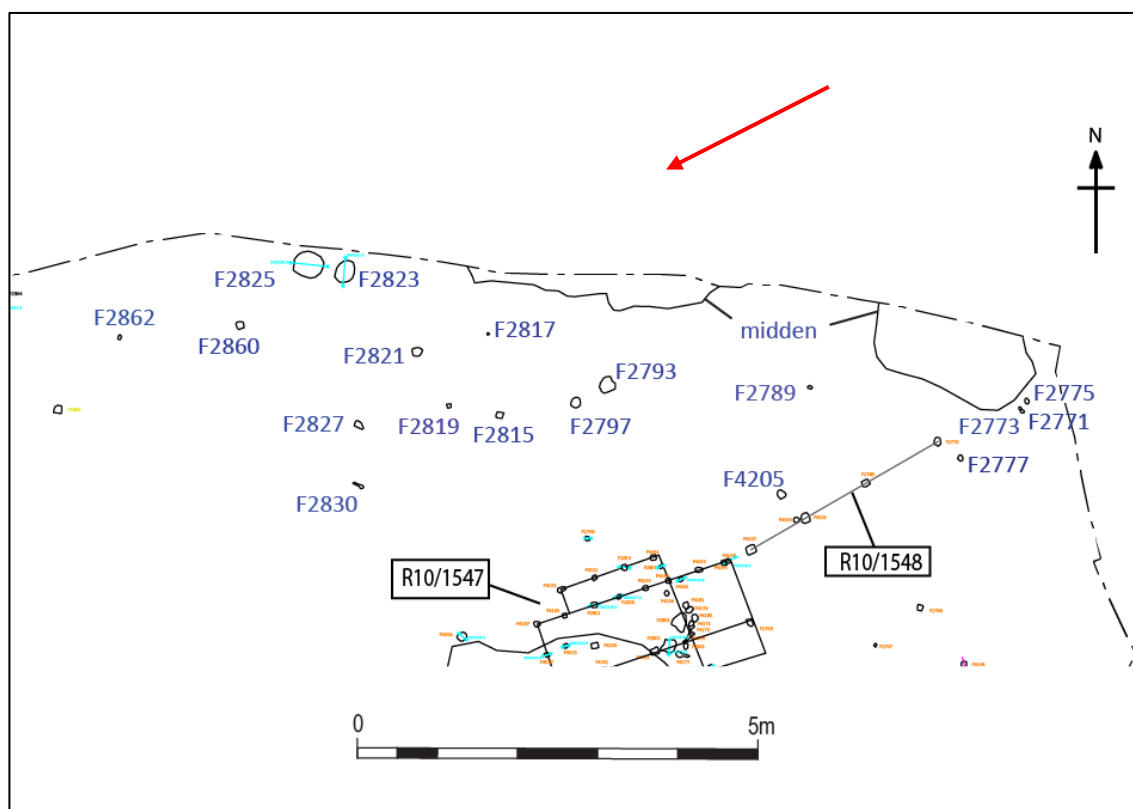


Figure 4-11. Plan of features comprising R10/1409 (blue context/feature numbers only). Portions of site R10/1547 (19th century house/store) and R10/1548 (fenceline/alignments) located in the near vicinity of R10/1409 are also shown



Figure 4-12. Pre-excavation image of the larger of the two oven features (2825) close to the western midden deposit, facing north (left), scale = 15cm; south-facing section through the firescoop-oven feature (2825) (right), scale = 30cm

4.2.4 Site R10/1410 Midden

This midden site was located outside of the main area of works and was to be avoided by the walkway (see Figure 4-2). It was recorded as a small midden eroding on a small slope on the edge of the coastal scarp, consisting of fragmented cockle, and measuring 4 x 2m in size. This midden was avoided during works. However, additional archaeological features were exposed in the vicinity of the site during works (Figure 4-13) and have been attributed to this site. They consisted of firescoops (n=5), hangi (n=1), historic hangi (n=3) (Figure 4-14) and a bin pit (n=1), with postholes forming the main feature type (n=18) (Figure 4-13).

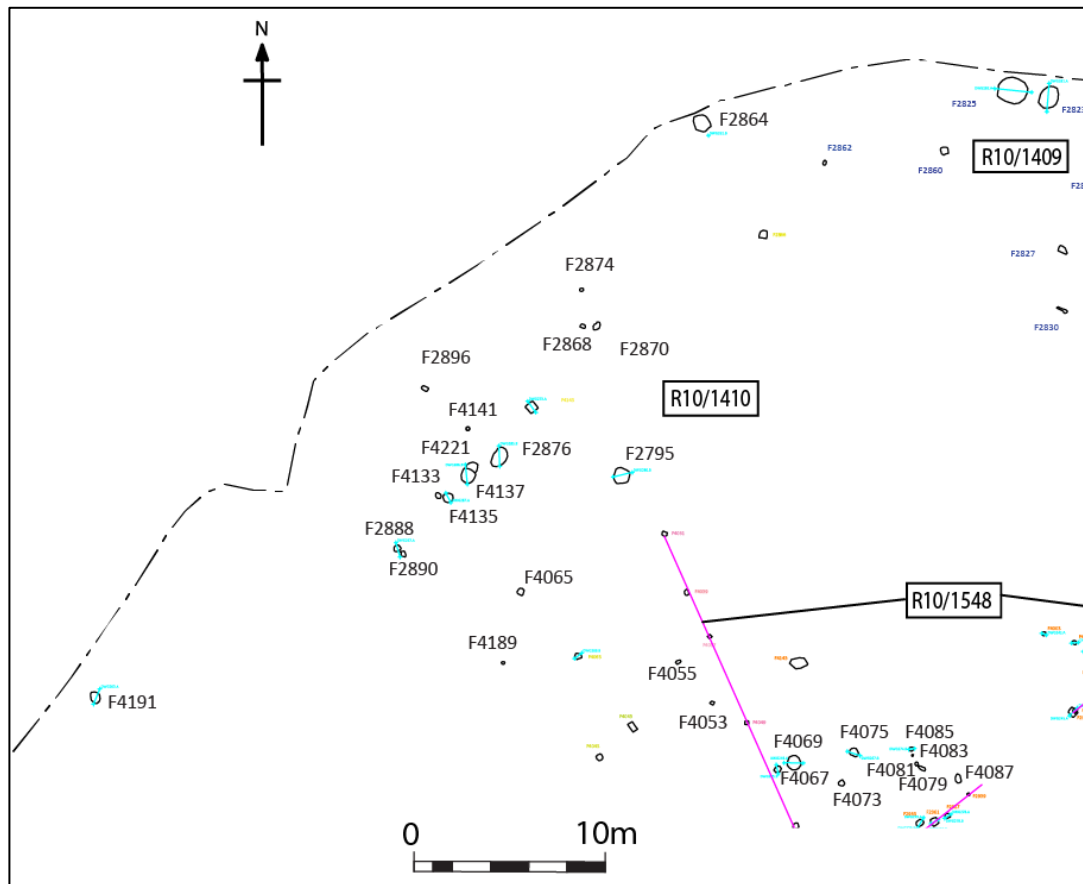


Figure 4-13. Features recorded as part of R10/1410 indicated with large numbers above. Parts of sites R10/1548 and R10/1409 are also shown



Figure 4-14. One of the three historic hangi (4135) recorded during monitoring which used bricks instead of stones (scale = 30cm)

4.2.5 Site R10/1411 Midden and Ovens

The majority of this site was preserved within the esplanade reserve (see Figure 4-2). However, during topsoil stripping, two ovens (2428 and 2430) and 4 postholes (2436, 2434, 2432, 2414) were identified in close proximity to the midden and have consequently been grouped with this site. The two ovens measured 1.7m and 1.32m in diameter respectively and had dark blackish-brown silty fills with charcoal, shell and frequent rock. The postholes were small and likely represent stakeholes (Figure 4-15 and Figure 4-16).

A further cluster of features located c.32m to the northwest of the ovens has also been grouped with this site (Figure 4-17). It consisted of a large ovalish pit (2406), post and board slots (2400, 2404, 2439 and 2441), postholes (2402, 2447, 2445, 2443) and two stakeholes (2408 and 2426). Also, some additional postholes and stakeholes located to the south and west of the two large oven features discussed above were included in this site – 2412, 2416, 2418, 2420, 2422, and 2424 (Figure 4-16). All these features likely represent small structures from temporary camps during resource gathering.

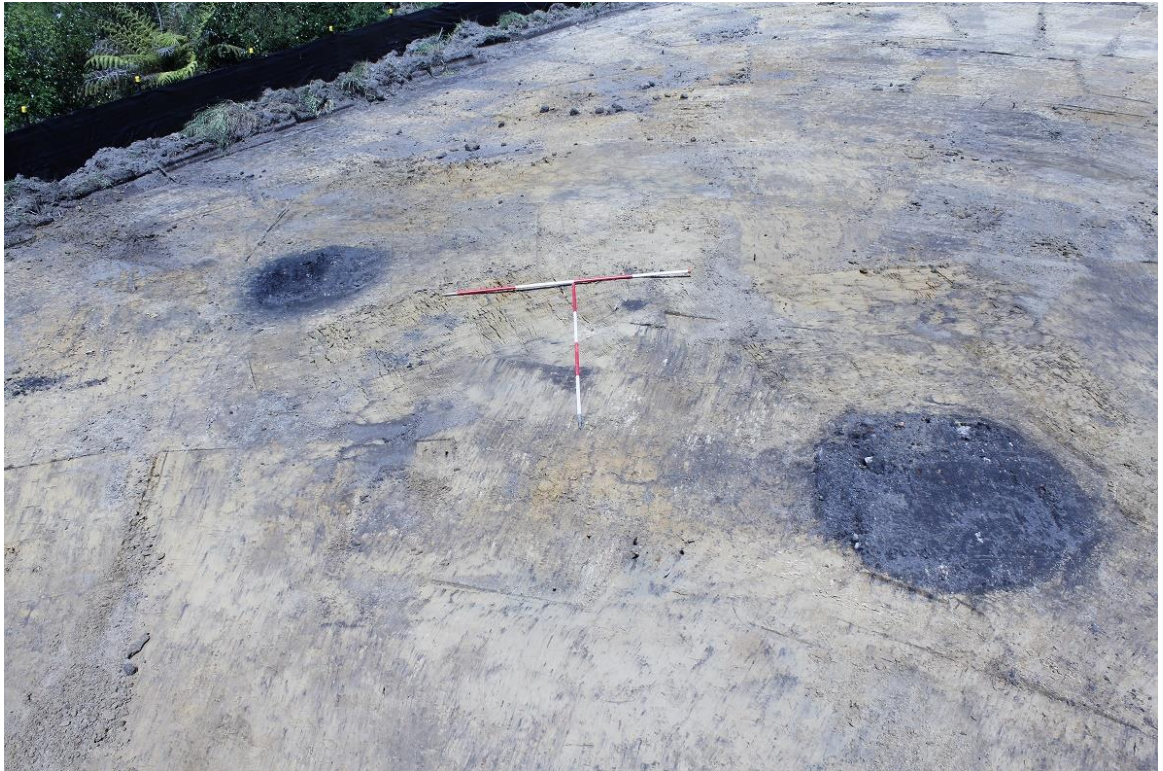


Figure 4-15. Photograph of the two circular ovens 2428 (right) and 2430 (left) with posthole 2432 visible next to the 2m long scale bars. Facing southeast

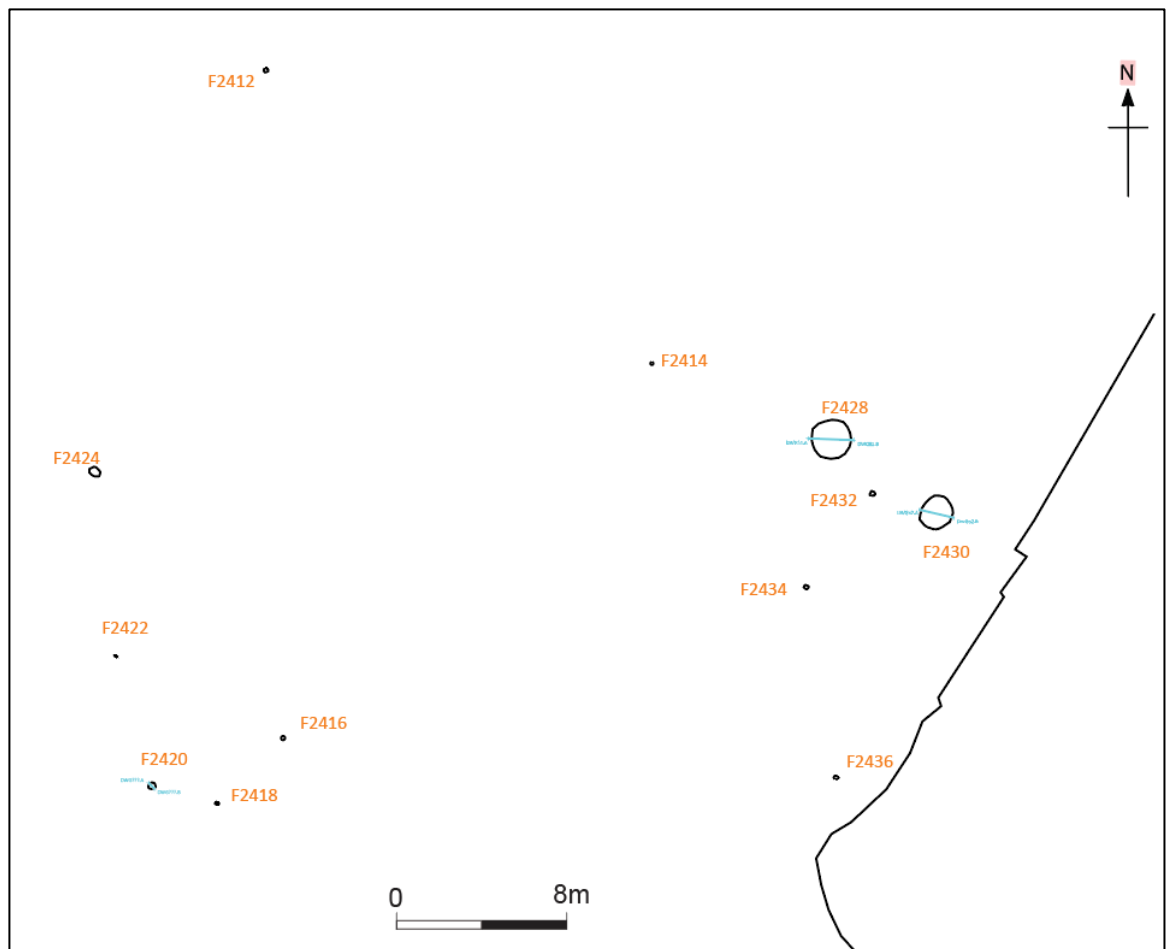


Figure 4-16. The two large ovens and other features to the west that formed part of site R10/1411

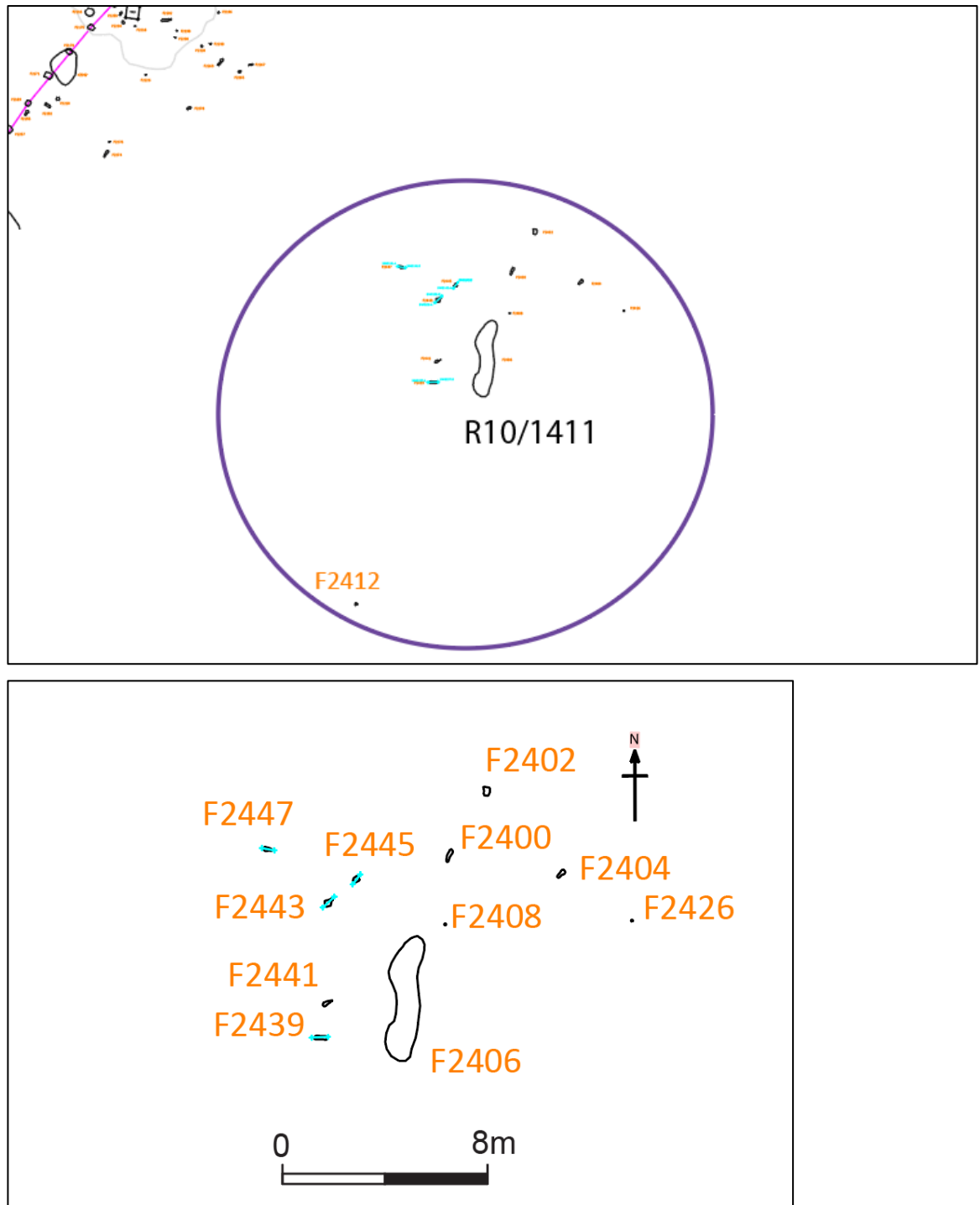


Figure 4-17. Cluster of features to the northwest of the two ovens (posthole 2412 visible in figure 4-17 also in top image) which consisted of postholes, post and board slots, a pit and stakeholes

4.2.6 Site R10/1425 Pits and Midden

Following topsoil stripping of the area (see Figure 4-2 for location), this site was found to consist of 2 midden deposits, 18 hangi/ovens, 2 bin pits, and one posthole (Figure 4-18). There was evidence of some vertical truncation of the area, likely through ploughing although plough lines were not observed. The midden deposits (3224 and 3226) were possibly derived from small ovens and consisted of frequent cockle, occasional pipi, and occasional mudsnail along with fire cracked rock and charcoal. The two bin pits (3201 and 3205) were located amongst a small cluster of ovens. The latter pit was larger and deeper than the other, measuring 73cm long and 35cm deep, compared to 3201, which measured only 40cm long and 15cm deep.

The predominant features were ovens ranging in size from 82cm long, 65cm wide and 16cm deep (3195) to 36cm wide and only 10cm deep (3233). The majority were c.50cm to 70cm wide with depth of c.10cm. Three of the ovens were clearly historic in date – one (3213) was 56cm by 450cm by only 6cm deep and had been truncated (Figure 4-19). Its shape was sub-rectangular and along with fire cracked rock and charcoal it included a small copper nail. Next to this was 321,5 very similar in size, shape and depth (Figure 4-19). The other (3217) was larger in size, measuring 90cm by 86cm and was deeper, at 35cm. Unusually, melted bottle glass was located beneath the hangi stones and tin was also present. It is possible this could date to the 20th century also.

One historic posthole (3182) only was recorded in this area, and no other postholes were present, which suggests this area was used for cooking rather than shelter or for whare. The site could be contemporary with R10/1551, which had no ovens, indicating different use areas – one for cooking and one for habitation. However, this could only be confirmed through radiocarbon dating.

4. Archaeological Excavation Results

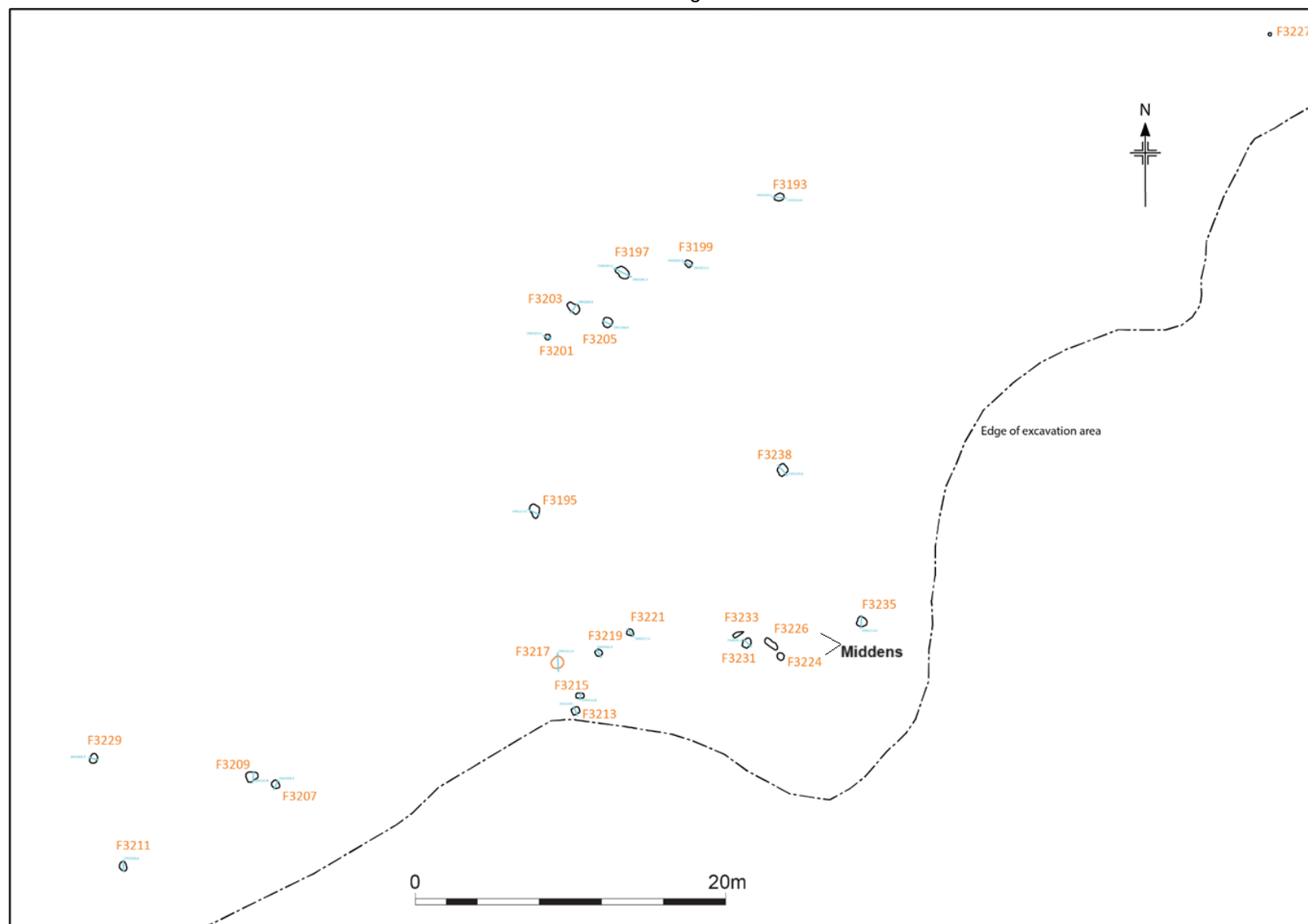


Figure 4-18. Survey plan of archaeological features comprising site R10/1425



Figure 4-19. Two historic period ovens – 3215 (left) and 3213 (right), pre-excavation. Facing southeast

4.2.7 Site R10/1545 Māori Settlement Features

Following the topsoil strip of the area shown in Figure 4-2 and Figure 4-20, up to the border of the coastal esplanade reserve, a total of 64 archaeological features relating to Māori occupation and settlement of the area were exposed in plan. These features were interspersed with Deacon's Inn features (R10/1377). Figure 4-4 illustrates the two settlement phases, while Figure 4-21 illustrates R10/1545 features only. The features consisted of hangi (n=4), firescoops (n=8), postholes (n=30) and stakeholes (8), board and slot/post and board features (n=7), two bin pits (n=2) and other pits (n=5) (Figure 4-22; Figure 4-23). The fills of the ovens and firescoops consisted of charcoal rich silt with frequent shell midden (predominantly cockle and mudstone) and heat fractured ovenstones, the majority of which were volcanic and represented resources brought to the site, as the local geology consisted of Waitemata Series interbedded mudstones and sandstones. A number of the postholes and stake holes formed alignments or groups indicative of drying racks and/or shelter-like structures. A single chert flake and a large chert core were recovered from the site. The site likely represents a seasonal encampment for resource gathering from the Upper Waitematā Harbour and Rangitopuni Creek environment. Charcoal and shell samples were taken for dating and species analysis purposes.

The part of the site within the development footprint was fully excavated and is therefore destroyed. However, some features extended beyond the edge of excavation into the coastal strip/bank top and it is likely that there are a number of oven features, postholes, etc surviving subsurface and in situ.



Figure 4-20. Area of site R10/1545 after topsoil stripping, facing southeast

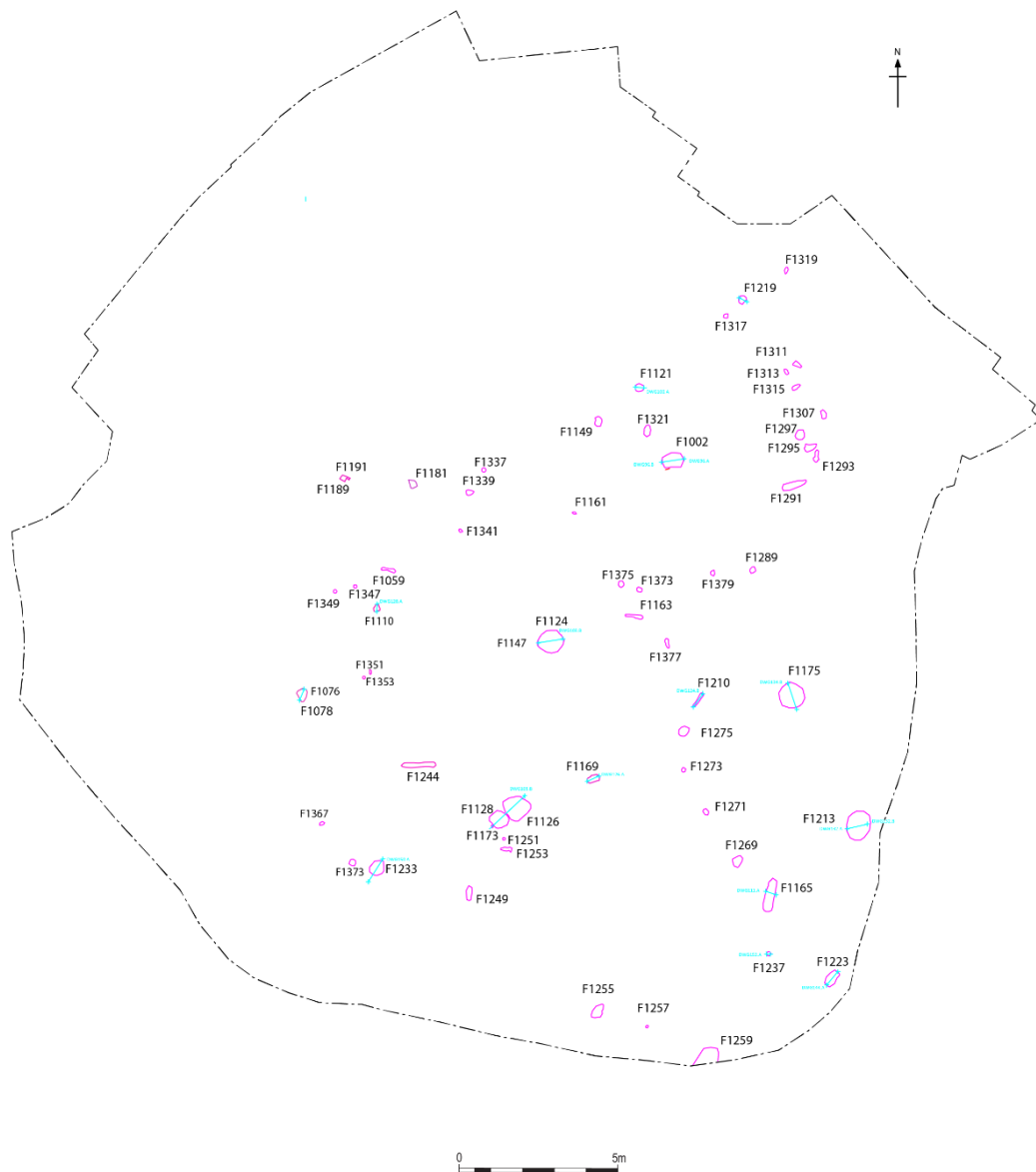


Figure 4-21. Archaeological features relating to site R10/1545



Figure 4-22. Pre-excavation view of firescoop (1223) (left); pre-excavation view of a hangi and firescoop (1126 and 1128) (right); scales = 1m

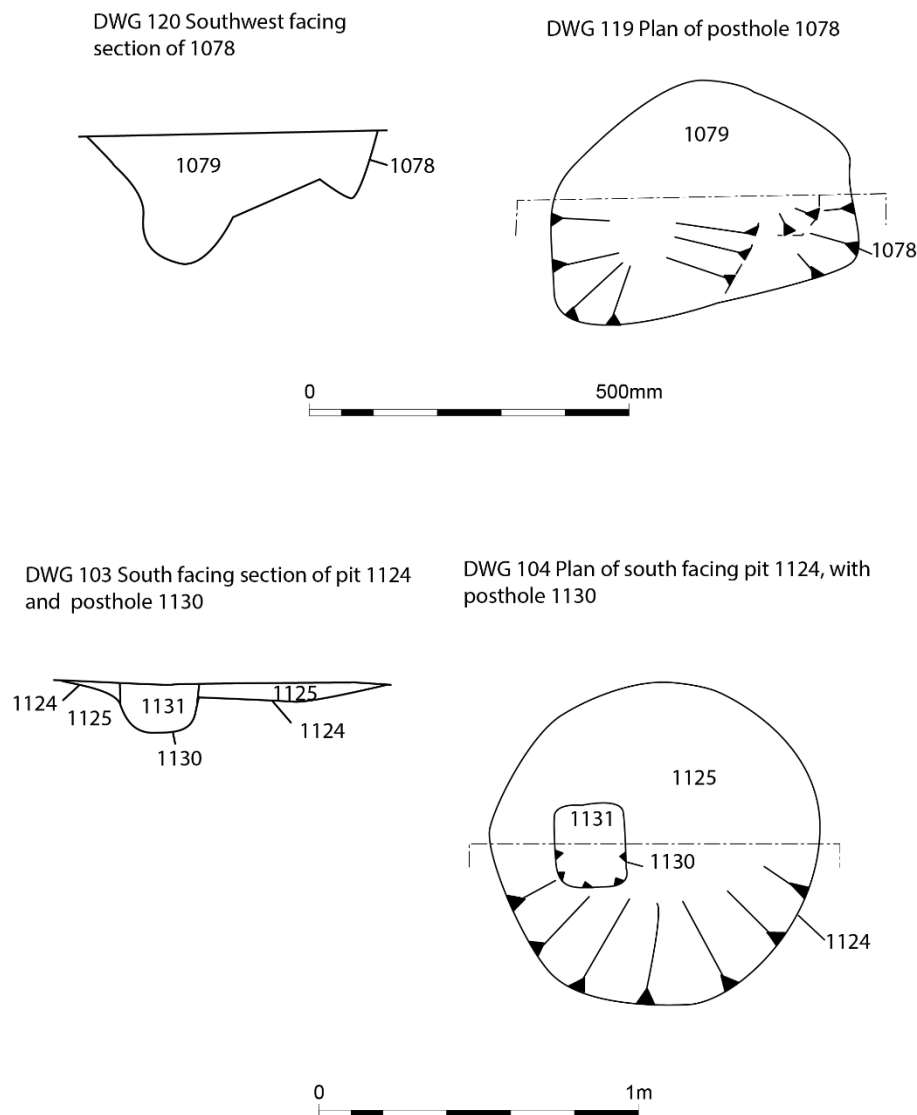


Figure 4-23. Section and plan drawings of posthole 1078 and pit 1124, with the latter feature truncated by 1130, a posthole relating to Deacon's Inn

4.2.8 Site R10/1546 Middens and Historic Artefacts

The site (Figure 4-2) consisted primarily of a large shell midden deposit that was 11.69m wide (north-south), up to 18.87m in length (east-west) and up to 0.10m thick (context 2116). The midden was sealed by the modern dark brown silt loam topsoil under turf (context 2000) and it in turn sealed the yellowish light brown clayey silt alluvial subsoil (context 2001). The midden consisted predominantly of fragmented and whole cockle shell within a blackish to dark brown ashy silt matrix that contained frequent charcoal and moderate heat fractured rock inclusions. There were two oval (2010 and 2018) and one sub-rectangular (2040) earth ovens associated with the shell midden (Figure 4-24). No artefacts were observed or recovered during the excavation of the shell midden and hangi.

There were also a large number of sub-circular and oval postholes and stakeholes probably related to activity associated with the formation of the shell midden. These likely represented drying racks for curing fish for consumption elsewhere, and perhaps small temporary shelters. The site was situated some 130m south of the entrance/exit to the Te Taonga Waka – Kaipara-Waitemātā Harbour portage.

Two small historic period shell middens (contexts 2083 and 2092) were located a few metres to the west of the large midden deposit. These small midden deposits were 2.82m by 2.12m by up to 0.10m deep (context 2092) and 1.74m by 1.35m by up to 0.04m deep (context 2083) in size respectively. The middens consisted of small fragmented and crushed cockle shell with very occasional mudsnail within a dark greyish-black ashy silt matrix that contained frequent charcoal inclusions and occasional heat fractured rock fragments. Artefacts retrieved from these small midden deposits consisted of blue and white ceramic (willow ware pattern) and black beer bottle glass.

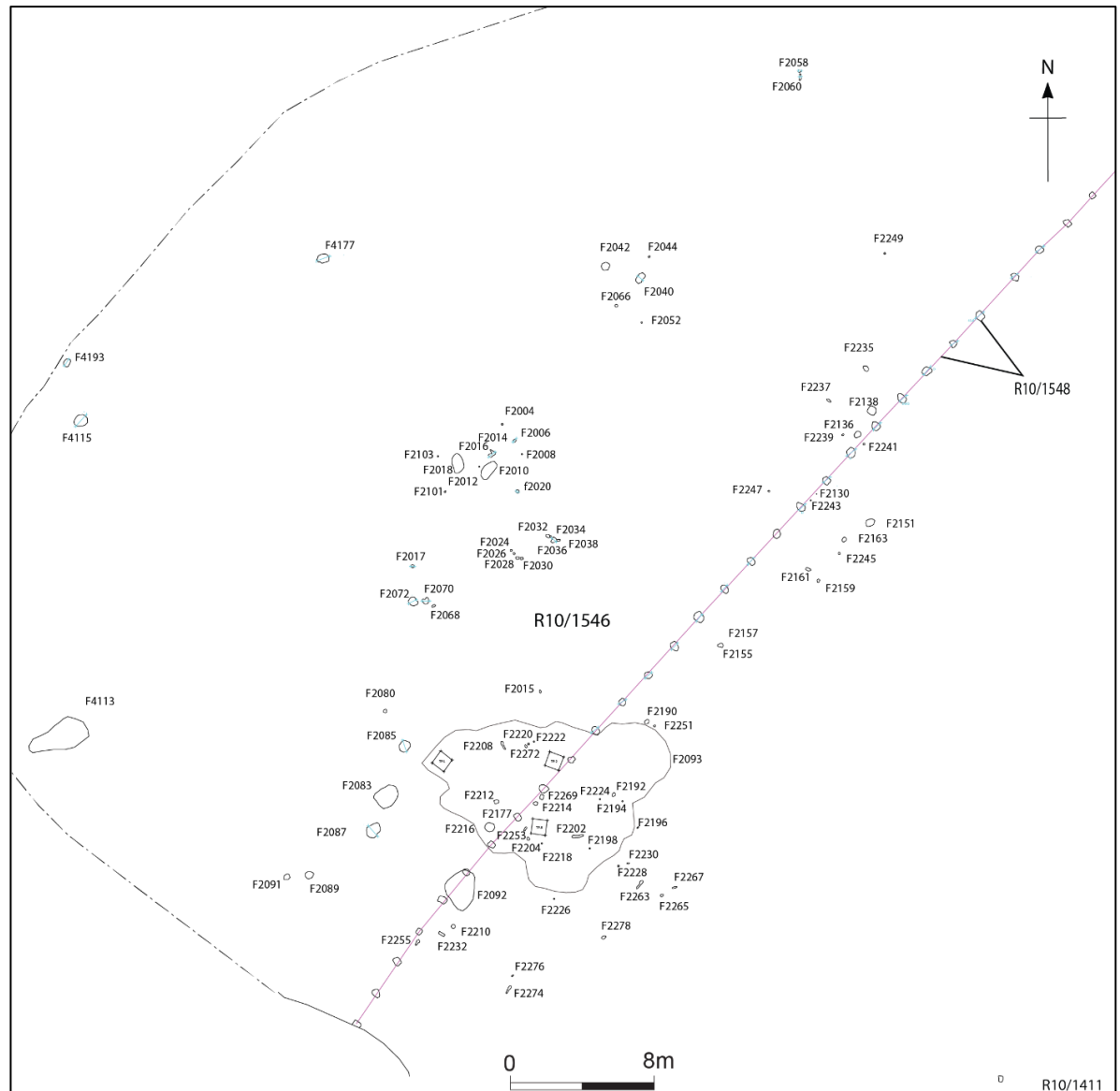


Figure 4-24. Survey plan of site R10/1546 with one of the alignments of site R10/1548 also shown running northwest-southeast through the site



Figure 4-25. Photo of midden (2216) during sampling, facing northwest (scale = 2m)

4.2.9 Site R10/1547 19th Century House/Store

Following the topsoil strip of the area to be occupied by a recreational reserve at the northern end of Riverhead Point Drive and up to the border of the coastal esplanade reserve footpath, a group of archaeological features (no. = 32) relating to what appeared to be a mid-19th century house/store were exposed (Figure 4-26). The features consisted of square and rectangular postholes and represented the bearer post supports for a structure 14.7m in length by 5.90m wide (approximately 48 x 19.5 feet), oriented north-northwest to south-southeast. An alignment of four postholes set offset but parallel to the northern face of the structure is considered to represent a verandah some 6.25m long and 1.53m wide (20.5 x 5 feet) with a north-northwest facing aspect which would have provided clear views directly over the Rangitopuni Creek (Figure 4-27).

Parts of the southwestern portion of the house/store footprint as well as the area to the south and west of the structure's southern and western sides were covered with an artefact-rich layer (context 2505) that is considered to represent a demolition deposit formed when the house/store was demolished or moved and which entailed the spreading and intermixing of what was originally most likely an underfloor refuse deposit (Figure 4-28). Artefacts retrieved consisted of ceramic (earthenware, stoneware bottles, porcelain), clay tobacco pipe fragments, glass (including black beer, and other alcohol-containing vessels, nails, a copper alloy Royal Navy uniform button, a copper alloy cricket belt buckle and a copper alloy rowing belt buckle (see section 5 for further details). When considering the location of the structure along with the high number of artefacts found, it is interpreted that this house/store belonged to Thomas William Deacon (see Discussion for further details).

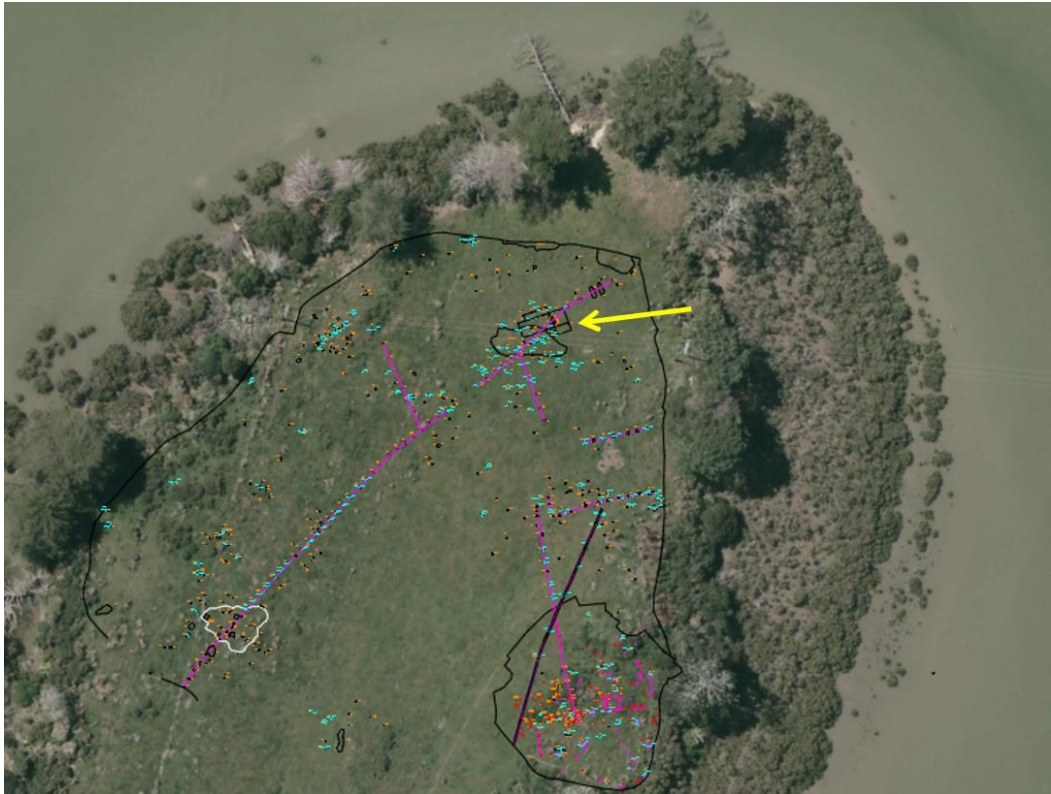


Figure 4-26. Aerial view showing location of the house/store on the wider site survey plan, indicated by the arrow (see Figure 4-34 for the site numbers)

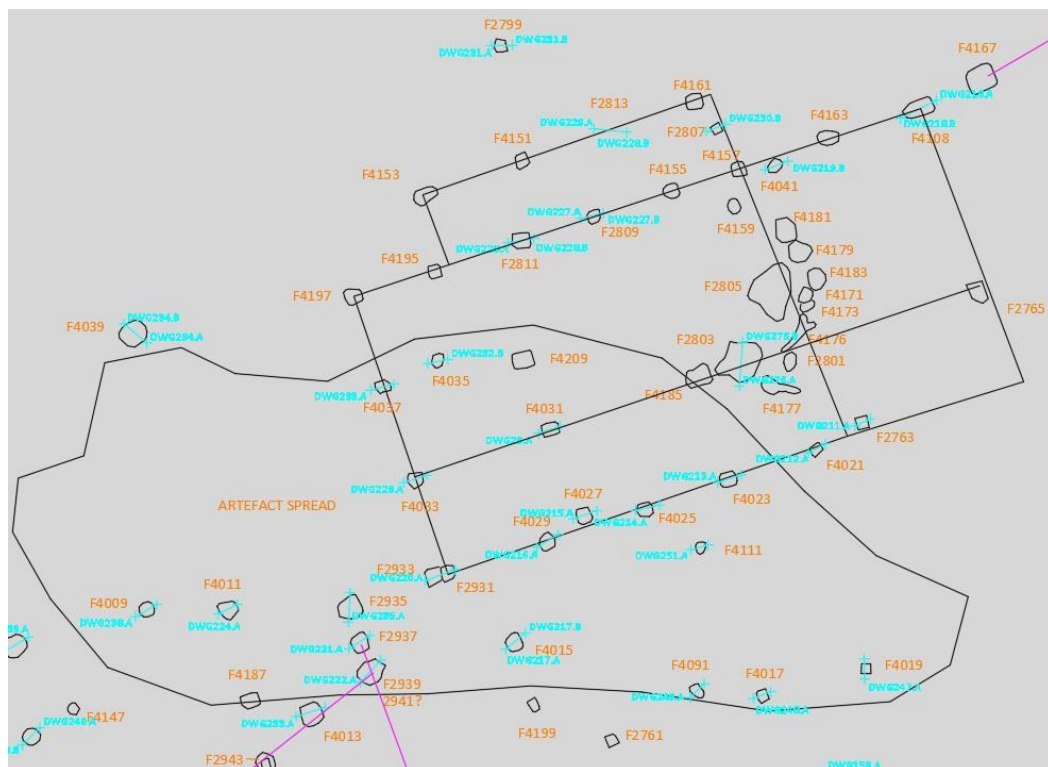


Figure 4-27. Detail of the survey plan showing the house/store, verandah, and artefact spread 2505



Figure 4-28. Artefact spread (context 2505), facing west

4.2.10 Site R10/1548 Post and Stakeholes

During the topsoil strip across much of the northern half of the property at Deacon Point towards the end of Riverhead Point Drive at least 8 alignments of postholes were observed cut through the subsoil and into the natural alluvial clay (in the locations shown in Figure 4-2 and Figure 4-29). The postholes were large and varied in size from as little as 0.44m by 0.41m and 0.45m deep, to examples that were 0.68m by 0.61m by up to 0.74m deep. The form of the postholes and their sides suggested that the original excavation of the features began with a spade before utilising a digging pry bar (or similar) at depth.

The longest alignment started towards the western side of the site and consisted of 31 rectangular and sub-rectangular postholes on a southwest to northeast alignment for some 99m. The alignment then changed to the east-northeast for a 19.2m section (8 postholes) at the end of which was a 9m break in the fence line and presumably a stock access point, before another 42.60m section (125 postholes) to the edge of excavation some 41.4m to the southwest of the recorded landing point for the steamers (Figure 4-30 and Figure 4-31).

Other alignments were on south-southeast to north-northwest and southeast to northwest alignments, and likely created at least four holding paddocks for cattle to be secured, prior to transportation via steamer from the landing point at the northeastern tip of the promontory.

The two longest alignments of 99m (western side) and 55m on the eastern side, extending up from the area where Deacon's Inn had been located, created a funnelling effect which would have served to 'hem' the cattle in and make controlling them a simpler process.

The majority of the postholes were half sectioned, with many of the fills containing postpipes and some producing artefacts, predominantly in the form of black beer bottle glass, nails, or occasional ceramic and tobacco pipe fragments.

4. Archaeological Excavation Results

On the plan (SO 1114B) dated 1857 (Figure 4-32), a stock yard, stock fence and a very wide track are depicted. The track extends to the point which is very close to the Rangitopuni Creek channel, which enables boats and other vessels to navigate the creek during low tide. This is the point where the cattle would have been loaded onto the steamers bound for the Auckland markets. It is interpreted that the posthole alignments with their substantial size and depth were part of a stock control system with holding paddocks, where cattle were kept prior to embarkation onto steamers at the point.

In addition, many other postholes which were clustered particularly around the north-eastern point were recorded as part of this site, as well as Māori features such as ovens and boardslots which were scattered amongst the square and rectangular-shaped postholes (Figure 4-29).

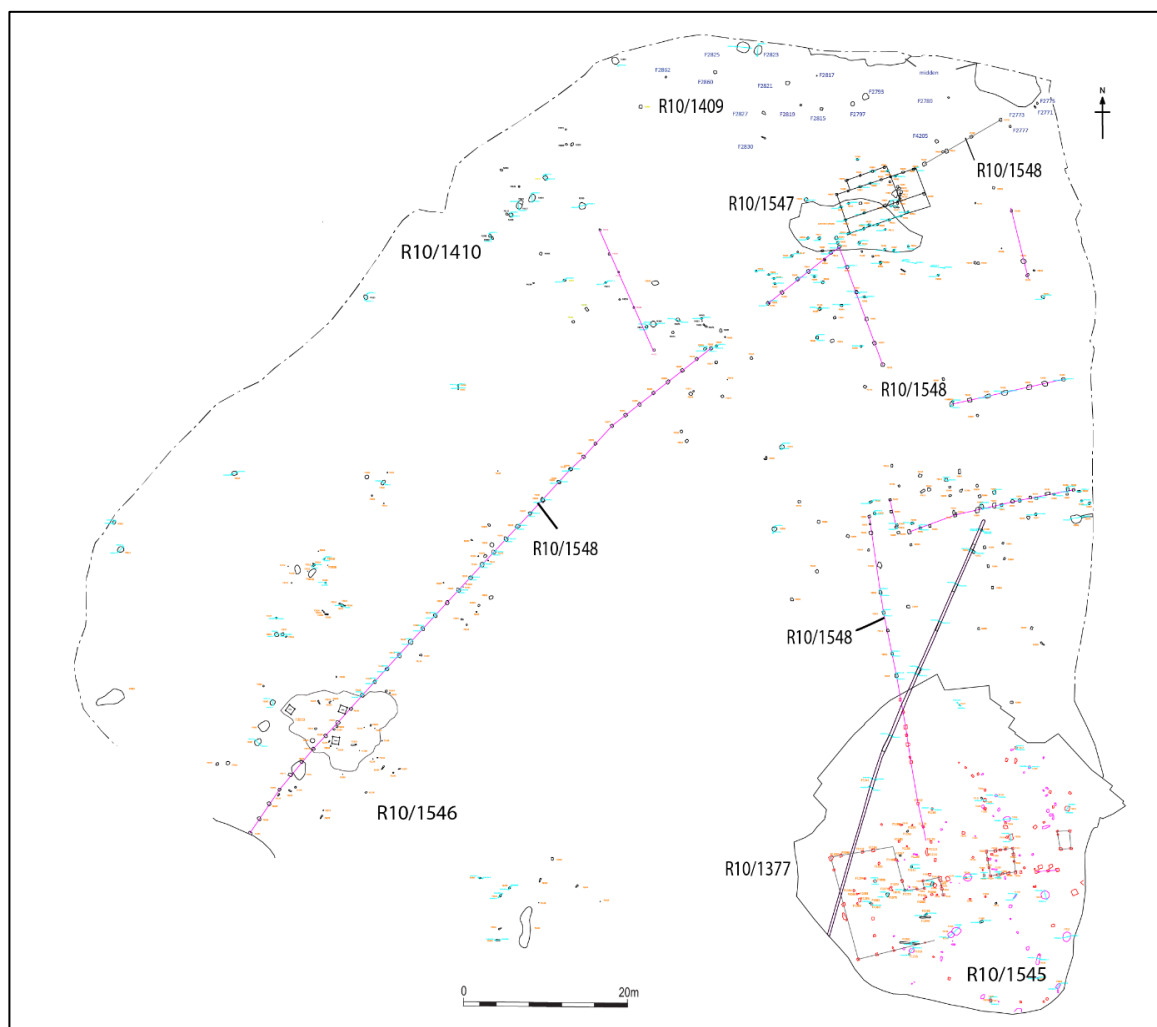


Figure 4-29. Survey plan of main features of R10/1548 with the alignments identified in pink. Also shown are the other sites recorded during the investigation works in the northern half of the development area



Figure 4-30. Part of the western stock fence alignment, facing northeast (left); and western posthole stock fence alignment, facing southwest (right)



Figure 4-31. Example of one of the stock fence postholes with postpipe visible in the section face. Scale 0.50m

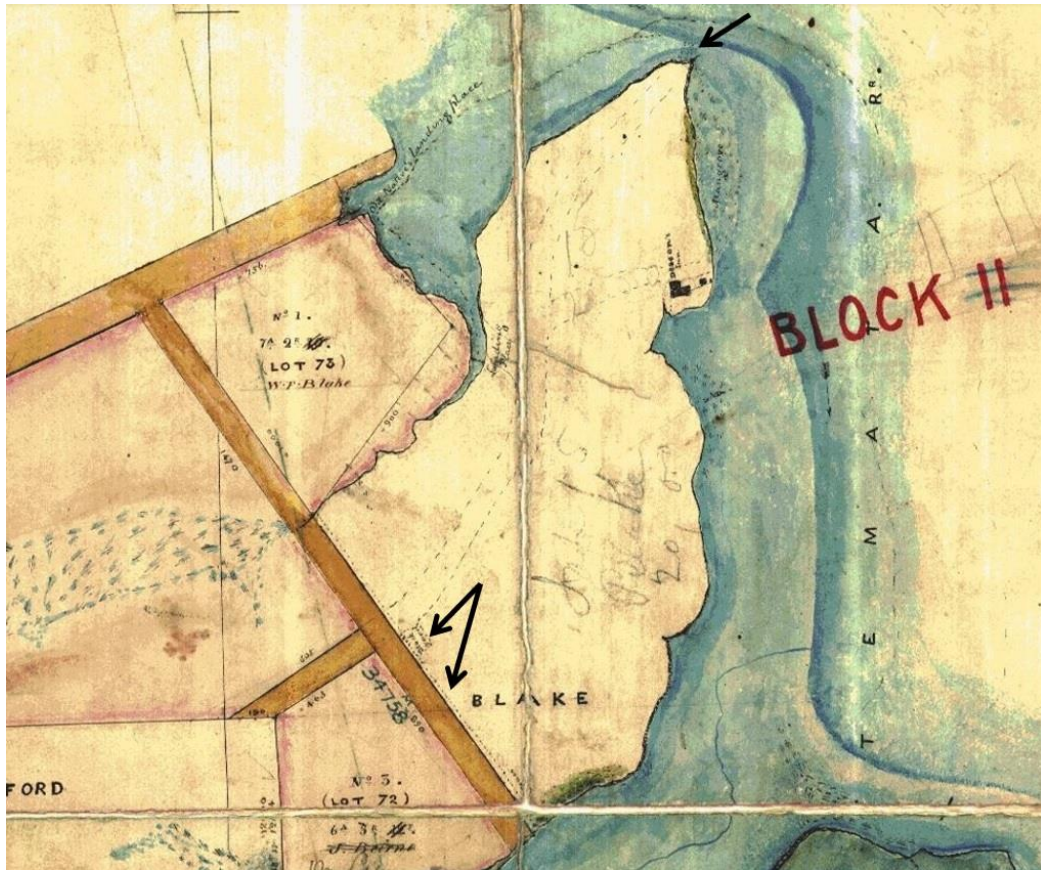


Figure 4-32. Detail from survey plan SO 1114B dated 1857 showing the stockyard and fence (indicated by the black arrows) and stock track leading to the point of the promontory where the cattle would have been loaded onto steamers for transport to the Auckland markets

4.2.11 R10/1551 Māori Settlement Features

Following topsoil stripping in the location shown in Figure 4-2 over 80 features were recorded and investigated on a former knoll that overlooked the majority of the development property (Figure 4-33). The site consisted of: 1 board and slot feature, 10 pit features, 4 bin pits, 58 postholes, and 12 stakeholes/postholes (Figure 4-33). However, there was clear evidence of truncation through ploughing (particularly through the middle area of the site), with plough marks visible during topsoil stripping, and vertical truncation evident in many of the features during excavation (Figure 4-34, e.g. contexts 3008, 3024, 3028, 3180).

The majority of features clustered around the northeast end of the knoll, and were predominantly postholes and stakeholes, with some pits also recorded. There were no midden deposits or ovens recorded; however, shell was observed in 7 of the posthole fills indicating that midden had been present in the area when the postholes were backfilled (naturally and/or intentionally).

Posthole and stakehole depths ranged from 0.1m where heavily truncated (e.g. 3030) to deeper features (Figure 4-35; e.g. 3004, 3026, 3054) which may represent pataka. The board and slot feature (3136) was located at the northwest extent of the site. All these features likely represent small whare and shelters, storage features and potentially fish drying racks (Figure 4-35).

4. Archaeological Excavation Results

Four bin pits were recorded, two of which were heavily truncated (3040 and 3090), and two at similar depths of 27cm (3018) 31cm but also truncated (3110). These bin pits were located in the eastern extent of the site. Ten other pit features were recorded, one a possible bin pit (3006) (Figure 4-35). The functions of the remaining pits are not clear, and some may have been larger postholes and possible pataka (e.g. 3125; 3104). One large pit feature (3177) was slightly irregular, being elongated in plan, with stepped sides and a concave base. It was 3.5m long, up to 1.21m wide and only 29cm deep. It is possibly a historic period feature of unknown function as it does not resemble known Māori settlement feature types.

Six of the postholes (3182, 3185, 3187, 3188, 3189, 3191) and an oval-like layer (3184) were modern features clustered along the southwest boundary of the site, with 3 additional postholes, also modern (3140, 3155, 3163), located to the northwest of this cluster, and a singular posthole (3052) to the east within the Māori features. Each likely represents a former fence post of some description.

Overall, the site is dominated by Māori settlement features. However, four postholes (3146, 3150, 3165 and 3168) date to historic/European settlement. As the site has been truncated by ploughing, heavily in places, it is likely that the recorded features are not a true reflection of the extent of settlement in this area.

4. Archaeological Excavation Results

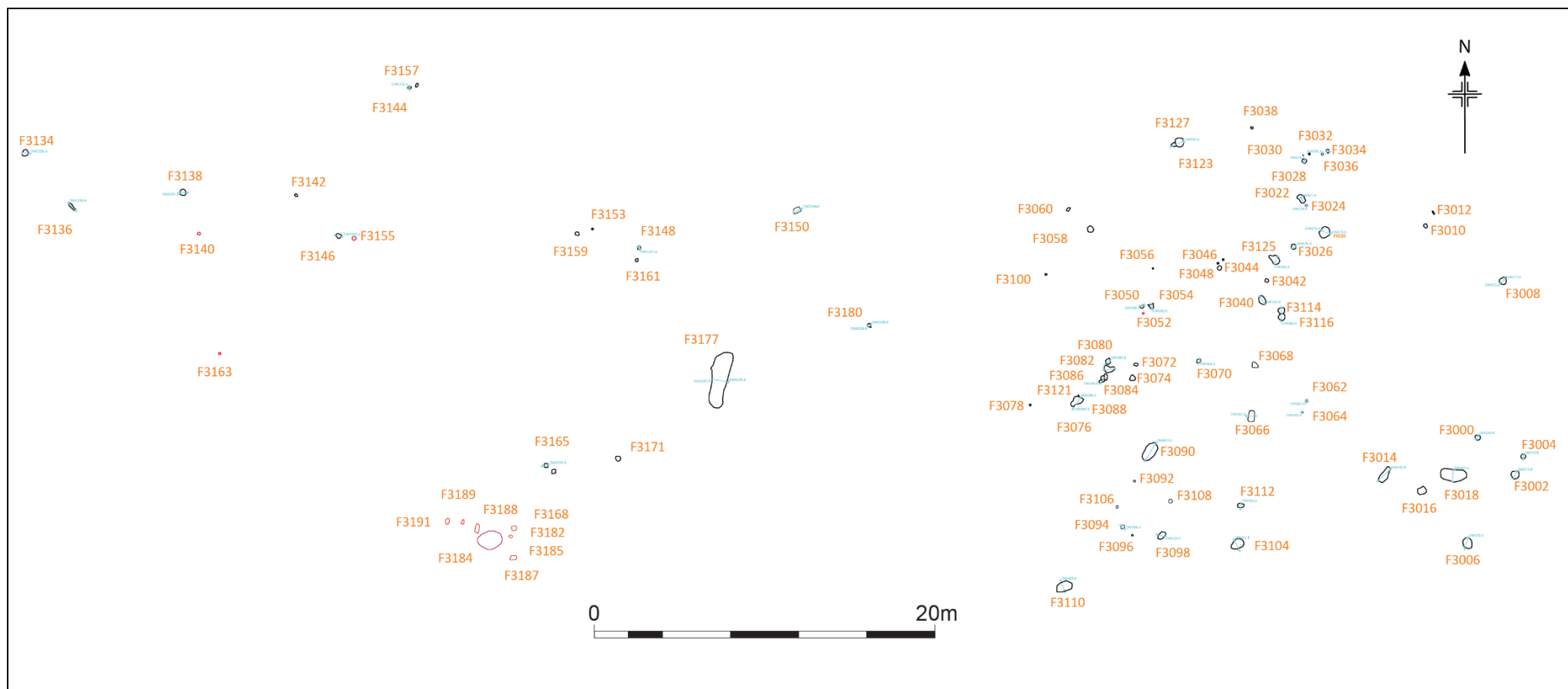


Figure 4-33. Plan of features recorded as part of R10/1551. Features outlined in red are modern



Figure 4-34. Plough marks visible during topsoil stripping, facing southwest

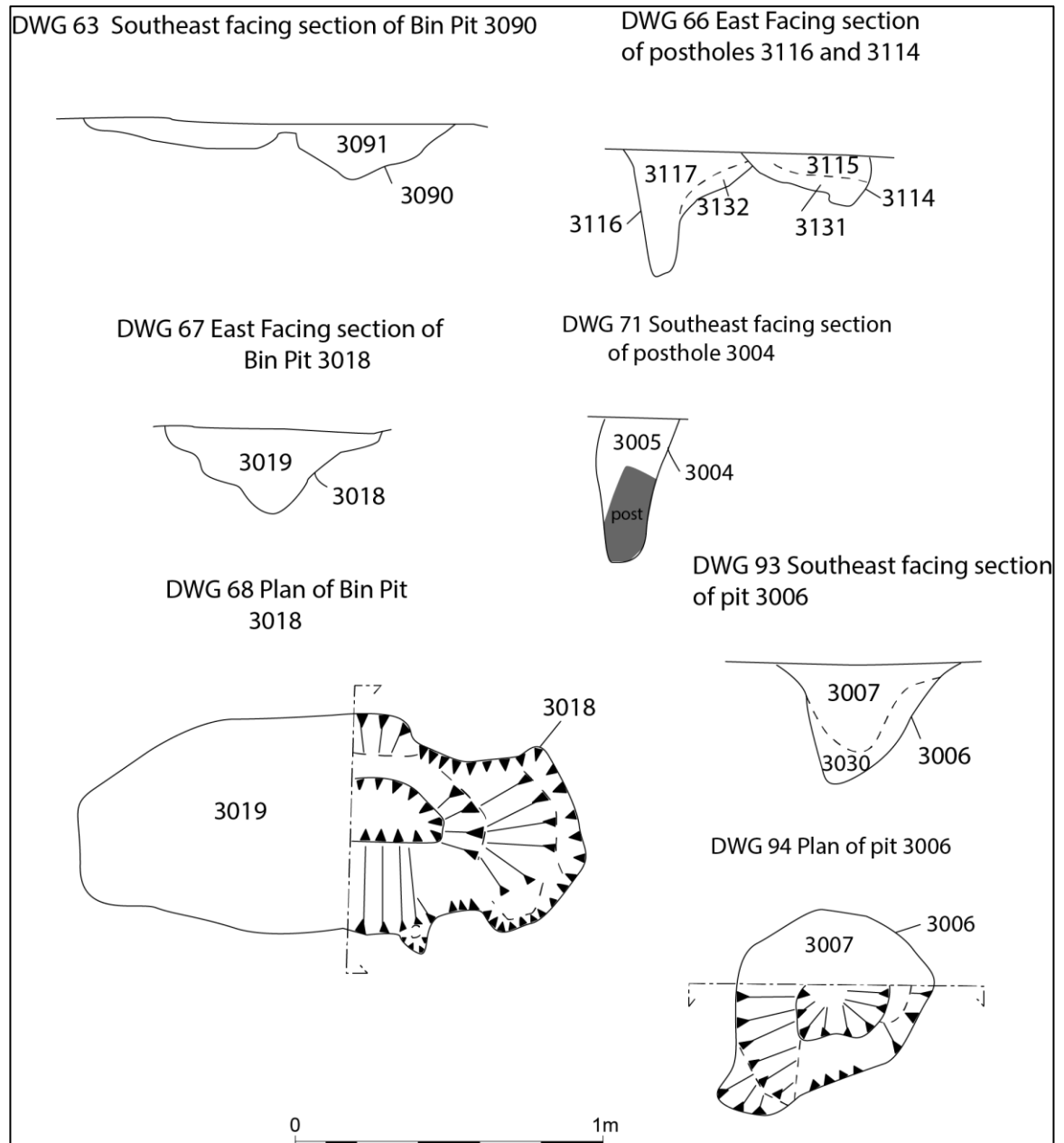


Figure 4-35. Selected plan and section drawings of site R10/1551

5 ARTEFACT ANALYSIS

5.1 Historic Artefacts

Analysis of ceramic, stoneware, glassware, and metal and other base material items was undertaken by Jennifer Low. Material was recovered from a total of 33 contexts across the project area from five individual sites: R10/1377 (Deacons Inn), R10/1546 (middens and historic artefacts), R10/1547 (19th century house/store), R10/1548 (post and stakeholes) and R10/1409 (midden and ovens).

5.1.1 Methodology

Ceramic material was cleaned using a toothbrush in warm water. Once dry, material was sorted by decorative technique, pattern, colour and vessel form. The material recovered from the excavations was generally heavily fragmented. A total of 1060 fragments of ceramic were collected from 24 contexts (with additional unprovenanced locations) representing a minimum of 248 individual vessels.

Stoneware items were cleaned in warm water using a toothbrush to dislodge soil and left to air dry. Thirty-four items of stoneware were collected representing a minimum of 15 individual items, with two being complete examples.

Glassware was cleaned using a toothbrush in warm water. Once dry, material was sorted by vessel form and colour to obtain minimum number of vessels present. Minimum number of vessels for each product type was calculated by assessing the number of bases and rims present, or by unique body fragments across the assemblage, with the exception of window glass which was calculated by context. The glass material from 29 Dinning Road was extremely fragmented and no vessels were recovered complete. In all, 381 pieces of glass representing a minimum of 74 individual glass vessels were recorded.

Portions of clay tobacco pipe were recovered and cleaned in warm water with a soft toothbrush. Clay pipe fragments were separated into component parts, bowl/part bowl, stems/part stems, and part bowl/part stem combination within each context.

Other items such as composite iron and wood, slate, shell and ceramic (not pertaining to consumption) were cleaned in warm water where appropriate and left to air dry.

5.1.2 Ceramic

The material recovered from 29 Dinning Road was extremely fragmented. A total of 1060 fragments of ceramic were collected representing a minimum of 248 individual vessels or items.

Table 5-1 provides the number of identified specimens (NISP) and the minimum number of individual vessels (MNV) those pieces represent by context. Where fragments of ceramic may relate between contexts only one vessel was counted. Contexts 1000 (topsoil collection at R10/1377) and 2505 (topsoil at R10/1547) contained the greatest concentration of ceramic material.

Table 5-2 details the minimum number of vessel forms represented by fabric, with tableware items accounting for 216 of the 248 items, or 87% of the assemblage. Plates,

numbering 75, may consist of saucers, side plates, or dinner plates where the size of the item could not be determined. In all, 244 of the vessels (98.78%) were Whiteware vessels, a common fabric for 19th and 20th century ceramic items, with three items made of plain earthenware.

Table 5-1. Summary of ceramic assemblage from 29 Dinning Road

Context	NISP	MNV	Context	NISP	MNV
1000	136	54	2644	1	0
1009	2	1	2646	3	1
1041	1	1	2647	2	0
1049	3	2	2786	7	0
1067	1	0	2994	1	0
1097	4	2	4014	2	0
1099	1	0	4016	7	3
1107	3	2	4109	1	1
1139	1	0	4168	8	1
1241	1	1	4178	2	0
1243	1	1	4202	2	2
2000	22	1	Unprovenanced	18	7
2505	830	169			

Table 5-2. Minimum number of vessel forms by fabric

Vessel Form	Earthenware	Whiteware	Total
Bedroom/Bathroom			(10)
Chamber Pot		1	1
Ewer		1	1
Ointment		2	2
Toilet Box		1	1
Washbowl		2	2
Washbowl/Chamber Pot		3	3
Household			(4)
Ornament/Figurine		2	2
Teacup - Child's Teaset		1	1
Unidentified	1		1
Kitchenware			(7)
Cheese Pot		1	1
Container		2	2
Container		1	1
Food Pot		1	1
Mixing Bowl		2	2
Tableware			(216)

5. Artefact Analysis

Vessel Form	Earthenware	Whiteware	Total
Bowl		7	7
Dinner Plate		1	1
Dish Lid		1	1
Egg Cup		2	2
Jug		3	3
Mug		1	1
Plate		75	75
Platter		1	1
Saucer		44	44
Serving Dish		7	7
Side Plate		3	3
Teacup		65	65
Teapot	1	1	2
Tureen		1	1
Tureen Lid Knob		2	2
Wine Jug		1	1
Unidentified			(11)
Unidentified		11	11
Total	2	246	248

5.1.2.1 Decorative Technique

Of the 248 vessels recovered from excavations at 29 Dinning Road, 231 contained some form of decoration, with 16 being undecorated examples.

Error! Not a valid bookmark self-reference. summarises the decorative techniques used by vessel fabric type and provides an overall percentage for each technique. Appendix 3 provides pattern name or assigned number, vessel form, decoration colour, NISP, MNV and contexts where present. Appendix 4 contains an image catalogue of all unidentified ceramic patterns, which were assigned an individual pattern number, prefaced DR (Dinning Road).

The dominant decorative technique within the assemblage was underglaze transfer printed designs, generally in a single colour. Transfer printed wares comprised 197 vessels or 80.1% of the assemblage with a further 0.8% having transfer prints with additional decorative techniques.

The range of transfer print colours is shown in Table 5-4, providing both the MNV for each colour and the percentage of the total sample of transfer only printed wares. Analysis indicates that blue print was the most common, making up 43.7% of the total sample; however, this increases to 49.2% when teal and flow blue are included.

Table 5-3. Decorative techniques by vessel fabric and as a percentage of the total ceramic assemblage

Decorative Technique	Earthenware	Whiteware	Total	Percentage of Total
Handpainted		19	19	7.7
Incised/Handpainted		1	1	0.5
Overpainted Transfer		2	2	0.8
Relief	1	4	5	2.0
Slipcast/Handpainted		1	1	0.5
Sprigged		4	4	1.6
Stamped		1	1	0.4
Transfer		197	197	80
Undecorated	2	14	16	6.5
Total	3	243	247	100

Table 5-4. Transfer print by colour, MNV and percentage of transfer only printed wares

Transfer Colour	MNV	Percentage of total sample
Black	17	8.7
Blue	86	43.7
Blue/Pink/Yellow	1	0.5
Brown	2	1
Flow Black	1	0.5
Flow Blue	7	3.5
Green	19	9.7
Green/Gilt	1	0.5
Green/Red/Blue	2	1
Grey	24	12.1
Purple	31	15.8
Red	2	1
Teal	4	2
Total	197	100

5.1.2.2 R10/1377 Deacon's Inn and Store

Context 1000 (topsoil layer)

In all, 136 fragments of ceramic representing a minimum of 54 individual vessel forms were collected from context 1000 (Table 5-5). Three fragments of ceramic relating to two individual bathroom- or bedroom-ware items were collected. Two fragments decorated with an unknown blue transfer print (DR081) originated from a washbowl while one fragment decorated with an unknown purple transfer print (DR090) originated from a ewer.

5. Artefact Analysis

Four fragments of an unidentified household vessel were painted orange on the exterior and white on the interior, and bore an unknown relief pattern (DR093). The vessel was made of earthenware and was potentially a large mixing bowl or similar.

A single fragment of a small food container of unknown variety contained a black transfer print (DR089) with letters ‘...and’ or ‘...an d...’ visible, possibly relating to a product name or company address.

The tableware assemblage was made up of 121 fragments of ceramic relating to a minimum of 50 individual items. All 50 items were decorated in some form, with the majority being transferware prints. One fragment bore a handpainted green pattern (DR094) and likely originated from a bowl. Forty-six fragments of ceramic related to a minimum of 14 individual plates of undetermined size. Thirteen of the plates were decorated with transfer prints with Asiatic Pheasants, Fibre, Wild Rose and Willow identified by name. A number of other patterns (DR006, DR010, DR011, DR028, DR060, DR079 and DR083) could not be identified by name. One fragment decorated with unknown print DR010 bore the mark of Pinder, Bourne & Co. (Figure 5-1), the mark being P.B & Co. in a garter surrounded by a wreath, suggesting manufacture c.1862 onwards (Godden 1991:495). One edge fragment of a plate was incised and coloured blue, being the Shell Edged design. One fragment was a blue handpainted banded plate; however this fragment could potential relate to other nearby fragments and was not calculated within MNI. Twenty-nine pieces of ceramic related to a minimum of 14 individual saucers all of which were transfer printed wares. Three saucer patterns were identified by name: Basket (Figure 5-2, left), Whampoa (Figure 5-2, right) and Fibre. Unidentified patterns included DR010, DR037, DR055, DR057, DR077, DR078, DR084, DR085, DR095 and DR099. Thirty-nine fragments related to a minimum of 18 individual teacups, all decorated with transfer prints. Identified patterns included Alhambra, Fibre and Whampoa. Unidentified prints included DR004, DR019, DR037, DR055, DR057, DR078, DR080, DR082, DR088, DR091, DR092, DR096, DR097 and DR098. There appeared to be only five possible matching teacups and saucers decorated with Whampoa, DR037, DR055, DR057 and DR078. Four fragments of a serving dish were decorated with a blue Willow print. A single fragment of a jug bearing unknown print DR087 was recorded. One fragment of a wine jug was decorated in relief with a grape vine (DR086), the main body coloured in beige and the upper coloured in a brown glaze similar to whisky jugs.

Seven fragments of plain white ceramic were unidentified but did not contribute to MNI.

Table 5-5. Minimum number of vessel forms by fabric, context 1000

Vessel Form	Earthenware	Whiteware	Total
Bedroom/Bathroom			(2)
Ewer		1	1
Washbowl		1	1
Household			(1)
Unidentified	1		1
Kitchenware			(1)
Food Pot		1	1
Tableware			(50)
Bowl		1	1

5. Artefact Analysis

Vessel Form	Earthenware	Whiteware	Total
Jug		1	1
Plate		14	14
Saucer		14	14
Serving Dish		1	1
Teacup		18	18
Wine Jug		1	1
Total	1	53	54



Figure 5-1. Plate fragment decorated with unknown print (DR010) manufactured by Pinder, Bourne & Co., from context 1000, R10/1377

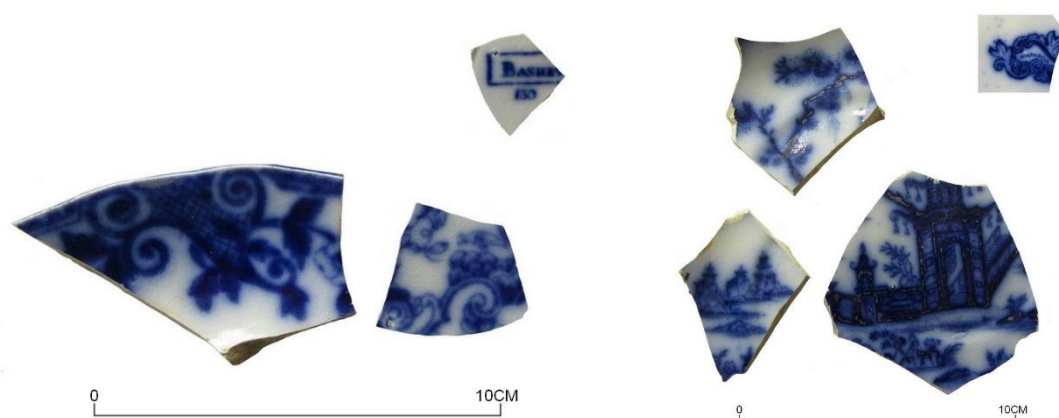


Figure 5-2. Fragments of saucers decorated with underglaze blue transfer prints, Basket (left) and Whampoa (right), from context 1000

Context 1009 (posthole fill)

Two fragments of a plate of undetermined size were decorated with blue handpainted bands.

Context 1041 (posthole fill)

A single fragment of a bowl was decorated with a handpainted gilt band.

Context 1049 (posthole fill)

Three fragments of ceramic were collected from context 1049, with two contributing towards overall MNV. A fragment of a plate of undetermined size was decorated with a blue transfer print (DR020), while a fragment from a saucer was decorated with a black transfer print (DR026).

One saucer fragment bearing blue transfer print (DR077) may relate to a saucer calculated within context 1000. A fragment bearing the same pattern was also recovered from an unprovenanced location.

Context 1097 (posthole fill)

Four fragments were collected, with two fragments being plain white, and excluded from overall MNV. One fragment from a side plate was decorated with the Willow pattern while a fragment from a plate of undetermined size was decorated with a blue transfer print (DR020).

Context 1107 (posthole fill)

Three fragments relating to two individual vessels were collected. Two small teacup fragments were decorated with a teal transfer print (DR075) while a single teacup fragment was decorated with a grey print (DR076).

5.1.2.3 R10/1546 Middens and Historic Artefacts**Context 2000 (topsoil layer)**

Twenty-two fragments were collected from context 2000; however, 18 of these fragments likely related to vessels calculated with context 2505 (also a topsoil layer) which indicates post-depositional movement of the artefacts in the topsoil potentially over 20m away. One kitchen mixing bowl was identified from four plain white sherds.

Transfer printed sherds included a blue printed Buccleuch patterned teacup and saucer fragments, a Bouquet patterned saucer, an Albion patterned plate, an Alhambra patterned teacup, a Milanese patterned plate, and teacup and saucer fragments bearing a green print (DR009).

5.1.2.4 R10/1547 19th Century House/Store**Context 4016 (posthole fill)**

Seven fragments of ceramic were collected, with four of the fragments representing three items contributing to overall MNV. Two fragments of an unidentified vessel were left unglazed on the exterior with a dark blue glaze on the interior; while the vessel form was not identified it may have been related to a cup, vase or small jug. Fragments of two plates of undetermined size were decorated with blue transfer prints (DR105 and DR106).

Context 4109 (posthole fill)

The handle of a whiteware fabric teapot was noted.

Context 2505 (demolition layer/spread)

In all, 830 pieces of ceramic were recovered from context 2505 representing a minimum of 169 individual vessels (Table 5-6). Tableware items accounted for 142 or 84% of the assemblage. Almost all of the ceramic recovered was constructed of typical whiteware with two vessels constructed of plain earthenware.

Nineteen pieces of ceramic related to a minimum of eight individual bathroom or bedroomware vessels. One chamber pot was identified, bearing an unidentified blue transfer print (DR027). Two Holloway's Ointment pots were noted (Figure 5-3, left), the ointment being generally used for gout or rheumatism but also touted as a cure all medicine. One fragment of an undecorated toilet box was identified. Toilet boxes generally held items such as toothbrushes or shaving items. Fragments of a washbowl were decorated with an unknown blue transfer print DR016. Three individual vessels were not conclusively identified but were likely washbowls or chamber pots. All three vessels were decorated with unknown prints, two in green (DR017 and DR018) and one in purple print (DR059).

Three general household items were identified from nine pieces of ceramic. Two ornaments were identified, one being a relief moulded item with brown glazing (DR064). The second ornament was slip cast and handpainted, appearing to be possibly a male figure with a long shirt and blue painted pants, carrying a pack or similar on his back (Figure 5-3, right). The head was also recovered but could not be rejoined. The remaining item was a portion of a teacup from a child's teaset.

Eleven pieces of ceramic related to a minimum of six individual kitchenware items. Three fragments originated from at least one cheese pot. Three containers for storage were noted, one being plain white, one beige and one being decorated with an unknown black print (DR022). One fragment of a plain white mixing bowl was noted. A fragment of a brown glazed earthenware teapot was likely reserved for kitchen use rather than tableware use.

There were 725 fragments of ceramic related to a minimum of 140 individual tableware vessels. Of these, 357 pieces related to at least 50 individual plates of unknown size. There were 299 fragments originating from at least 29 plates which were decorated with patterns able to be identified by name. A minimum of four plates were decorated with the Rhine pattern in grey print and a further two in blue print. Asiatic Pheasants prints were seen in two blue printed plates and two grey printed plates. Two plates were decorated with the blue Milanese print and two were decorated with the blue Willow pattern. Two plates were decorated with the Rouen pattern, one in blue print and one in purple print. Two plates were decorated with the Bouquet pattern; one in black print bearing a partial mark showing manufacture in Staffordshire (Figure 5-4, left) and one decorated in a blue print. There were a further eight plates carrying identified patterns: Teddesley in grey print, Foliage in purple print, Gem in blue print, Albion in blue print, Fibre in green print, Windsor in purple print, a handpainted blue Banded plate, with the remaining plate titled '1365', also known as Gaudy Willow manufactured by Ashworth Brothers (Figure 5-4, centre and right). Twenty-two plates were decorated with unidentified prints or relief patterns. Blue printed patterns included DR002, DR003, DR004, DR005, DR006, DR011, DR020, DR028, DR040, DR041, DR043, DR047 and DR048. One plate was decorated with a pattern of blue, pink and yellow (DR033). Green printed plates included DR014 and DR039, while grey printed plates included DR060 and DR061. Three plates were printed with unknown

purple prints DR013, DR056 and DR058. One plate was decorated with an unidentified relief pattern DR035. One plain white plate was also recorded.

Two side plates were identified. One side plate was decorated with a blue sprigged design (DR051), commonly referred to as Imitation Jasper. The second side plate was decorated with the Buccleuch pattern in purple print.

There were 102 fragments related to at least 25 individual saucers. Sixty-six fragments related to 14 saucers decorated with identified patterns, including two decorated with the Buccleuch pattern, one in purple print and one in blue print with a maker's mark which could not be transcribed with certainty (Figure 5-5, left). A saucer bearing the Coral print in blue (Figure 5-5, right) was manufactured by Davenport, the mark on the rear identifying the year of manufacture as 1860. Two Dulcamara patterned saucers were present, one in black print (Figure 5-6, left) and one in purple print. A saucer decorated with the Alhambra pattern in purple is shown in Figure 5-6 (right). Other saucers included a blue Fibre print and two handpainted blue Banded wares, one with three bands and one with four bands. The Chios pattern was identified in green print. Purple printed saucers included the patterns Clyde, Dresden and Windsor. Eleven saucers were decorated with unidentified designs. These included black print (DR026), blue print (DR019), flow blue prints (DR036 and DR037), green prints (DR008 and DR009), and purple prints (DR030, DR031 and DR032). One saucer contained blue sprigged decoration (DR054) and one contained a handpainted orange design (DR063).

Two hundred fragments related to at least 43 individual teacups, most containing some form of decoration. Three teacups were considered undecorated but did have colouring, two being blue cups (internally and externally) and one being blue (externally) with white (internally). Twenty-nine teacups were decorated with printed patterns, 13 of which bore identified patterns. These included Alhambra in purple, Asiatic Pheasants in blue, Bouquet in blue, Buccleuch in purple and blue, Chios in green, Clyde in purple, Coral in blue, Dulcamara in black and purple, and Fibre in blue. Sixteen teacups were decorated with unidentified prints in a variety of colours: black print (DR021 and DR025), blue print (DR007, DR019 and DR042), brown print (DR024), flow blue (DR036), green print (DR001, DR009, DR010 and DR038), purple (DR001 and DR055), red print (DR010) and teal print (DR044). Handpainted Banded teacups included two in blue (one 4 banded and one 3 banded), two gilt banded and two red banded teacups. At least two teacups were handpainted in 'Cornishware' style of wide stripped banding. Blue sprigged wares included blue DR052 and DR053. One teacup was decorated with an identified red stamp pattern (DR023). When reviewing both teacups and saucers it was concluded there were at least 14 matching pairs including Alhambra, Banded (2), Buccleuch (2), Chios, Clyde, Coral, Dulcamara (2), Fibre, DR019, DR036 and DR009.

Eight fragments of ceramic related to a minimum of five individual bowls. One bowl was decorated with the Asiatic Pheasants design in grey print, one was decorated with handpainted red banding and one with gilt banding, one bowl was decorated with an unidentified blue transfer print (DR015) and one bowl was undecorated.

One fragment of burned ceramic was identified as a dish lid and was decorated with the Cable print in purple. Two egg cups were recorded: one decorated with the Bouquet print in blue and the other decorated with an unknown brown print (DR012). Fragments originating from two table jugs were noted: one having an unidentified Chinoiserie style black print with orange coloured hand applied highlights (DR029) and the other being a beige relief corn pattern (DR107). One 'Cornishware' mug was identified with a blue stripe. A thick base fragment of a platter was decorated with unknown blue print DR050, which appears to depict a butterfly wing.

Twelve fragments of ceramic originated from at least six individual serving dishes. All were decorated with transfer prints. The Albion pattern was represented in both blue and grey prints, the Asiatic Pheasants pattern in blue print, the Rhine pattern in grey print, and an unidentified pattern (DR066) in blue print.

At least one plain brown teapot with a manganese glaze was present. Two tureen lid knobs from the same tureen style were shaped as lions and covered with a blue transfer printed sheet decoration (Figure 5-7, left). One further undecorated tureen lid knob was recorded but could potentially relate to an already recorded tureen lid. Nine fragments of a tureen lid were partially reconstructed and were decorated with the Abbey pattern in grey print (Figure 5-7, right).

Sixty-six pieces of ceramic were not identified to a particular vessel form, but likely represented a minimum of 10 individual vessels. The 10 individual vessels were all decorated with unidentified transfer prints in various colours: blue print (DR045, DR049, DR062, DR065 and DR067), green print (DR068), green and gilt print (DR034), grey print (DR069 and DR070), and purple print (DR046).

Table 5-6. Minimum number of vessels by fabric from context 2505, R10/1547

Vessel Form	Earthenware	Whiteware	Total
Bedroom/Bathroom			(8)
Chamber Pot		1	1
Ointment		2	2
Toilet Box		1	1
Washbowl		1	1
Washbowl/Chamber Pot		3	3
Household			(3)
Ornament/Figurine		2	2
Teacup – Child’s Teaset		1	1
Kitchenware			(6)
Cheese Pot		1	1
Container		3	3
Mixing Bowl		1	1
Teapot	1		1
Tableware			(142)
Bowl		5	5
Dish Lid		1	1
Egg Cup		2	2
Jug		2	2
Mug		1	1
Plate		50	50
Platter		1	1
Saucer		25	25

5. Artefact Analysis

Vessel Form	Earthenware	Whiteware	Total
Serving Dish		6	6
Side Plate		2	2
Teacup		43	43
Teapot	1		1
Tureen		1	1
Tureen Lid Knobs		2	2
Unidentified			(10)
Unidentified		10	10
Total	2	167	169



Figure 5-3. Two partial Holloway's Ointment pots (left) and partially reconstructed ornament (right) from context 2505, R10/1547



Figure 5-4. Fragments of plate bearing Bouquet printed manufactured in Staffordshire (left) and Gaudy Willow pattern and mark '1365' (centre and right), from context 2505

5. Artefact Analysis



Figure 5-5. Saucer fragments decorated with Buccleuch pattern (left) and Coral pattern (right), from context 2505



Figure 5-6. Decorated saucer fragments, black print Dulcamara pattern (left) and purple printed Alhambra pattern (right), from context 2505



Figure 5-7. Tureen lid knobs in the shape of lions (left) and partial tureen lid with Abbey pattern in grey print (right), from context 2505

5.1.2.5 R10/1548 Post and Stake Holes

Context 1242 (drain fill)

A single fragment of a teacup was decorated with a black transfer print (DR074).

Context 1243 (drain fill)

A single fragment from a green transfer printed (DR009) saucer was collected.

Context 2646 (posthole fill)

Three ceramics fragments were collected with only one fragment contributing to overall MNV. The fragment was of a plate of undetermined size bearing a blue transfer print (DR073). One fragment of a teacup bearing a purple print (DR055) likely relates to fragments recovered from context 2505 (topsoil), R10/1547. One small plain white fragment was not identified to vessel form.

Context 4168 (posthole fill)

Eight fragments of ceramic were collected from context 4168; however, only one sherd contributed to overall MNV. This sherd originated from a saucer, decorated with a blue Fibre print. All other fragments likely related to vessels calculated elsewhere.

Context 4202 (posthole fill)

Two fragments representing two individual vessels were collected. Both fragments originated from plates of undetermined size with one decorated with a blue Albion print and the other an unknown grey print (DR104).

5.1.2.6 Unprovenanced

Eighteen fragments of ceramic were collected from unprovenanced locations. Most of the fragments were small in size with four likely related to items calculated elsewhere. Seven larger fragments of a dinner plate were decorated with a blue Asiatic Pheasants print, and the reverse bore the manufacture mark of Unwin, Mountford & Taylor. Godden (1991) provides a date of c.1864 for this manufacturer, who was to become Unwin, Holes & Worthington in 1865.

Six vessels were represented by single fragments only including a grey print saucer (DR010), two grey print plates (DR100 and DR101), a blue print plate (DR102), a blue print saucer (DR103) and a blue print teacup (DR104).

5.1.3 Stoneware

Thirty-four items of stoneware were collected from five contexts (Table 5-7), representing a minimum of 15 individual items (Table 5-8), with two being complete examples.

Two of the vessels were identified as beverage bottles, with seven vessels having contained household products. Six further vessels were present but their original contents could not be determined.

Table 5-7. Summary of stoneware assemblage from 29 Dinning Road

Context	NISP	MNV	Context	NISP	MNV
1000	3	2	4016	1	1
1099	1	0	4184	2	1
2505	27	11			

Table 5-8. Minimum number of individual stoneware vessels by vessel type

Product	MNI
Beverages	(2)
Ginger Beer	2
Household	(7)
Blackening	2
Crock	1
Penny Ink	3
Storage Container	1
Unidentified	(6)
Bottle	5
Lid	1
Total	15

5.1.3.1 R10/1377 Deacon's Inn

Context 1000 (topsoil layer)

Three pieces of stoneware were recovered from context 1000. Two pieces of brown coloured stoneware rejoined to form the base and most of the body of a blackening jar (Figure 5-8). The bottle had a base diameter of 60mm. The partial base and body of a cream coloured storage container was also recovered.



Figure 5-8. Two rejoining pieces of stoneware forming a large portion of a blacking jar, from context 1000, R10/1377

Context 1099 (posthole fill)

A single body fragment of a cream coloured storage container was recovered and could potentially relate to that recovered from context 1000, so did not contribute to overall MNI.

5.1.3.2 R10/1547 – 19th Century House/Store

Context 2505 (topsoil layer)

Twenty-seven pieces of stoneware representing a minimum of 11 individual vessels were recovered from context 2505. Three pieces of stoneware were associated with a minimum of two individual ginger beer bottles. Two pieces were associated with a cream-pale grey bottle including the rim, neck and shoulder (Figure 5-9, top left). A second rim, neck and shoulder was of a pale brown colour (Figure 5-9, bottom left).

Ten pieces of stoneware represented a minimum of five individual household product items. Two pieces of stoneware, including the base and partial body along with a further body fragment, originated from a blacking jar (Figure 5-9, right). One cream coloured body fragment was likely associated with a large crock. Three penny ink bottles were recorded, with two being complete examples, one standing 49mm high while the second measured 45mm high (Figure 5-10).

5. Artefact Analysis

Fourteen fragments of stoneware related to a minimum of four individual vessels which could not be identified, with two brown vessels, one two-tone brown vessel and one grey/brown vessel noted. One fragment of a brown coloured lid was noted.



Figure 5-9. Rim, neck and shoulder of two ginger beer bottles (left) and large portion of misshapen blacking jar (right) from context 2505, R10/1547



Figure 5-10. Two complete penny ink bottles recovered from context 2505

Context 4016 (posthole fill)

A single fragment of an unidentified beige coloured bottle was recovered.

Context 4184 (posthole fill)

Two fragments of a grey coloured bottle were recorded; however, the likely original contents could not be determined.

5.1.4 Glassware

The glass material from 29 Dinning Road was extremely fragmented and no vessels were recovered complete. In all, 381 pieces of glass representing a minimum of 74 individual glass vessels were recovered from 32 individual contexts. Table 5-9 shows the number of glass pieces and the number of vessels they represent for each context. Table 5-10 shows the minimum number of individual vessels by product type.

Alcoholic beverage bottles accounted for 34, or 45.9%, of the assemblage followed by household products at 24, or 32.4%. Food products accounted for 9.45%, pharmaceutical products for 8.1%, water for 2.7% and unidentified vessels for 1.35%. Only two fragments of glass contained any form of embossing, and both were fragmentary.

Table 5-9. Summary of glassware from 29 Dinning Road

Context	NISP	MNV	Context	NISP	MNV
1000	10	4	2940	2	0
1049	5	0	2994	5	2
1097	19	4	2996	1	0
1242	1	1	4016	4	0
1243	2	0	4028	3	1
2000	13	2	4109	5	1
2109	1	0	4156	3	1
2505	233	46	4162	1	1
2644	7	0	4164	7	1
2646	2	0	4168	10	3
2647	9	0	4178	2	0
2648	2	0	4180	3	0
2786	5	0	4182	3	0
2806	4	1	4184	4	0
2930	1	0	4202	5	1
2938	2	1	4206	1	1
			Unprovenanced	6	3

Table 5-10. Minimum number of individual glass vessels by product type

Product	MNV
Alcohol	(34)
Bitters	1
Black Beer	13
Case Gin	14
White Wine/Brandy	1
Wine	5
Food	(7)
Pickle	2
Salad Oil	4
Sauce	1
Household	(24)
Dish	1
Drinking Glass	9
Lampshade	1
Sherry Glass	1
Stemmed Glass	1
Stopper	2
Window	9
Pharmaceutical	(6)
Castor Oil	2
Medicine	4
Unidentified	(1)
Unidentified	1
Water	(2)
Mineral/Soda	2
Total	74

5.1.4.1 R10/1377 Deacon's Inn

Context 1000 (topsoil layer)

Ten pieces of glass representing at least four individual vessels were calculated. Six pieces of glass were identified to particular product types while the remaining pieces were not. At least two black beer bottles were calculated from unrelated partial bases. A partial base of a case gin bottle was also noted. The partial base of a clear drinking glass was also recorded, however there was no indication of body shape.

Context 1097 (posthole fill)

Nine pieces of glass related to four individual vessels with a further 10 pieces excluded from MNV. The partial base of a black beer bottle was recorded along with two partial bases of two individual case gin bottles. Five fragments of aqua window glass related to at least one pane of glass.

5.1.4.2 R10/1548 Post and Stakeholes**Context 1242 (posthole fill)**

The partial base of a case gin bottle, unrelated to other partial bases, was recovered.

Context 4156 (posthole fill)

Three fragments from at least one window pane were recovered.

Context 4162 (posthole fill)

One fragment of a cobalt blue castor oil bottle was noted.

Context 4164 (posthole fill)

Seven fragments of glass were collected. Five were unidentified aqua pieces that may have related to other vessels so were excluded from MNV. Two fragments of at least one window pane were also collected.

Context 4168 (posthole fill)

Ten pieces of glass representing a minimum of three individual vessels were noted. Eight fragments related to a dark olive green case gin bottle. One fragment related to a window pane and the remaining piece of glass coloured in amber and clear glass was not identified.

Context 4202 (posthole fill)

Five pieces of glass were collected from context 4202. Three body fragments of black beer bottle did not contribute to MNV. Two fragments of at least one clear drinking glass (tumbler) were noted.

5.1.4.3 R10/1546 Middens and Historic Artefacts**Context 2000 (topsoil layer)**

The partial base of a black beer and a case gin bottle were recovered. The partial bases did not appear to be related to other bases and both contributed to overall site MNV. Eleven other fragments of glass were present but may have related to vessels calculated elsewhere.

5.1.4.4 R10/1547 19th Century House/Store

Context 2505 (topsoil layer)

In all, 233 pieces of glass were recovered from context 2505, of which 144 fragments were excluded from MNV as they may have related to vessels calculated elsewhere.

There were 135 which related to at least 20 alcoholic beverage bottles. One bitters bottle was identified from an amber coloured fragment of glass, embossed ‘...RS’ and likely referring to bitters. Seventy-nine pieces of dark olive green glass related to a minimum of eight individual black beer vessels, all of these evidenced by unrelated partial bases. Thirty-eight pieces of dark olive green glass related to at least seven individual case gin bottles, with at least seven partial bases noted. Two case gin finishes were also recorded, one being a pig snout finish and the other a cone collar finish. Five pieces of pale green glass, four body fragments and a ring seal closure related to at least one white wine or brandy bottle. Twelve pieces of green glass were related to at least three wine bottles typically having contained a red wine.

Eleven pieces of glass related to a minimum of seven individual food product vessels. Two pickle bottles were identified from a complete and an incomplete rim. A minimum of four individual salad oil bottles were noted with two body styles, herringbone and whirly, identified. One sauce bottle rim was identified however the particular type of sauce was not.

Thirty-eight pieces of glass were related to a minimum of 13 individual household items. Three small fragments of a pressed glass dish were recorded. Fourteen pieces of glass related to at least seven individual drinking glasses (tumblers). Body styles of these glasses was generally unable to be determined; however, at least one glass was octagonal. The base and partial body of a sherry glass was recovered. A second stemmed glass was not identified to a particular type. The pegs of two glass bottle stoppers were collected. Seventeen fragments of window glass related to at least one pane of glass.

Six pieces of glass represented a minimum of five individual pharmaceutical bottles. A partial rim and a body fragment of a cobalt blue bottle was likely castor oil. The body fragment was embossed ‘...RA’ and is likely that of W. Hora & Co., a well-known company producing castor oil and other products.²⁴ Four medicine bottles were recorded, all from partial bases including one clear vial, one blue aqua medicine and two aqua medicines. It could not be determined whether the bottles carried dispensed or patent medicine.

Three fragments of a mineral water or soda bottle were noted. The fragments related to a Hamilton’s Patent ‘torpedo’ style bottle but contained no embossing.

Forty pieces of glass, generally of aqua and clear glass, remained unidentified to particular product type but may relate to fragments identified elsewhere.

²⁴ Such as: <https://heritagecentre.cityofparramatta.nsw.gov.au/objects/41833/hora-co-london-cobalt-blue-castor-oil-bottle>

Context 2938 (posthole fill)

A fragment of a wine bottle was recovered but likely related to a vessel calculated elsewhere so was excluded from MNV. The partial base of a case gin bottle was recorded and did not appear to relate to specimens found elsewhere.

Context 2994 (posthole fill)

Five pieces of glass were recovered from context 2994; however only two pieces contributed to MNV. Both of these pieces were wine bottle bases, likely having contained red wine.

Context 4028 (posthole fill)

Three pieces of clear glass likely related to a lampshade.

Context 4109 (posthole fill)

Five pieces of glass were collected; however, only one fragment contributed to MNV, this being an aqua window glass fragment.

5.1.4.5 R10/1409 – Middens and Oven**Context 2806 (posthole fill)**

Four pieces of glass were recovered from context 2806 with only one fragment contributing to MNV. This fragment was from a window pane.

Context 4206

A fragment of a window pane was collected.

5.1.4.6 Unprovenanced

Two pieces of glass were collected without attribution of provenance, but both contributed to overall MNV. A partial base of a black beer bottle was identified, and the rim and neck of a Hamilton's Patent 'torpedo' bottle was noted. Four fragments of aqua window glass were recovered.

5.1.5 Clay Tobacco Pipes

Clay pipe fragments were separated into component parts, bowl/part bowl, stems/part stems, and part bowl/part stem combination within each context. Stem length was measured for each piece and the presence of any maker's mark or spur was recorded. Stems measuring less than 30mm did not contribute to MNI unless there were unique identifying stamps allowing for inclusion in the count. MNI of marked stems was a process of determining presence of letters of specific names, i.e. McDougall, and partial lettering combinations. Bowls were inspected for identifying marks or relief patterns. MNI of these items was recorded under Bowl MNI and Stem MNI. Where both bowl and stems/part stems were present in a single piece, MNI was recorded under Bowl & Stem MNI. In the

case of bowls marked 'TD' (nine were present) and the unidentified partial mark on a bowl, these are not reflected in total MNI as the bowls could potentially have related to stems with manufacturer's marks or larger unmarked stems.

In all, 238 pieces of clay tobacco pipe were recovered from seven identified contexts and unprovenanced locations, representing a minimum of 94 individual pipes. Context 2505 contained the majority of clay pipes recovered, with 211 pieces recovered. No complete pipes were recovered, with the assemblage consisting of 37 bowls, 90 stems and 4 Bowl & Stem portions (Table 5-11). Six manufacturers were identified (Table 5-12) along with several marked pipes with no maker identified (such as TD and Baltic Yachter). The majority of marked pipes were manufactured by Duncan McDougall of Glasgow, making up 22.3% of the total clay tobacco pipe assemblage. Of the complete assemblage 38.3% were marked in some way with 61.7% of the assemblage containing no markings. Several bowls marked 'T.D.' were recovered but did not contribute to MNI as stems may have related to these bowls.

Table 5-11. Minimum number of individual clay pipe bowls, stems and combinations by manufacturer

Maker's Mark	Bowl MNI	Stem MNI	Bowl & Stem MNI	Total MNI
Baltic Yachter	0	3	0	3
Davidson	0	7	0	7
Illegible	0	1	0	1
L Fiolet	0	1	0	1
McDougall	0	20	1	21
TD	9	0	0	0
Thomas White	0	2	0	2
Unidentified	1	0	0	0
W White	0	1	0	1
Unmarked	27	55	3	58
Total	37	90	4	94

Table 5-12. Summary of marked clay pipes by manufacturer

Manufacturer	Date Range	Contexts	MNI	% of Total Assemblage
Louis Fiolet, St Omer	1765-1921	2505	1	1.06
Davidson	c.1861-c.1891	2505, 2804	7	8.51
Duncan McDougall, Glasgow	1846-1871 [thereafter D McDougall & Co.]	2505	21	22.3
Thomas White & Co., Edinburgh	1823-1876	2505	2	2.12
William White, Glasgow	1805-1955	2505	1	1.06

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Unidentified – Baltic Yachter		2505	3	3.19
Unidentified		2505	0	0

5.1.5.1 R10/1377 Deacon's Inn

Context 1000 (topsoil layer)

Eighteen pieces of clay tobacco pipe were collected from context 1000. One partial TD bowl with a spur was recorded and two further partial bowls were noted. One of these partial bowls, decorated with oak leaves in a vertical alignment along the front of the bowl with vines on the sides (Figure 5-11, left), had been lightly smoked prior to breakage and/or deposition. The other partial bowl was undecorated and had not been smoked prior to deposition. Twelve pieces of stem were recorded with only four examples measuring greater than 30mm. None of the partial stems recovered were marked.

Context 1097 (posthole fill)

Context 1097 contained three partial stems with only one measuring greater than 30mm in length. None of the fragments included any form of maker's mark.

5.1.5.2 R10/1546 Middens and Historic Artefacts

Context 2000 (topsoil layer)

Two partial bowl fragments were collected from context 2000. One of the fragments was marked with a T, likely that of TD.

5.1.5.3 R10/1547 19th Century House/Store

Context 2505 (topsoil layer)

In all, 211 pieces of clay tobacco pipe were recovered from context 2505, representing a minimum of 87 individual tobacco pipes, a number derived from the stems and bowl/stem combination. Fifty-two of these contained no stamp identifying a manufacturer. Thirty-five did contain a maker's mark or other mark – six Davidson, one L. Fiolet (Figure 5-12, left), 21 McDougall (example Figure 5-12, lower right), two Thomas White and one William White were identified. Three Baltic Yachter (example Figure 5-12, upper right) and one unidentified maker were also noted. Eight pieces of the total assemblage from this context were damaged by fire to varying degrees with five being heavily blackened. One portion of a bowl showed that it had not been smoked prior to deposition. Of the bowl portions seven were likely TD pipes and one was marked '...n', which was not identified.

5.1.5.4 R10/1409 Midden and Ovens

Context 2804 (posthole fill)

One partial stem with spur measuring 59.38mm contained the maker's mark '253 Davidson' 'Glasgow', the 253 presumably relating to a mould or design number (Figure 5-11, right).

Context 4206 (posthole fill)

A 44.57mm length of unmarked pipe stem was recovered from this context. The pipe stem was included within stem MNI.



Figure 5-11. Partial bowl with decoration incorporating oak leaves, recovered from context 1000, R10/1377 (left) and stem with spur marked '253 Davidson' from context 2804, R10/1409 (right)



Figure 5-12. Examples of Baltic Yachter, L. Fiolet and McDougall tobacco pipes recovered from context 2505, R10/1547

5.1.5.5 R10/1548 Post and Stake Holes**Context 2940 (posthole fill)**

A single partial stem measuring 37.56mm contained a partial origin mark '...gow***', being Glasgow. The stem was not included within MNI as it may have been related to a stem fragment calculated elsewhere.

5.1.5.6 Unprovenanced

A partial bowl fragment was decorated with vertical ridging around the circumference of the recovered piece.

5.1.6 Other Items

In all, 134 pieces representing a minimum of 101 individual items that were placed within the Other Items category. These items related to both personal items, footwear and clothing, tools, building and construction items etc. Table 5-13 provides the category, item type and MNI.

Table 5-13. Minimum number of individual other items recovered

Category/Item	MNI
Building/Construction	(17)
Bolt	1
Hinge	2
Nail	12
Roofing Nail	2
Children	(2)
Marble	2
Clothing/Footwear	(46)
Boot	1
Button	28
Button Back	1
Button front	1
Rivet	9
Suspender Clip	3
Cricket belt buckle	1
Rowing belt buckle	1
Royal Navy button	1
Equestrian/Transport	(2)
Split Pin	1
Tack	1
Personal Items	(3)
Comb	1
False Teeth	1
Lice Comb	1
Shell	(1)

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Category/Item	MNI
Shell	1
Stone	(1)
Pebble	1
Tools	(3)
Whetstone	3
Unidentified	(1)
Lead	1
Utensils	(2)
Handle	1
Spoon	1
Water	(1)
Stopper	1
Writing	(20)
Stylus	19
Writing Slate	1
Numismatics	(2)
Silver Coins	2
Total	101

5.1.6.1 Building/Construction

Seventeen items were calculated within this category, predominantly from R10/1547. One hand forged copper nail with a square cross section was recovered from context 1241 R10/1548 (Figure 5-13). This nail is likely to have been used for attaching slate roof tiles, however the length of the nail is longer than regularly seen, so an alternative use cannot be discounted. Eleven heavily corroded iron nails were recovered from context 2505, R10/1547 and were likely timber to timber nails. A small copper nail typically used for the attachment of slate tile to roof frame was also recovered from context 2505. A misshapen lead head from a roofing nail with remains of blue paint was recovered from context 2000, R10/1546. One bolt and a hinge plate were recovered from context 2505, R10/1547, while a second hinge plate was unprovenanced.



Figure 5-13. Hand-forged copper nail from context 1241, R10/1548

5.1.6.2 Children – R10/1547 19th Century House/Store

Two marbles were collected from context 2505 (Figure 5-14 centre and right), one large marble known as a bonker (27.65mm diameter) and one being a smaller marble (18.94mm diameter). The bonker was decorated with black banding and green and gold leaves. The smaller marble was decorated with black banding and green and brown flowers on two sides.



Figure 5-14. Aerated water bottle stopper (left), child's bonker (centre) and smaller marble (right), recovered from context 2505, R10/1547

5.1.6.3 Clothing/Footwear – R10/1547 19th Century House/Store

Forty-eight pieces representing a minimum of 43 individual items relating to clothing and footwear were recovered, with all but one item recovered from context 2505, R10/1547. A small white undergarment, likely an undershirt button was collected from context 4162, R10/1548 (Figure 5-15, top left).

The presence of one lace-up boot was identified from two eyelets recovered from context 2505 (Figure 5-15, top right). Thirty-three items related to buttons with a minimum of 29

5. Artefact Analysis

buttons present (Figure 5-15, top right); two button backs were excluded from MNI. Five buttons related to a coat or jacket with one constructed of nylon (and therefore of 20th century date), one of copper and shell, one of unidentified material, and two of brass, although one of these was a button back. This button back was stamped with a partial manufacturer name '...& Wright'. The copper and shell button was broken and the rear had a faint stamp which could not be interpreted. One shirt button was noted, having a maker's mark; however, this was too faint to read. Sixteen shirt buttons were recorded, all made of copper. One button was stamped 'H L Posseniskie, Auckland, NZ'. Posseniskie was occupied as a tailor in Wellesley Street from at least 1871 when an advertisement was placed for a tailoress (*Auckland Star*, 13 October 1871:3). One button was stamped '...TAILOR...' and two other were too faint to read. The remaining shirt buttons did not appear to have been stamped. At least five undergarment buttons were noted, all having four attachment holes. One broken undershirt button was also noted. One button front was not assigned a garment type. Nine trouser rivets were also recovered (Figure 5-15, top right).

Three brass suspender items were also recovered from context 2505 (example Figure 5-15, bottom left). One suspender clip was complete with the tines not worn away. A loop for part of a different style suspender clip was also noted, as was an incomplete suspender clip with tines still intact and some fabric adhering to the remaining upper portion of the clip.

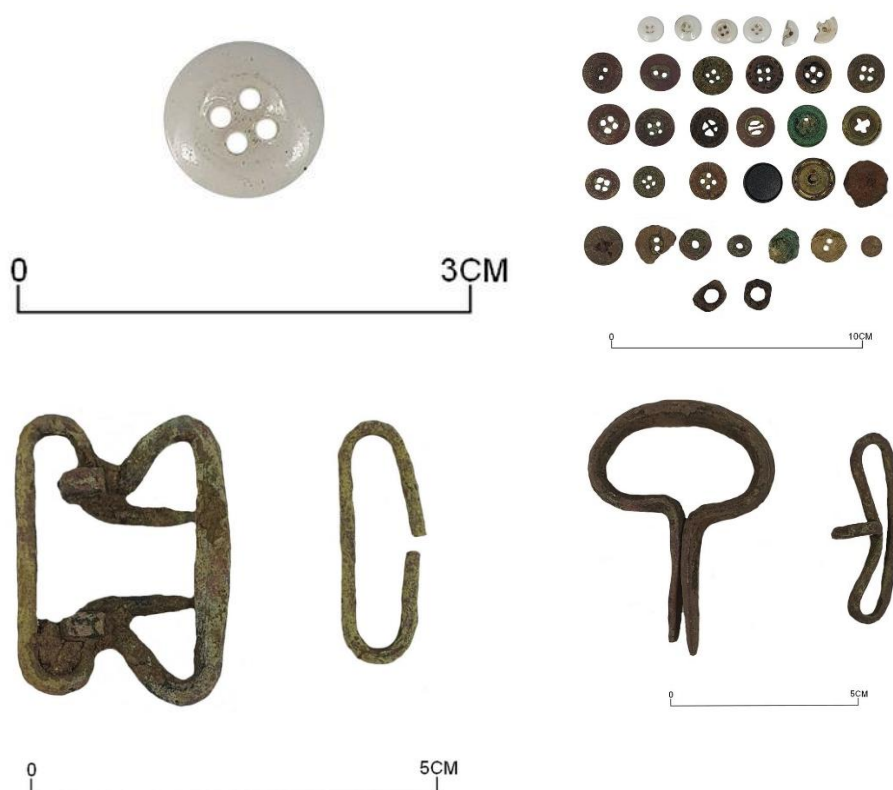


Figure 5-15. Undergarment button from context 4162, R10/1548 (top left), and items recovered from context 2505, R10/1547: buttons, boot eyelets and trouser rivets (top right), suspender clips (bottom left) and split pin and tack (bottom right)

5.1.6.4 Equestrian/Transport – R10/1547 19th Century House/Store

Two brass items were recovered from context 2505 (Figure 5-15, bottom right). One item was a split pin while the second is believed to be related to horse tack. The items suggest that a cart pulled by a horse was likely to have been present on the property. It is possible, although less likely, that the items were deposited during one of the many sales of ‘wheels, timber, wagon, carriage, &c’ to have been undertaken on the property by George Sibbin (*Daily Southern Cross*, 10 June 1867:3).

5.1.6.5 Personal Items – R10/1547 19th Century House/Store

Eight pieces related to a minimum of six individual items were collected from context 2505. Two pieces of at least one nylon comb were collected (Figure 5-16, left). A lice comb with a number of the teeth missing was also collected. Two portions of false teeth were noted (Figure 5-16, right). While the teeth themselves were no longer present, their position in the gum setting was visible. A wire is seen to protrude from one end of the molar section.

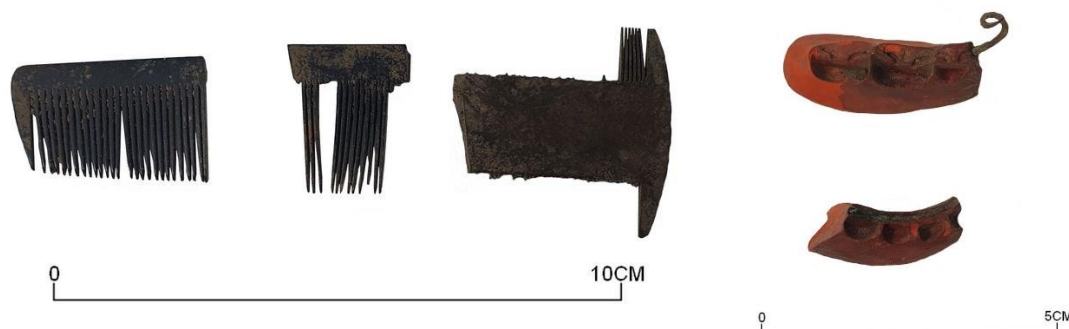


Figure 5-16. Standard comb and lice comb (left) and gum bed for false teeth (right) from context 2505, R10/1547

19th Century Cricket Belt and Rowing Belt Buckles

The cricket belt buckle features an elaborate design consisting of an oval cartouche in which a cricketer is depicted holding a bat under his right arm in front of a set of stumps, framed within a plaque set over two sets of crossed bats, which themselves are placed over two sets of stumps (Figure 5-17, left). Each set consists of four stumps bound together by a buckled strap. The tops of the gripped bat handles are also seen around the plaque while a small triangular tent with flying pennant is visible in the background to one side of the cricketer, presumably representing a refreshments pavilion.

Outside of the oval cartouche, cricket balls complete with seams depicted are placed at the four corners of the buckle and set within a milled pattern border. Traces of gilding remain in places and in the lower left corner of the oval cartouche between the end of a cricket bat and the plaque a British diamond registration mark is present which gives a date of 15 November 1872 (Figure 5-17). The registration mark and the details it contained within confirm that the design had been registered in Britain and was afforded three years’ copyright protection (see also Halls 2014).

The rowing buckle consists of a pressed brass design of a rower with oar in hand in a small scull on the water inside an oval cartouche upon the bottom of which is emblazoned ‘Pull

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Away' (Figure 5-18, right). The outer frame also incorporates a ropework motif with garlands of ribbons at the four corners. This example of a rowing buckle appears to be unique in archaeological contexts in New Zealand.

While cricket belt buckles have been found in other 19th century contexts in New Zealand, rowing belt buckles have not, making this find somewhat unusual (see Bickler and Shakles, in prep. for further information).



Figure 5-17. The cricket belt buckle on the left and rowing buckle on the right, from context 2505, R10/1547

Royal Navy Button

The Royal Navy Button is of interest and possibly derives from Deacon himself (as he was in the Navy), although it is not known if he was an Officer or not. The button appears to be brass and has the crown, rope and anchor emblem on the front, with 'Stillwell & Son, London' on the reverse side, who were British button makers.



Figure 5-18. Royal Navy button from context 2505, R10/1547

5.1.6.6 Shell

Three fragments of unidentifiable shell were recovered from an unprovenanced location.

5.1.6.7 Stone

A small water-worn pebble was collected from context 1097, R10/1377.

5.1.6.8 Tools – R10/1547 19th Century House/Store

Three whetstones were recovered from context 2505 (Figure 5-19). The dimensions of the largest were 103mm x 34mm x 23mm. Two stones, possibly broken, measured 60mm x 34mm x 16mm and 65mm x 35mm x 19mm.



Figure 5-19. Whetstones recovered from context 2505, R10/1547

5.1.6.9 Utensils – R10/1547 19th Century House/Store

Two items were recovered from context 2505 within this category (Figure 5-20). One was a large part of a spoon missing a large part of the bowl. The spoon appeared to have been made of brass but did not include a maker's mark. The spoon was reasonably small and could potentially have been used for serving condiments, or was a small-sized spoon used by a child. A portion of a bone handle with an internal metal attachment was also recorded. It could not be determined whether the handle was from a knife, fork or spoon.

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Figure 5-20. Spoon, possibly for condiments or a child's size (top) and bone utensil handle with internal metal attachment (bottom), both recovered from context 2505, R10/1547

5.1.6.10 Water – R10/1547 19th Century House/Store

One plain white marble aerated water bottle stopper was collected from context 2505 (Figure 5-14, left). The marble could potentially have been repurposed as a child's toy.

5.1.6.11 Writing – R10/1547 19th Century House/Store

Thirty-eight pieces of slate relating to a minimum of 20 individual items were collected from context 2505 (Figure 5-21). Nineteen pieces related to stylus with 12 having a modified end to create a writing point. Nineteen broken pieces of flat smooth slate represented at least one individual writing slate board. Several of the pieces had incised lines; however, no remaining writing was visible.

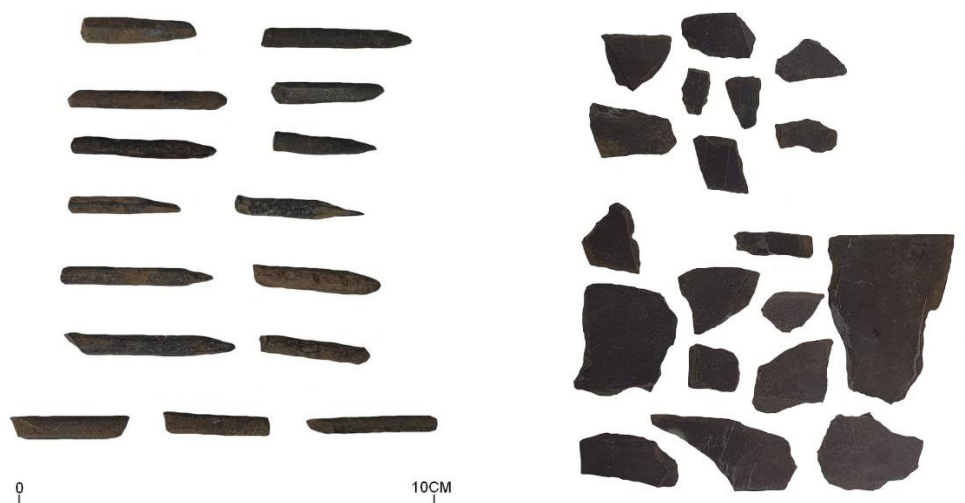


Figure 5-21. Slate stylus' (left) and slate board (right) collected from context 2505, R10/1547

5.1.6.12 Numismatics – R10/1547 19th Century House/Store

Two coins were found, the smallest coin which is a silver sixpence dated 1853 that was recovered from context 2505. The obverse side of the coin features the young, uncrowned portrait ('Young Head') of Queen Victoria facing left and with the surrounding legend: VICTORIA DEI GRATIA BRITANNIAR: REG: F: D: ('Victoria - By the Grace of God, Queen of the Britains, Defender of the Faith'). The reverse of the coin features the lettering: 'SIX PENCE 1853' (see Figure 5-22 and Figure 5-23).

The oldest of the two coins was an 1826 George IV shilling, also retrieved from context 2505. The reverse features a rampant lion standing on the royal crown, with a rose, thistle, and shamrock below. The surrounding legend reads 'BRITANNIARUM REX FIDEI DEFENSOR'. The obverse features the bare head of King George IV facing left, with the legend 'GEORGIUS IV DEI GRATIA', and date below (see Figure 5-22 and Figure 5-23).

Both these coins were relatively common for the period.

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Figure 5-22. Obverse side of the silver shilling (left) and six pence (right) retrieved from context 2505 (R11/1547)



Figure 5-23. Reverse side of the silver shilling (left) and six pence retrieved from context 2505 (R11/1547)

5.1.6.13 Unidentified

Six items remained unidentified, five being constructed of highly corroded iron. These items did not contribute to MNI. A single cylindrical lead item was calculated; however, its identification remained unknown.

5.1.7 Discussion

A moderate amount of historic artefact material was recovered during excavations at 29 Dinning Road. The material was, in general, extremely fragmented with minimal complete items recovered.

A large amount of ceramic was collected; however, it was extremely fragmented. The majority of ceramic was collected from topsoil contexts 1000 and 2505. The material from context 1000 (R10/1377 Deacon's Inn) was predominantly tableware items and could reflect the typical items in use for the service of food at an inn. It is known that crockery was available in the inn as some was reported to be smashed during an altercation (*New Zealand Herald*, 24 April 1866:4). The ceramic recovered from context 2505 (R10/1547 19th century house/store) also contained a large amount of tableware, but included more bedroom or bathroom wares, kitchen wares and household wares than the inn. This location also provided some items with matching decoration. A small number of maker's marks were noted, with a Davenport saucer manufactured in 1860, a Pinder, Bourne & Co. plate manufactured 1862+, and an Asiatic Pheasants decorated plate manufactured by Unwin, Mountford & Taylor c.1864.

A small collection of stoneware was recovered, including two complete penny ink bottles and a blacking jar which was missing only the rim and neck. These vessels are typically thicker walled and fired at a higher temperature than other ceramic vessels.

The glassware was highly fragmented with only component parts of bottles and other vessels recovered. Alcoholic beverage bottles accounted for 34 (45.9%) of the assemblage followed by household products at 24 (32.4%). Food products accounted for 9.45%, pharmaceutical products for 8.1%, water bottles for 2.7% and unidentified vessels for 1.35%. Only two fragments of glass contained any form of embossing, and both were fragmentary. The largest portion of glassware was located in context 2505 (R10/1547) and was regarded as domestic in nature. Interestingly there was only a moderate amount of glass recovered from the area of Deacon's Inn (contexts 1000 and 1097), which could be a reflection of the river/estuary being the main receptacle of discarded bottles instead of bottle pits (and many bottles were certainly recorded in the mangrove mud during the field survey adjacent to the jetty posts).

The clay tobacco pipe assemblage was heavily fragmented, with 238 pieces of pipe being recovered, representing a minimum of 94 individual pipes. The fragmentation suggests the true MNV may be higher than determined. The single greatest identified contributor to the pipe assemblage was the manufacturer Duncan McDougall, accounting for 21 of the pipes. Context 2505 (R10/1547) contained the majority of clay tobacco pipe with few pieces located elsewhere. All of the clay tobacco pipe material is likely to have been used and deposited c.1860s to c.1880s.

The majority of pipe bowls were undecorated or unmarked; however, there were some notable exceptions including vines and ridges. A number of pipe fragments had been burnt in fires prior to final deposition, suggesting breakage during use and discard into a fireplace.

A moderate number of items were categorised as Other Items. These were generally recovered from context 2505 (R10/1547). Apart from typical building and construction items such as nails, bolts and hinges, a large number of personal items were noted. Buttons, rivets, and suspender components along with eyelets from shoes were indicative of domestic products. Coupled with the combs and false teeth bed, it suggests context 2505

was located in an area where domestic activities took place. However, we know there was a store located close to the inn, and with the high number of varied artefacts recovered from 2505, it is likely that this structure was actually the store. The six pence and the shilling could relate to sales at the store, as these were found within the demolition deposit. The presence of children was evidenced by toy marbles, and perhaps slate stylus' and writing board, although these arguably may also have been used by adults. There was some evidence of modern artefacts mixed into the topsoil, such as the nylon combs.

5.2 Lithics Analysis

5.2.1 Introduction

Clough & Associates engaged Southern Pacific Archaeological Research (SPAR) to carry out the analysis of the lithic (stone) material from the Dinning Road/Deacon Point archaeological investigation. The following documents the laboratory methods employed and the results of the laboratory analysis. Quantitative data is also provided digitally as an Excel Workbook, and the full report is provided in Appendix 5.

5.2.2 Methodology

5.2.2.1 *Technological Analysis*

The technological analysis of the lithic material was carried out in the Otago Archaeological Laboratories (OAL) by SPAR archaeologist Nick Sutton. This analysis involved identification of raw material using the OAL's New Zealand Rock Reference Collection, the allocation of each individual lithic piece to a class, and the recording of attributes relevant to that class. Individual lithic pieces were only washed using warm water and a soft toothbrush when adhering sediments were considered to impede one of these three steps.

For the pieces relating to stone working (i.e. flaking events), five artefact classes were adopted (core, flake, flake tool, tool (other), and angular fragment). Artefact classes were defined according to the criteria presented in Table 1, Appendix 5. Where applicable, pieces were examined under an Olympus SZX7 stereo microscope for evidence of micro-scarring (use wear) or abrasion. Pieces that did not fit neatly into one of these five classes were allocated to a separate 'Other' class. The measurement dimensions for stone cores, flakes and angular fragments can also be found in Table 2 in Appendix 5.

To gain a fuller understanding of the stone technology and reduction sequence, additional attributes were analysed for cores and flakes. While the ultimate goal of any stone tool technology is to produce stone tools for use, the strategies used to create and organise the technology go beyond reduction, involving broader processes affected by environment, economy and socio-cultural factors. For example, the availability and knowledge of suitable local raw material will affect the manufacture and organisation of stone tool technology, as well as the specific subsistence strategies pursued by a group, including their frequency of mobility. Consequently, the following attributes were analysed based on the information they could provide regarding: a) the manufacturing technology employed and b) the intensity of reduction for stone materials (see Table 3, Appendix 5).

The following dimensions were recorded for the remaining stone artefacts as appropriate (e.g. tools): maximum length (mm), maximum width (mm), maximum thickness (mm) and weight (g.). Supplementary information was also recorded when applicable; this included

5. Artefact Analysis

a qualitative description, and quantitative analysis relating to: cortex (e.g. polish), cortex percentage, retouch patches, retouch percentage, use wear patches and use wear percentage.

5.2.2.2 Geochemical Analysis

To better understand aspects of raw material procurement and distribution, a secondary analysis was conducted for a sample of the obsidian artefacts. This involved a geochemical XRF analysis (X-ray fluorescence). This form of analysis is a non-destructive X-ray technique used to determine the elemental composition of materials. It returns chemical spectra that are unique to specific raw material sources, enabling some interpretation of where the obsidian material was first procured, and subsequently transported to. A Bruker Tracer III-SD pXRF was utilised in the OAL, with the machine optimised to identify mid-Z trace elements (Mn, Fe, Zn, Th, Rb, Sr, Y, Zr, Nb) with green filter settings (40kV per channel, filament ADC = 30µA, filter = 12milAl +1milTi +6milCu, runtime = 300 seconds).

5.2.3 Results

5.2.3.1 Overview of Lithics

The analysed assemblage contained a total of 274 lithic pieces recovered from seven sites (R10/1408-1411 and R10/1545-1547)²⁵ (Table 5-14). These seven sites will be considered individually below following a brief overview of the whole Riverhead lithic assemblage.

The Riverhead lithic assemblage can best be described as an assemblage of informal tools and manufacturing debris. There is a noteworthy lack of convincing evidence for formal tools in the assemblage, including an absence of evidence for the presence of adzes. Pieces included in the 'Other' category comprised what are likely to be natural stones or fire-cracked oven stones.

Table 5-14. Breakdown of total Dinning Road assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
Chert	7	14	1	-	236	-	258	2412.06
Obsidian	-	-	1	-	3	-	4	12.03
?Basalt	-	-	-	1	-	3	4	952.38
?Greywacke	-	-	1	-	-	-	1	90.39
Unidentified volcanic	-	-	-	1	-	5	6	1294.78
?Sandstone	-	-	-	-	-	1	1	51.40
Total	7	14	3	2	239	9	274	4813.04

Heat fractured stone, and in particular heat fractured chert, was abundant throughout the assemblage. Most pieces showed signs of having been heated (Figure 5-24). This

²⁵ This total considers two clear refits (R10/1408, Bag 22 & R10/1545, Bag 3) as single pieces.

5. Artefact Analysis

observation is consistent with the general context of most of the material, which was recovered from oven or firescoop features. It is uncertain whether this is the result of the discard of knapping debris into these features or a process of deliberate heat treatment of some cherts with the intention to alter the properties of the stone and make it easier to knap, as is well documented overseas (e.g. Whittaker 1994: 72-73). ‘Pot lids’ are little round ‘flakes’ lacking striking platforms that can pop off the surface of chert and similar types of stone when heated or cooled too quickly, leaving a concave ‘flake scar’ on the surface of the stone (Figure 5-24; Whittaker 1994: 73).



Figure 5-24. Pieces of chert in the Dinning Road assemblage that show signs of the characteristic ways that this type of stone reacts when it has been heated or cooled too quickly. From left: ventral surface of ‘pot lid’ flake (note lack of platform, etc), two examples of crazing (surface cracking caused by heating and cooling), piece of chert showing the characteristic concave ‘pot lid’ scars (from site R10/1408, context 2451)

In terms of raw materials, most of the assemblage is comprised of chert (N = 258; 94.16% of assemblage). Other raw materials present are obsidian (N = 4; 1.46%), as well as potential basalt (N = 4; 1.46%), greywacke (N = 1; 0.36%), and sandstone (N = 1; 0.36%). Six pieces in the assemblage (2.19% of assemblage) are likely to be volcanic in nature, but more specific identifications were not possible based on the available reference collection. The absence of these specific stone types in the OAL’s New Zealand Rock Reference Collection suggests that they are locally sourced and not any of the types of stone that are known to have been transported over long distances by Māori.

Chert sources from the Auckland and Northland area are not well represented in the reference collection, but the observed variation in the colour and grain of the chert in the assemblage is suggestive of the exploitation of multiple sources. Overall, grey and/or red cherts are most abundant. Some of the chert may have come from the Whangārei Harbour area based on visual appearance. Of note here are six yellow and red pieces that are a tantalisingly close match to reference examples of chert from Onerahi (Figure 5-25), on the northern side of the Whangārei Harbour (Fredericksen 1990), but we are not able to say that it is Onerahi chert with absolute certainty without a more systematic comparison with sources in the wider region than was possible with the available reference collection.

The four obsidian pieces are likely to be the most exotic material present in the assemblage, in terms of distance between site and source. The results of the geochemical analysis of the obsidian pieces are presented below.



Figure 5-25. Potential Whangārei Harbour chert artefacts in the Dinning Road assemblage. Top: flake (R10/1408, bag 27, context 2449). Bottom: core (R10/1408, bag 23, context 2449)

R10/1408: Shell Midden/Ovens/Firescoops

Two hundred and fifty-two of the 274 lithic pieces (91.97% of all lithics) were recovered from R10/1408 (Table 5-15).

Table 5-15. Breakdown of R10/1408 assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
Chert	3	11	-	-	228	-	242	1290.69
Obsidian	-	-	1	-	3	-	4	12.03
?Basalt	-	-	-	-	-	1	1	782.19
?Greywacke	-	-	1	-	-	-	1	90.39
Unidentified volcanic	-	-	-	-	-	3	3	755.13
?Sandstone	-	-	-	-	-	1	1	51.4
Total	3	11	2	0	231	5	252	2981.83

Two hundred and twenty-one of these pieces were recovered from the fill of a single firescoop feature (context 2451). Consistent with this context, there is extensive evidence of heating visible on the lithics (Figure 5-24). Except for one probably heat fractured piece of potential sandstone that lacks clear signs of having been used as a grinding or abrading

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tool, the material recovered from context 2451 is entirely chert. Many of the pieces have a blackened surface and were initially identified as possible argillite. However, alongside the contextual information provided, multiple lines of converging evidence support the parsimonious conclusion that the material from this context is (predominantly heat-fractured) local chert:

1. There are several instances of only partial blackening or where subsequent damage has occurred and the black colour can be clearly seen to be only ingrained on the surface. In these cases, the other colours were consistent with what had been observed for definite chert in the assemblage.
2. There is a complete absence of adze polish/hammer-dressing, which we would expect to see on argillite, as it was finished adzes rather than raw material that tended to be exported from the source regions (Walter et al. 2017: 358).
3. The sample contains hardly any flakes (N = 3) with clear flake platforms, impact points/bulbs of percussion which we would expect to see represented in much higher numbers if it was not predominantly heat fractured.

All four of the pieces of obsidian and five of the six pieces of potential Whangārei Harbour chert present in the entire Riverhead assemblage were recovered from an associated shell midden deposit (context 2449). One flake of obsidian and a potential greywacke flake recovered from the same context are probable flake tools, with signs of use wear (Figure 5-26). Three of the four pieces of potential basalt or other, unidentified, volcanic stone were from ovens (contexts 2461, 2469, and 2491) and are most likely oven stones that show clear or probable signs of heat fracturing. The remaining piece was unstratified and is probably a natural stone of unidentified volcanic material.



Figure 5-26. Probable flake tools from site R10/1408. Top: Obsidian (context 2449). Right: potentially greywacke (context 2449)

R10/1409: Shell Midden/Ovens/Firescoops/Postholes

Five of the 274 lithic pieces (1.82%) were recovered from R10/1409 (Table 5-16). The lithics are two incomplete chert flakes, an incomplete chert core and two chert angular fragments (context 2824 oven; 2829 midden).

Table 5-16. Breakdown of R10/1409 assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
Chert	1	2	-	-	2	-	5	30.76
Total	1	2	0	0	2	0	5	30.76

R10/1410 Midden/Ovens/Postholes

Four of the 274 lithic pieces (1.46%) were recovered from R10/1410 (Table 5-17). All the lithics are chert angular fragments. One of these fragments is the sixth piece of potential Whangārei Harbour chert. All the lithics from this site were recovered from a firescoop (context 4114) and all show signs of having been heated.

Table 5-17. Breakdown of R10/1410 assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
Chert	-	-	-	-	4	-	4	72.3
Total	0	0	0	0	4	0	4	72.3

R10/1411: Midden and Oven/Firescoops

Two of the 274 lithic pieces (0.73%) were recovered from R10/1411 (Table 5-18). The lithics are an incomplete chert flake and a chert angular fragment. Both the lithics from this site were from a firescoop (context 2431) and show signs of having been heated.

Table 5-18. Breakdown of R10/1411 assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
Chert	-	1	-	-	1	-	2	8.55
Total	0	1	0	0	1	0	2	8.55

R10/1545: Midden/Ovens/Firescoops

Four of the 274 lithic pieces (1.46%) were recovered from R10/1545 (Table 5-19). The lithics are two chert cores, a probable chert flake tool and what is probably a natural stone of unidentified volcanic material. All artefacts were retrieved from the interface between the base of the topsoil and where features were observed cutting the subsoil.

Table 5-19. Breakdown of R10/1545 assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
Chert	2	-	1	-	-	-	3	946.22
Unidentified volcanic	-	-	-	-	-	1	1	57.76
Total	2	0	1	0	0	1	4	1003.98

R10/1546: Midden/Oven/Firescoops/Postholes

Four of the 274 lithic pieces (1.46%) were recovered from R10/1546 (Table 5-20). Three are most likely fragments of oven stones and show clear signs of heat fracturing (context 2217 oven; 2139 posthole fill; 2093 midden). The remaining lithic is a small basalt cobble that has potentially been used as a hammerstone (context 2093 midden).

Table 5-20. Breakdown of R10/1546 assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
?Basalt	-	-	-	1	-	2	3	170.19
Unidentified volcanic	-	-	-	-	-	1	1	57.95
Total	0	0	0	1	0	3	4	228.14

R10/1547: Mid-19th Century House/Store and Truncated Māori Features

Three of the 274 lithic pieces (1.09%) were recovered from R10/1547 (Table 5-21). The lithics are a chert core, a chert angular fragment (from context 2505) and a piece of potentially ochre stained volcanic stone from context 2492 (posthole fill) (Figure 5-27). If it was used to work ochre, given the type of stone (a dense, unidentified volcanic stone with a vesicular surface texture, rather than a sandstone) it might have been used as a pounding tool to crush bits of ochre rather than an ochre grindstone. It is notable that the staining appears to be largely confined to raised areas of the stone's surface.

Table 5-21. Breakdown of R10/1547 assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
Chert	1	-	-	-	1	-	2	63.54
Unidentified volcanic	-	-	-	1	-	-	1	423.94
Total	1	0	0	1	1	0	3	487.48

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Figure 5-27. Potential ochre pounding tool from site R10/1547 (context 2942)

5.2.3.2 Obsidian Geochemical Analysis

Of the total obsidian assemblage from R10/1408, 3 samples were selected to undergo geochemical analysis. Before running the samples through the pXRF the obsidian was sorted visually by colour into the groups grey and green based on the colour of the translucency. There were 3 grey and 1 green obsidian samples. After colour, 3 samples were selected based on their size and surface flatness to obtain good quality data.

The raw data was calibrated to parts per million (ppm) using the machine-specific quantification protocols for the Bruker Tracer III-SD #T3S2521, based on 40 known obsidian standards. A basalt standard (BHVO-2) was run at the beginning and end of the session as a quality control to assess accuracy of the data generated. This standard is used to check the consistency and calibration of the results as it has a known value. Table 5-22 shows the accuracy of the OAL pXRF in reproducing US Geological Survey (USGS) recommended results for the BHVO-2 standard and indicates that it is particularly poor at producing accurate results for Zn. Despite this, the precision of the machine (i.e. its ability to consistently produce the same results irrespective of its accuracy) is relatively good for all elements.

Table 5-22. Basalt standard chemistry (ppm)

	Mn	Fe	Zn	Ga	Th	Rb	Sr	Y	Zr	Nb
BHVO-2*	1290	86300	103	22	1	10	389	26	172	18
OAL	962	69574	221	25	2	14	313	22	144	15
SD	232	11827	84	2	0	3	54	3	20	2
CV (%)	21	15	52	10	30	23	15	12	12	12

*USGS (United States Geological Survey) standard values; SD = standard deviation; CV = coefficient of variance

Each sample was analysed three times (on different surfaces where possible) and reported values are the means of the three analyses. Table 5-23 presents the results of mid-Z trace

elements identified from the obsidian samples. Five elements are considered the most useful and indicative when discriminating between obsidian sources (Rb, Sr, Y, Zr, and Nb) (McCoy and Carpenter 2014).

Table 5-23. Calibrated concentration values for obsidian samples (ppm)

Samples	Mn	Fe	Zn	Ga	Th	Rb	Sr	Y	Zr	Nb	Likely Source*
18	598	25453	265	23	14	121	2	106	897	76	MI
19	135	7475	117	19	18	177	19	35	121	9	GBI
20	135	7799	122	20	18	184	20	36	124	9	GBI

*MI = Mayor Island; GBI = Great Barrier Island

Following calibration, the archaeological material was then compared to geological reference sample spectra and values from known New Zealand sources to identify likely sources in the assemblage (McCoy and Carpenter 2014; Ward 1972). The OAL reference collection includes samples from the following major obsidian sources: Waiare, Huruiki, Te Ahumata, Cooks Bay, Hahei, Tairua, Waihi, Mayor Island, Rotorua, Maraetai, Ongaroto and Taupo. Following comparison with geological reference sample spectra and values (McCoy and Carpenter 2014; Ward 1972), two samples are likely from Great Barrier Island (with a small chance of being from the Coromandel Volcanic Zone) and one is likely from Mayor Island (Table 5-23, Figure 5-28).

5. Artefact Analysis

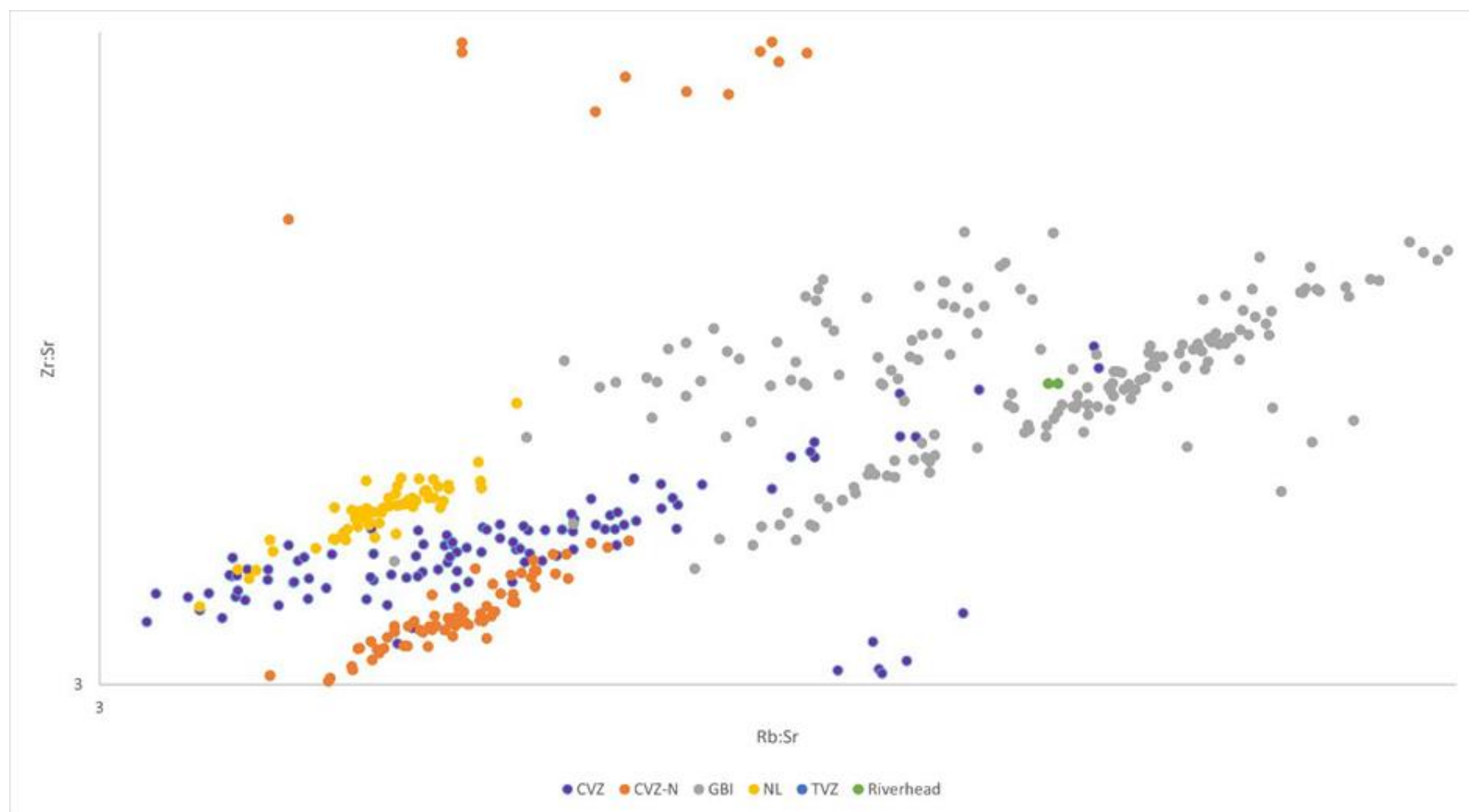


Figure 5-28. Scatterplot showing the two artefacts in relation to obsidian sources in New Zealand. CVZ = Coromandel Volcanic Zone, CVZ- N = Coromandel Volcanic Zone North, GBI = Great Barrier Islands, NL = Northland, TVZ = Taupo Volcanic Zone

6 ENVIRONMENTAL ANALYSIS

6.1 Midden Analysis

6.1.1 Introduction

The archaeological excavations undertaken during the Deacon Point development included the sampling of shell midden deposits for post-excavation analysis by Jennifer Low. Not all of the excavated sites related to Māori settlement activities on the peninsula included shell midden deposits of sufficient volume to provide samples with the information potential suitable for detailed midden analysis. As such, only four shell midden samples from three of the sites were found to be suitable for detailed analysis. These were from sites R10/1408 context 2461, R10/1409 context 2829 and R10/1546 contexts 2083 and 2093.

6.1.2 Methodology

All samples were sieved with a 1.5mm sieve and shells were sorted and analysed by taxon. Preferred habitat of taxon was also noted for further analysis. A list of all taxa identified in the analysis is presented in Table 6-1.

The analysis of each taxon examined three aspects: the Number of Identified Specimens (NISP), the Minimum Number of Individuals (MNI), and the MNI percentage. NISP is calculated by counting the total number of identifiable shells for each species. For bivalves to be counted a hinge was the minimum requirement. For gastropods whole or nearly whole terminal spires were counted. MNI for bivalve species was calculated by total number of hinge portions divided by two. The MNI percentage is calculated to show relative proportions. Table 6-2 to Table 6-5 summarise NISP, MNI and percentage of MNI recorded for each species by site.

Any whole shell was measured to determine size where 100 examples were present. Using accepted age grouping size ranges of measured whole shell it was possible to determine some general conclusions relating to the collection methods used by occupants of the site. The size ranges for cockle are as follows: juvenile (up to 10mm), pre adult (10-20mm), young adults (18-25mm), adults (>25mm), with sexual maturity 18-20mm (www.gopi.org.nz). Pipi are grouped into juvenile (<40mm) and adult (>40mm) at which point Hooker and Creese (1995) suggest pipi are sexually mature.

The analyses included the calculation of fragmentation ratios to assess the level of fragmentation of the deposits.

6.1.3 Results

6.1.3.1 Taxon and Habitat Analyses

A total of 5 species were identified across the 4 samples analysed. Cockle (*Austrovenus stutchburyi*) was the dominant species identified, suggesting cockle beds were the primary species targeted. Context 2461 (R10/1408) contained an unusually high component of mudsnail (*Amphibola crenata*). Mudsnail was and is considered a delicacy by Māori and

would have been taken wherever possible. Site R10/1546 (context 2093) contained a relatively high number of horn shell (*Zeacumantus lutulentus*). Other species – pipi (*Paphies australis*) and mud whelk (*Cominella glandiformis*) – were recorded in low numbers, and it is suggested these species, as well as the horn shell, were generally the result of by-catch.

Table 6-1. List of identified taxa by scientific and common names and preferred habitat for the sampled middens at Deacon Point

Scientific Name	Common Name	Preferred Habitat
<i>Austrovenus stutchburyi</i>	Cockle	Muddy shore
<i>Paphies australis</i>	Pipi	Muddy and/or sandy shore
<i>Amphibola crenata</i>	Mudsnail	Muddy shore
<i>Cominella glandiformis</i>	Mud Whelk	Muddy Shore
<i>Zeacumantus lutulentus</i>	Horn Shell	Muddy shore

Table 6-2. NISP, MNI and percentage of MNI per taxa, R10/1546 (context 2083)

Scientific name	Common Name	NISP	MNI	MNI %
<i>Austrovenus stutchburyi</i>	Cockle	192	96	92.30
<i>Amphibola crenata</i>	Mudsnail	1	1	0.97
<i>Cominella glandiformis</i>	Mud Whelk	5	5	4.80
<i>Zeacumantus lutulentus</i>	Horn Shell	2	2	1.93

Table 6-3. NISP, MNI and percentage of MNI per taxa, R10/1546 (context 2093)

Scientific name	Common Name	NISP	MNI	MNI %
<i>Austrovenus stutchburyi</i>	Cockle	2776	1388	94.29
<i>Amphibola crenata</i>	Mudsnail	6	6	0.41
<i>Cominella glandiformis</i>	Mud Whelk	18	18	1.22
<i>Paphies australis</i>	Pipi	10	5	0.34
<i>Zeacumantus lutulentus</i>	Horn Shell	55	55	3.74

Table 6-4. NISP, MNI and percentage of MNI per taxa, R10/1408 (context 2461)

Scientific name	Common Name	NISP	MNI	MNI %
<i>Austrovenus stutchburyi</i>	Cockle	1707	854	72.19
<i>Amphibola crenata</i>	Mudsnail	315	315	26.62
<i>Cominella glandiformis</i>	Mud Whelk	3	3	0.25
<i>Paphies australis</i>	Pipi	3	3	0.18
<i>Zeacumantus lutulentus</i>	Horn Shell	9	9	0.76

6. Environmental Analysis

Table 6-5. NISP, MNI and percentage of MNI per taxa, R10/1409 (context 2829)

Scientific name	Common Name	NISP	MNI	MNI %
<i>Austrovenus stutchburyi</i>	Cockle	749	375	92.30
<i>Amphibola crenata</i>	Mudsnail	2	2	0.50
<i>Cominella glandiformis</i>	Mud Whelk	5	5	1.30
<i>Paphies australis</i>	Pipi	5	3	0.70
<i>Zeacumantus lutulentus</i>	Horn Shell	21	21	5.20

Cockle made up by far the largest proportions (both NISP and MNI) of shellfish species in all four samples. The second most numerous species present within the shellfish assemblage was mudsnail, with horn shell, pipi and mud whelk present in much lesser quantities.

The composition of any midden sample assemblage can indicate the availability of certain species of shellfish and which particular environments were exploited in order to gather them. Given the location of the project area on a peninsula surrounded by a tidal estuarine mudflat environment, it is not surprising that the inhabitants were consuming local food resources from the local muddy shore environment. A point of interest is how these different environmental niches were made use of and how this may have changed over time.

To examine this, each species was separated in one of the following environmental niches:

- Muddy Shore
- Muddy and/or Sandy Shore
- Sandy Shore
- Rocky Shore
- Sandy, Rocky or Muddy Shore
- Coarse Sand/Gravel
- Shells/Rocks
- Other/Unknown

The environmental niche associated with each species was presented in Table 6-1. The MNI of all species in each niche was then summed to provide the total MNI for each niche. The relative proportions for these niches are presented for sites in each area in Figure 6-1. The sample from site R10/1546 (context 2083) contained 100% muddy shore species whilst those from sites R10/1546 (context 2093), R10/4108 (context 2461) and R10/1409 (context 2829) contained over 99% muddy shore species. The habitat of the pipi (*Paphies australis*) is muddy and/or sandy shore. However, it is likely that the pipi at Deacon Point was collected from a muddy shore rather than a sandy shore environment, suggesting that the shellfish from these three contexts can in effect also be considered as 100% muddy shore species.

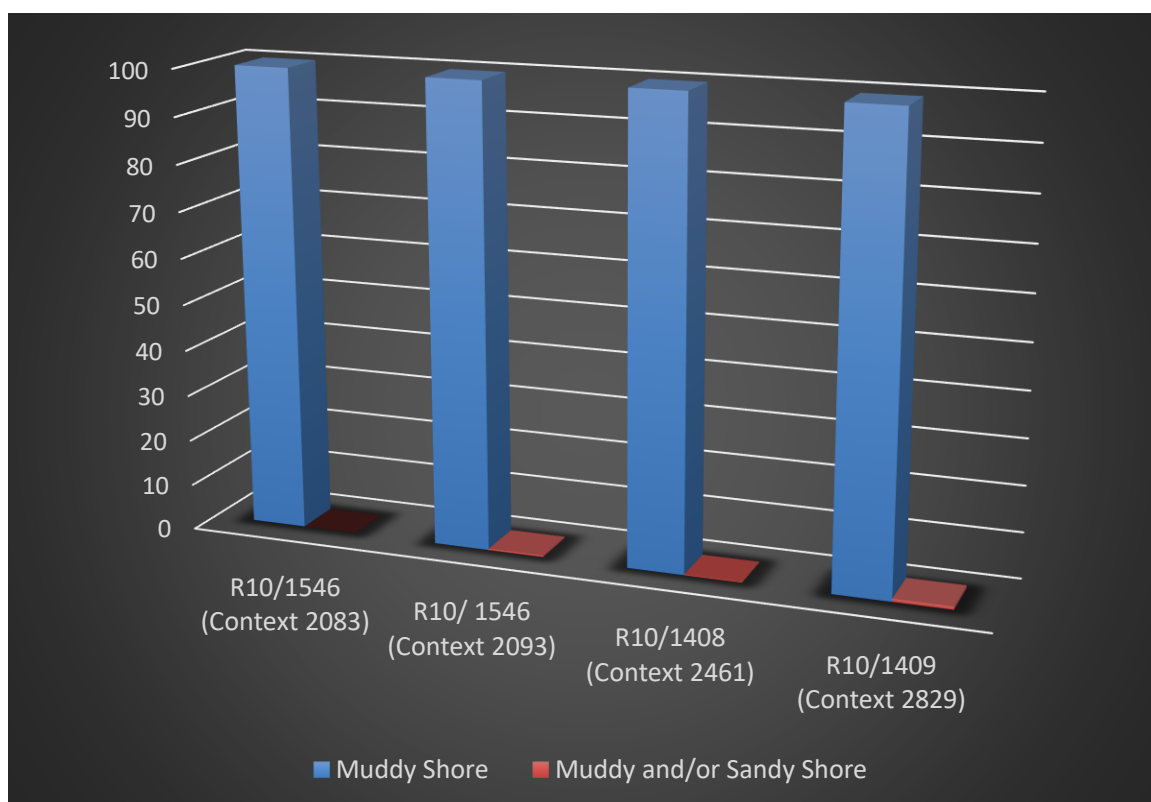


Figure 6-1. Sample environmental niche MNI as a percentage of the total sample environmental niche MNI

6.1.3.2 Fragmentation Ratio

A fragmentation ratio was calculated to assess the level of fragmentation. The reasoning for this follows the argument that greater quantities of broken shells indicate greater levels of damage to the deposit. Therefore greater quantities of intact shells would indicate a deposit in 'good/whole' condition. Interpretation of this ratio needs to take into account various taphonomic factors influencing the site, such as the level of plough damage, cattle trampling or vehicle movements across the site, or even environmental factors such as chemical weathering.

In order to calculate the ratio the identifiable shells were separated into those with over 50% of the shell intact and those with less than 50%. Only cockle were counted due to the low numbers of other species (Table 6-6). The MNI of each portion was calculated and the less than 50% portion was divided by the greater than 50% portion. This creates a ratio of broken shells to whole shells, with a higher number indicating more broken shells. The MNI numbers of each sample and the ratio is presented in Table 6-6.

Calculation of the ratio indicates that contexts 2083 and 2093 from site R10/1546 had been subjected to high fragmentation, likely due to cattle trampling.²⁶ Context 2829 from site

²⁶ Based on the current data collected for cockle fragmentation ratios in the Auckland region the results can be split into six groups: very low = 0-1.5, low = 1.51-2.5, moderate = 2.51-4.5, high = 4.51-10, very high = 10.01-16, and extreme = 16.01+. These groups are roughly organized according to percentiles, with approximately 20% of the total numbers of samples assigned to each group, except for the last two which are around 10% each.

R10/1409 had low fragmentation. In contrast, context 2461 from site R10/1408 had a very low fragmentation ratio of 0.51, suggesting little damage had occurred and that the sample was in good condition.

Table 6-6. MNI of <50% and >50% cockle and the fragmentation ratio for each sample

Site / Context	<50% MNI	>50% MNI	Ratio
R10/1546 - context 2083	160	32	5.00
R10/1546 - context 2093	2327	449	5.18
R10/1408 - context 2461	576	1131	0.51
R10/1409 – context 2829	531	218	2.44

6.1.3.3 Shell Dimensions

Shell dimension is a variable that can reveal changes in the levels of predation over time. A dense occupation over a considerable period of time could harvest a particular species with great enthusiasm and thereby reduce the size of the individuals available to little more than juveniles. Conversely a targeted harvest conducted by individuals moving quickly across the landscape may select simple the largest available individuals.

Whole cockle shells were measured to avoid any conscious or unconscious bias in selection, to obtain data on individual shellfish size to determine maturity of shellfish collected. Descriptive statistics for maximum dimensions of cockle are presented in Table 6-7, where 100 or more whole shell were recorded, with individual sample histograms in Figure 6-2 to Figure 6-4.

Using accepted age grouping size ranges of measured whole *Austrovenus stutchburyi* (cockle) shell it was possible to determine some general conclusions relating to the collection methods used by occupants of the sites, with the exception of the sample from context 2083 from site R10/1546, which was not large enough to warrant inclusion in this particular analysis. The size ranges for cockle are provided in section 6.1.2.

The descriptive statistics suggest cockle from site R10/1409 (context 2829) were predominantly young adult in age, whereas cockle in from site R10/1408 (context 2461) was largely adult.

Table 6-7. Maximum cockle dimension mean, median, mode and standard deviation

Site / Context	Count	Mean	Median	Mode	Standard Deviation
R10/1546 – context 2093	449	18.83	18.51	19.6	3.33
R10/1408 – context 2461	1131	25.18	25.95	24.54	4.34
R10/1409 – context 2829	749	18.08	18.43	18.55	3.27

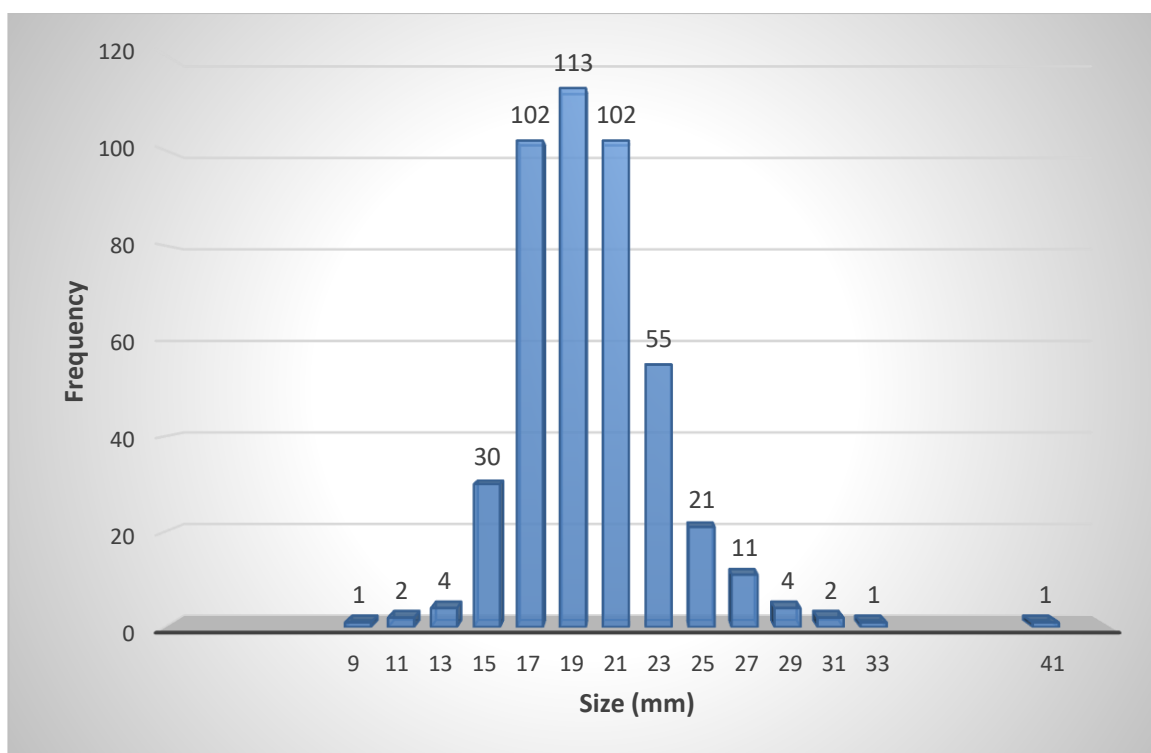


Figure 6-2. Site R10/1546 (context 2093) maximum cockle dimension histogram (Skewness²⁷ = 1.002)

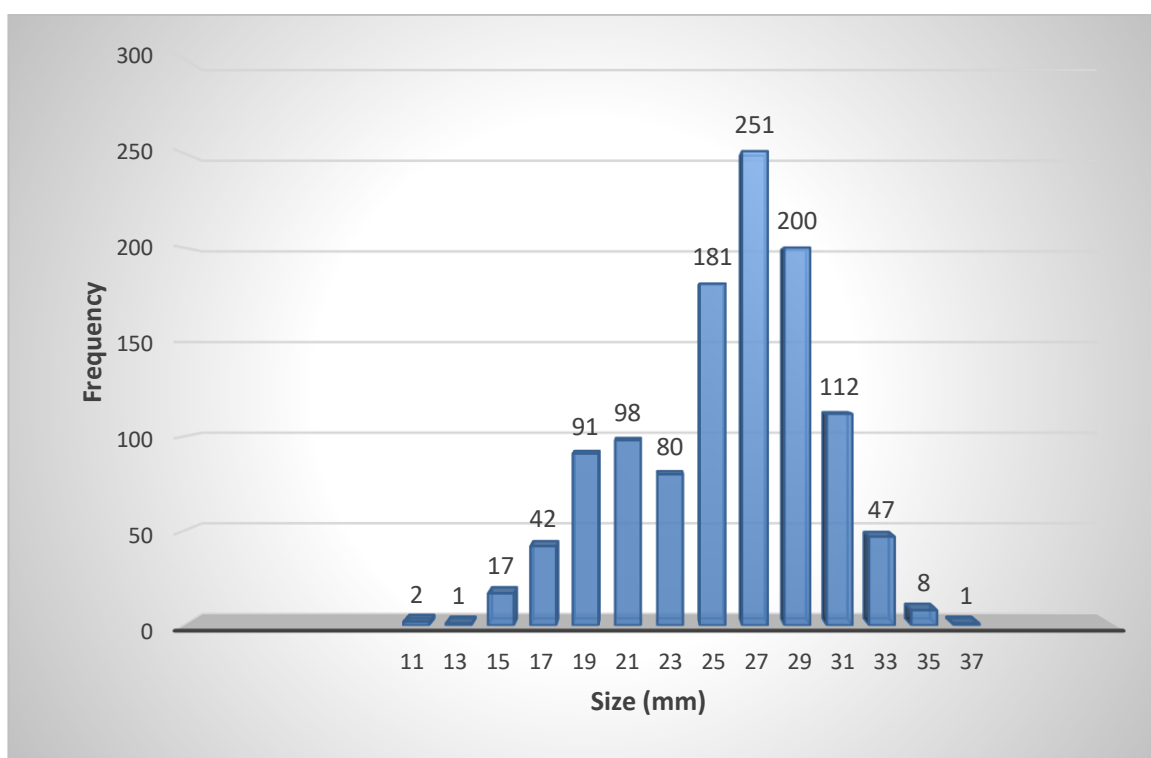


Figure 6-3. Site R10/1408 (context 2461) maximum cockle dimension histogram (Skewness = -0.496)

²⁷ Skewness is a measure of the asymmetry of a distribution. If skewness is less than -1 or greater than 1, the distribution is highly skewed. If skewness is between -1 and -0.5 or between 0.5 and 1, the distribution is moderately skewed.

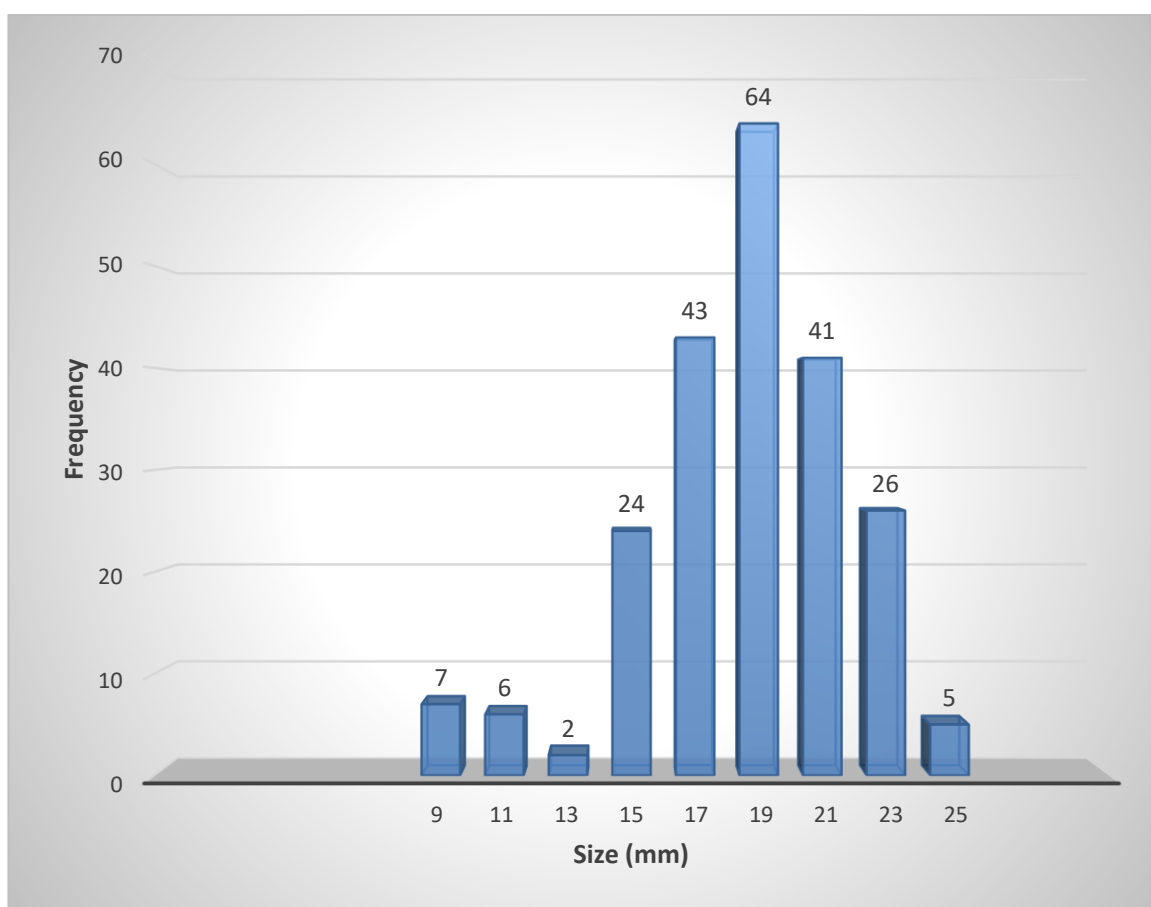


Figure 6-4. Site R10/1409 (context 2829) maximum cockle dimension histogram (Skewness = -0.770)

6.1.4 Discussion

The shell midden analysed was limited to three sites – R10/1408, R10/1409 and R101546. It is not surprising that the species which dominated the assemblages are from a muddy shore environment, that being the closest environment for shellfish gathering. As mudsnail was present in significant numbers at site R10/1408, it could indicate this resource was targeted for a specific feast/meal as mudsnail was and is considered a delicacy by Māori and would have been taken wherever possible. Cockle was present across all sites, which is typical for the region. Of note is that for site R10/1409 the cockle were predominantly young adult in age, whereas cockle in from site R10/1408 were largely adult. It is possible that at the latter site the larger cockle only could have been targeted as there was abundant mudsnail, whereas R10/1409 concentrated on cockle gathering and harvested mainly juveniles, which made up the bulk of the protein resource. The cockle beds may have been the same for both sites, with resource gathering undertaken at different time of the year as reflected in the age of the cockles represented between the two sites.

6.2 Charcoal and Wood Analysis

6.2.1 Introduction

A total of 31 charcoal samples were taken from contexts from 11 sites (see Table 6-8) for species identification and for the selection of samples suitable for radiocarbon dating analysis. The charcoal analysis was undertaken by Dr Rod Wallace of the University of Auckland.

6.2.2 Results

Eighteen charcoal samples from seven pre-European Māori midden and oven sites were submitted for identification and radiocarbon dating sample selection. Additionally, six charcoal samples relating to a single historic period Māori shell midden and oven site (R10/1410) and six samples from three sites relating to historic period European settlement activities (R10/1377; R10/1547; R10/1548) were also submitted for identification.

It is considered likely that the charcoal assemblage was mainly derived from firewood collected by the inhabitants of the sites from the immediate area, although in the case of the European sites the charcoal was derived from postpipe fills relating to structural features. Material suitable for C14 dating was present in the majority of the samples.

The raw results are summarised in Table 6-8 below.

6.2.3 Discussion

The charcoal data show that the vegetation in the local area had a high level of kanuka and manuka scrub accompanied by shrubs, with some broadleaf trees. Conifers were predominantly represented by kauri across all but one of the archaeological sites (R10/1546). This suggests there was still forest present in the wider area. There is no evidence of the burning of mangrove wood, a species that dominates the muddy upper harbour environment at present. It is of note that hardwood species dominate the R10/1411 samples from the large ovens/firescoops, and the size of the ovens suggest food cooking for a good number of people.

6. Environmental Analysis

Table 6-8. Summary of charcoal results from the archaeological sites investigated at 29 Dinning Road

Species	Type Plant	Archaeological Site Number (all with R10 prefix)										
		1377	1408	1409	1410	1411	1425	1545	1546	1547	1548	1551
Coprosma	Shrubs						11	4	2			
Olearia												
Pittosporum		1										
Kowhai							1					
Manuka	Scrub Spp.		1		6		14	8	7			
Kanuka					4							
Tawa	Broadleaf Trees	2										
Tarairi							2					
Pohutakawa									1			
Puriri						10						
Tawhairaunui						4						
Matai	Conifer											1
Kauri		4	1	1	1	17	1	5		1	4	1
Total		7	2	1	11	31	29	17	10	1	4	2

6.3 C14 Dating

Prior to the Deacon Point residential subdivision, there was a complete paucity of radiocarbon dating in the wider Riverhead area, including the Rangitopuni Creek and the upper reaches of the Upper Waitematā Harbour that it flows into. During the archaeological monitoring and investigations of sites exposed during the subdivision works, eight sites relating to Māori occupation of the peninsula were sampled for radiocarbon dating analysis. However, not all of the samples proved suitable for radiocarbon dating purposes with the result that six samples from only five of the shell midden/earth oven sites (Figure 6-5) were submitted for radiocarbon dating analysis. The samples consisted of either marine shell or identified and suitable charcoal pieces and were dated utilising the Accelerator Mass Spectrometry (AMS) method.

Details for all radiocarbon determinations can be found in Table 6-9, and the detailed University of Waikato Radiocarbon Dating Laboratory determinations for each sample are provided in Appendix 6.

The results of the Deacon Point subdivision radiocarbon dating analysis are presented below per site.



Figure 6-5. Location of shell midden/oven sites which provided radiocarbon dating samples

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Table 6-9. Details of the calibrated radiocarbon dates for the midden and oven sites at Deacon Point

Lab No	Sample	Material	CRA		Years AD			
			Years BP	Error	-2σ	-1σ	1σ	2σ
Wk-55466	R10/1408 - 2479	Manuka charcoal	190	23	1660	1670	1940	1920
Wk-55467	R10/1410 - 4070	Manuka charcoal	204	23	1660	1670	1810	1920
Wk-55468	R10/1408 - 2469	Manuka charcoal	187	22	1670	1670	1950	1920
Wk-55469	R10/1411 - 2429	Cockle shell	720	17	1460	1520	1680	1770
Wk-55470	R10/1546 - 2093	Cockle shell	727	16	1460	1520	1670	1770
Wk-55471	R10/1545 - 1124	Charcoal - twig	409	23	1450	1450	1620	1630

6.3.1 R10/1408

Midden site R10/1408 was situated on the southern banks of a small rectangular inlet on the eastern side of the Deacon Point peninsula (Figure 6-5). Two samples of small diameter charcoal from features associated with the midden were submitted for radiocarbon dating analysis. A charcoal sample consisting of Manuka (*Leptospermum scoparium*) from context 2479 (the fill of firescoop/oven 2478) was submitted for AMS radiocarbon dating analysis and produced a result of 190 ± 23 BP (Wk-55466), with a calibrated radiocarbon date range of 1660-1920 AD (2σ) (Figure 6-6 and Table 6-9). The radiocarbon data suggest that context 2479 was formed around the middle of the 18th century (Figure 6-6 and Table 6-9).

A charcoal sample consisting of Manuka (*Leptospermum scoparium*) from context 2469 (the fill of earth oven 2468) was submitted for AMS radiocarbon dating analysis and produced a result of 187 ± 22 BP (Wk-55468), with a calibrated radiocarbon date range of 1670-1920 AD (2σ) (Figure 6-7 and Table 6-9). The radiocarbon data from this sample suggest that context 2479 was also formed around the mid-18th century (Figure 6-7 and Table 6-9).

6. Environmental Analysis

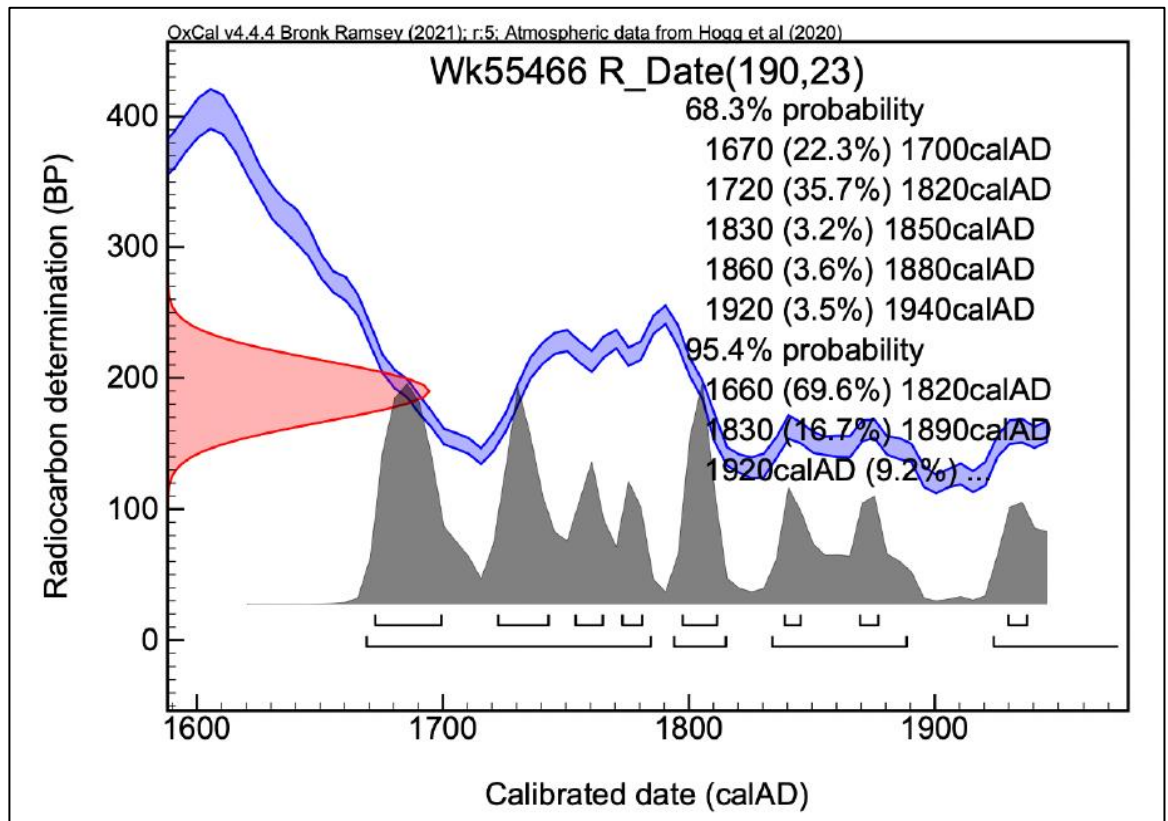


Figure 6-6. Calibrated radiocarbon date range from the fill (2479) of firescoop 2478 at site R10/1408

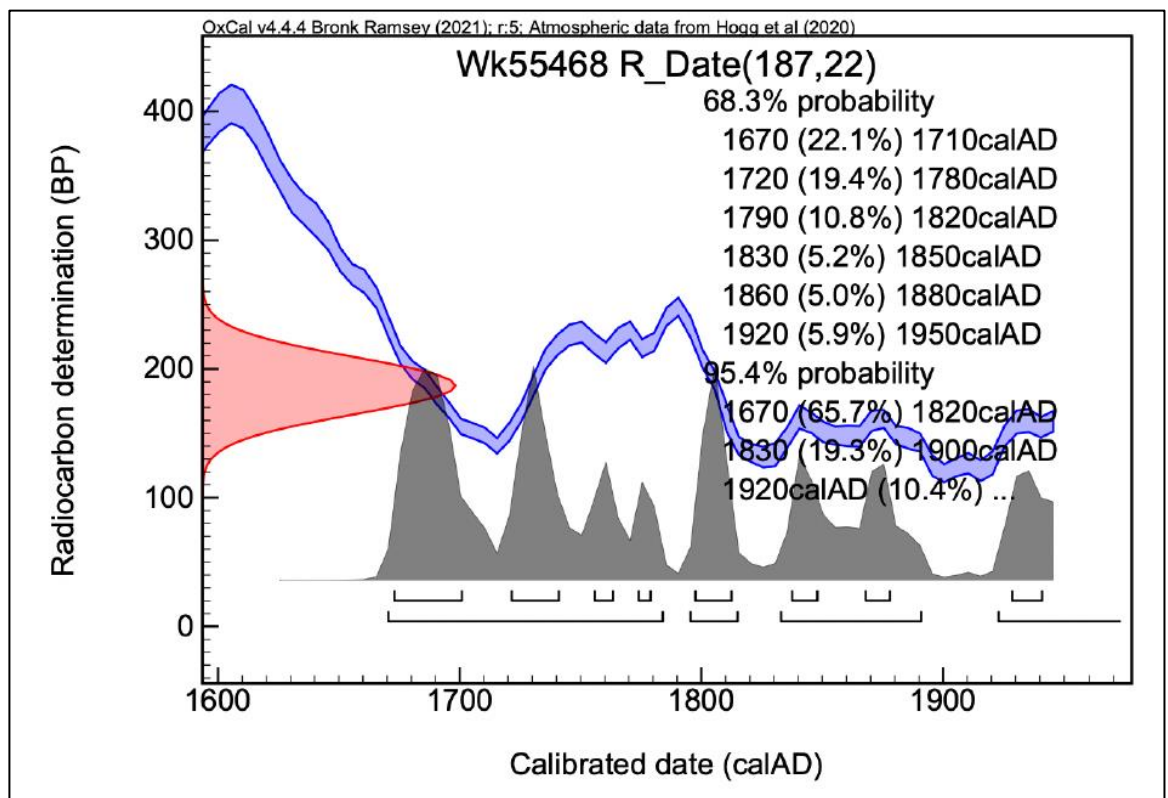


Figure 6-7. Calibrated radiocarbon date range from the fill (2469) of oven 2468 at site R10/1408

6.3.2 R10/1410

Site R10/1410 consisted of a complex of earth ovens, firescoops, and postholes associated with a small shell midden deposit located on the northwestern banks of the Deacon Point peninsula (Figure 6-5). A charcoal sample of small diameter Manuka (*Leptospermum scoparium*) from context 4070 (the fill of earth oven 4069) was submitted for AMS radiocarbon dating analysis and produced a result of 204 ± 23 BP (Wk-55467), with a calibrated radiocarbon date range of 1660-1920 AD (2σ) (Figure 6-8 and Table 6-9). The radiocarbon data suggest that context 4070 was most likely formed during the second half of the 18th century (Figure 6-8 and Table 6-9).

6.3.3 R10/1411

Site R10/1411 consisted of two large circular firescoop/oven features associated with a small shell midden deposit located on the northwestern banks of the rectangular inlet on the eastern side of the Deacon Point peninsula and a collection of small postholes and stakeholes (Figure 6-5). A sample of cockle shell (*Austrovenus stutchburyi*) from context 2429 (the fill of firescoop 2428) was submitted for AMS radiocarbon dating analysis and produced a result of 720 ± 17 BP (Wk-55469), with a calibrated radiocarbon date range of 1460-1770 AD (2σ) (Figure 6-9 and Table 6-9). The radiocarbon data suggest that context 2429 was formed during the first quarter of the 17th century (Figure 6-9 and Table 6-9).

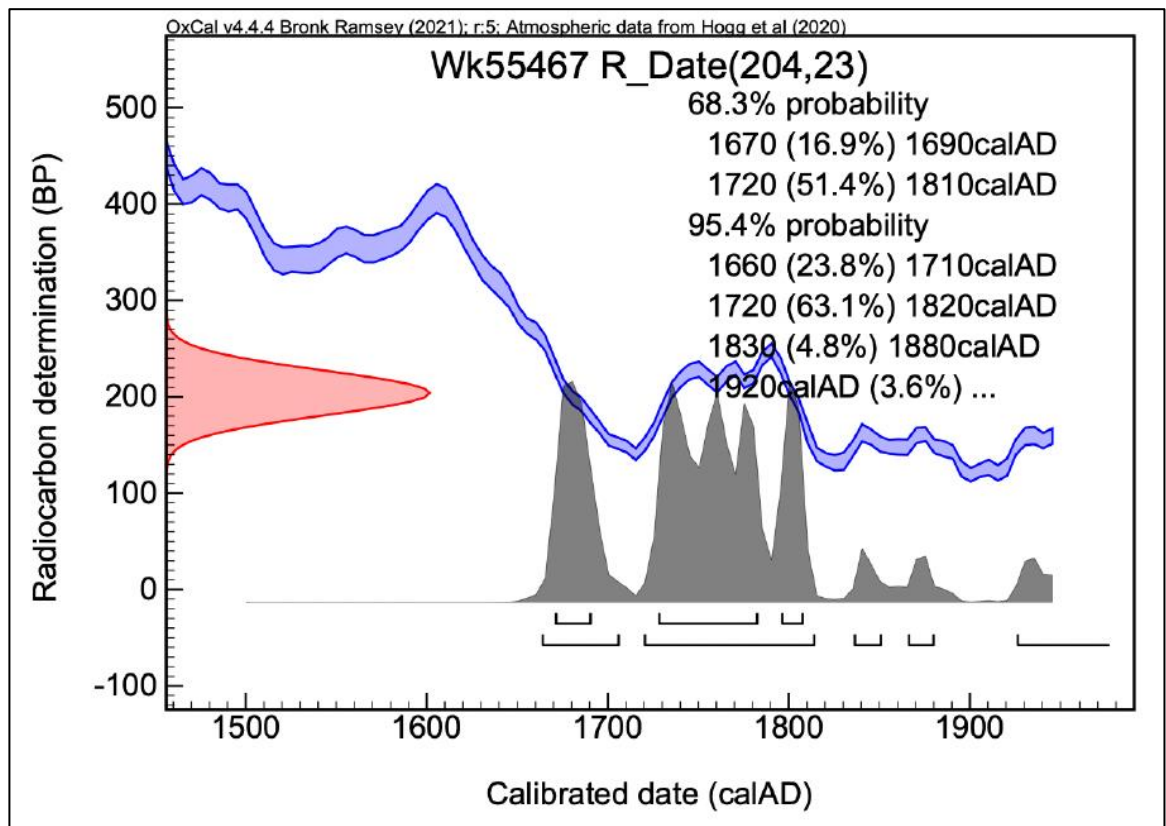


Figure 6-8. Calibrated radiocarbon date range from the fill (4070) of oven 4069 at site R10/1410

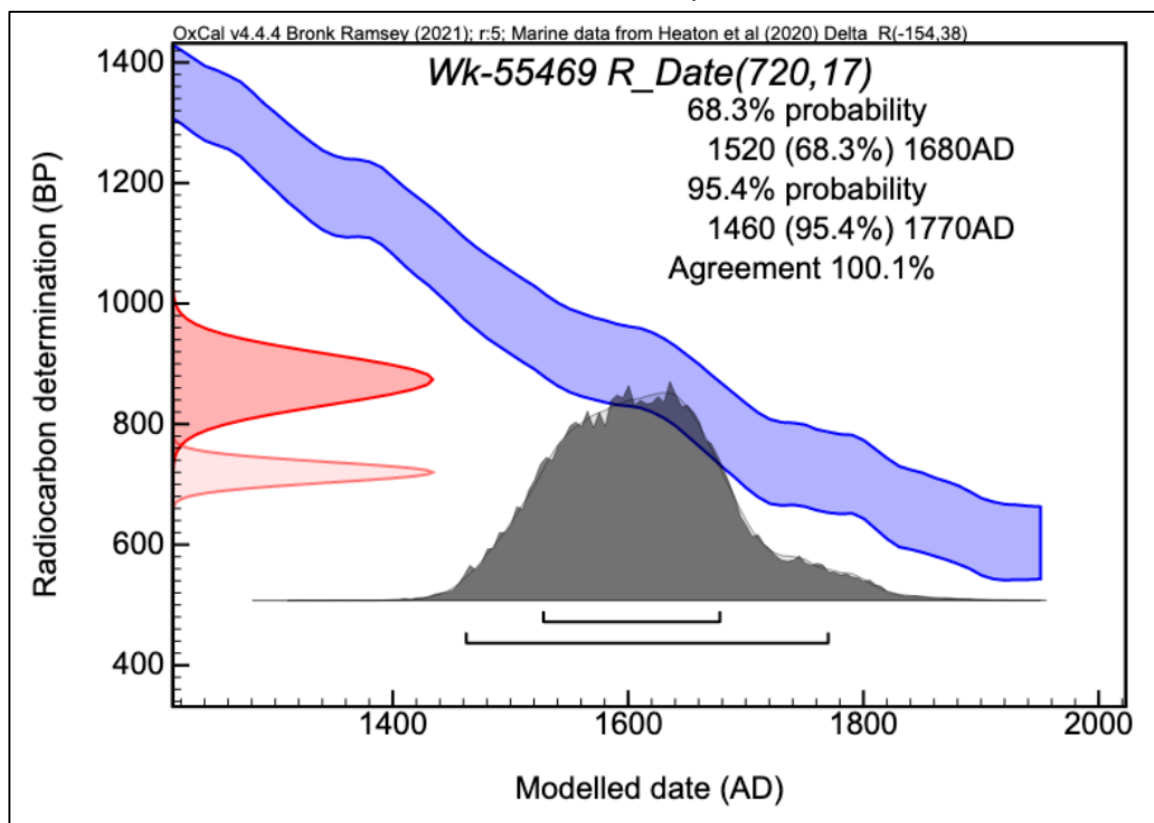


Figure 6-9. Calibrated radiocarbon date range from the fill (2429) of firescoop 2428 at site R10/1411

6.3.4 R10/1545

Site R10/1545 consisted of a complex of earth ovens, firescoops and postholes on the northeastern banks of the Deacon Point peninsula (Figure 6-5). A sample of small diameter twig charcoal (unidentified) from context 1125 (the fill of firescoop/earth oven 1124) was submitted for AMS radiocarbon dating analysis and produced a result of 409 ± 23 BP (Wk-55471), with a calibrated radiocarbon date range of 1450-1630 AD (2σ) (Figure 6-10 and Table 6-9). The radiocarbon data suggest that context 2479 was formed during the last quarter of the 15th century (Figure 6-10 and Table 6-9).

6.3.5 R10/1546

Site R10/1546 consisted of a large shell midden, several small and dispersed shell midden deposits, with a number of earth ovens, firescoops, postholes and stakeholes which were situated a short way inland from the northwestern banks of the Deacon Point peninsula (Figure 6-5). A sample of cockle shell (*Austrovenus stutchburyi*) from context 2093 (the main shell midden deposit) was submitted for AMS radiocarbon dating analysis and produced a result of 727 ± 16 BP (Wk-55470), with a calibrated radiocarbon date range of 1460-1770 AD (2σ) (Figure 6-11 and Table 6-9). The radiocarbon data suggest that shell midden 2093 was formed around the late 16th century/early 17th century (Figure 6-11 and Table 6-9).

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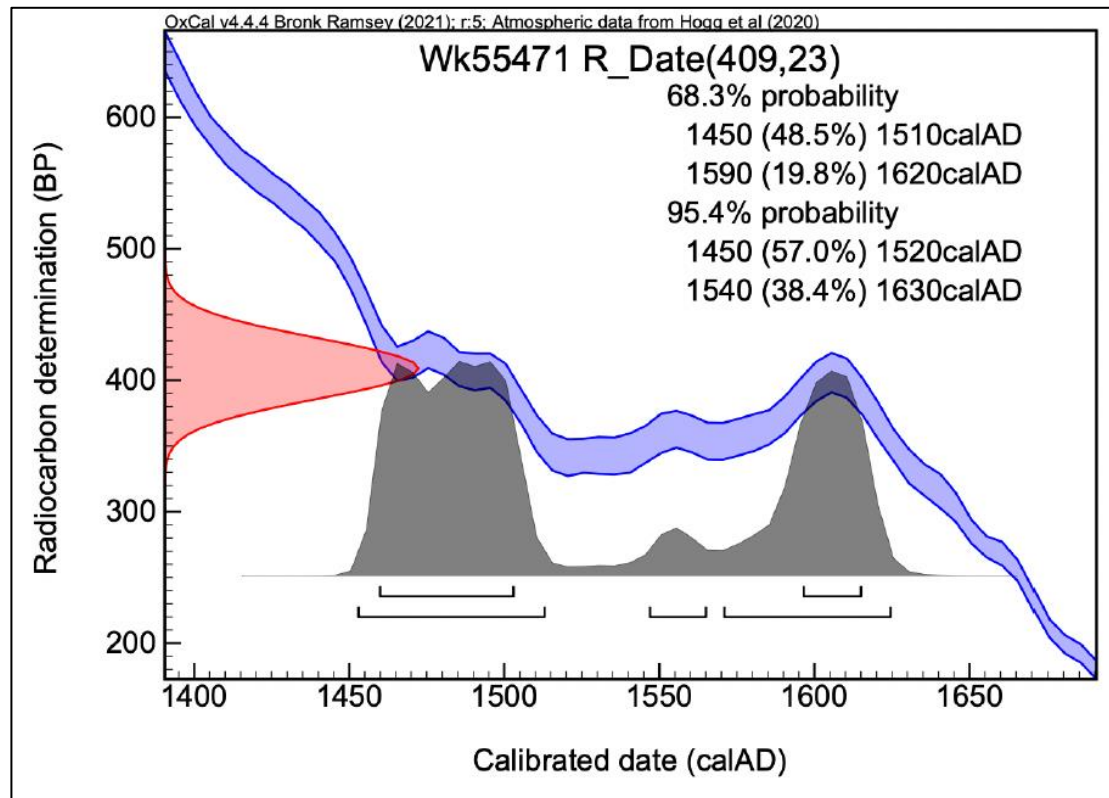


Figure 6-10. Calibrated radiocarbon date range from the fill (1125) of firescoop 1124 at site R10/1545

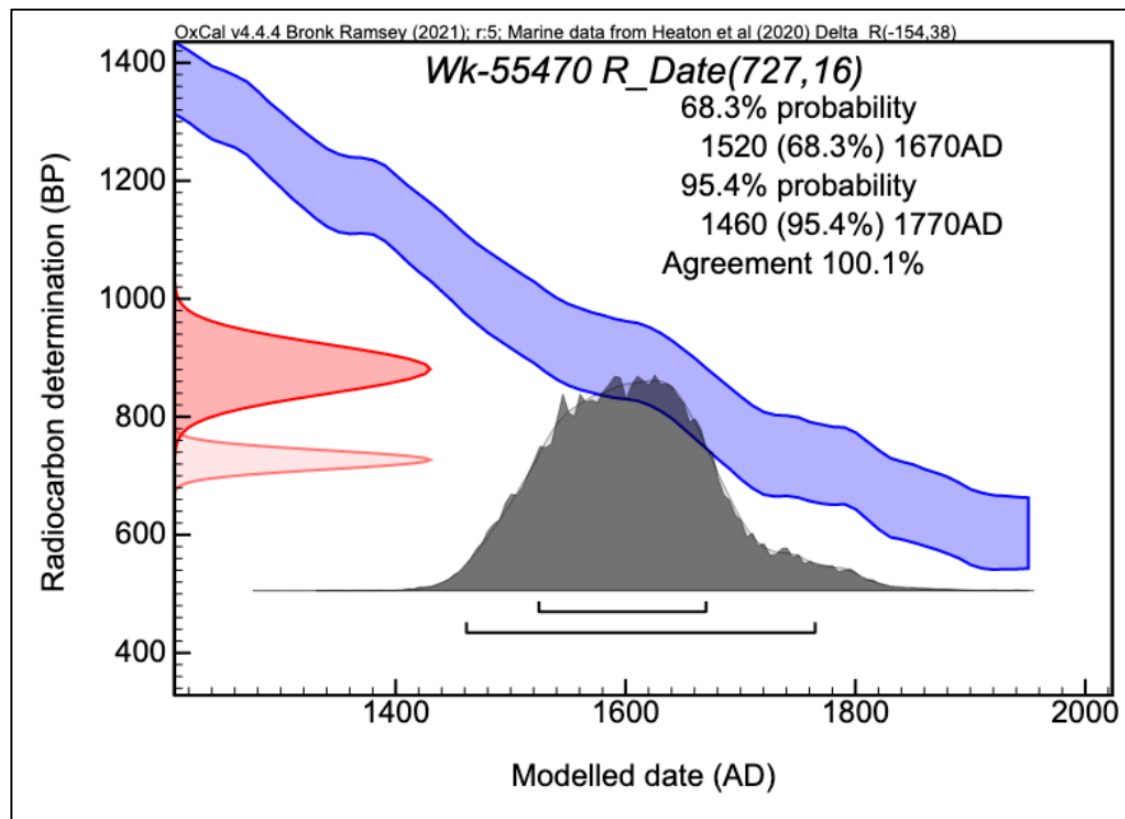


Figure 6-11. Calibrated radiocarbon date range from the large shell midden deposit (2093) at site R10/1546

6.3.6 Radiocarbon Dating Discussion

A range of dates are represented by the six radiocarbon samples from sites R10/1408, R10/1410, R10/1411, R10/1545 and R10/1546. Of these, the earliest occupation date is from the Māori site R10/1545 located beneath and around Deacon's Inn (R10/1377), placing occupation in the last quarter of the 15th century. Site R10/1546 located to the west produced a date around the late 16th/early 17th century. Just south of these sites the small cooking and occupation site R10/1411 appears to have been occupied during the first quarter of the 17th century, with the largest midden and occupation site, R10/1408, producing a radiocarbon determination placing occupation in the mid-18th century (also located south of R10/1411). This is followed by midden and oven site R10/1410 with evidence of occupation during the second half of the 18th century. This site is located on the northwestern coastal edge of the peninsula.

Looking further afield at dates in the wider Upper Waitematā Harbour area (Figure 6-12 and Figure 6-13), at Hobsonville Point where radiocarbon dates have been obtained, the dates from Riverhead are generally similar in age range. However, it is clear that this upper harbour area is grossly under-represented in terms of both archaeological investigations and radiocarbon dates, which limits any discussion of temporal and spatial patterns of pre-European Māori settlement.

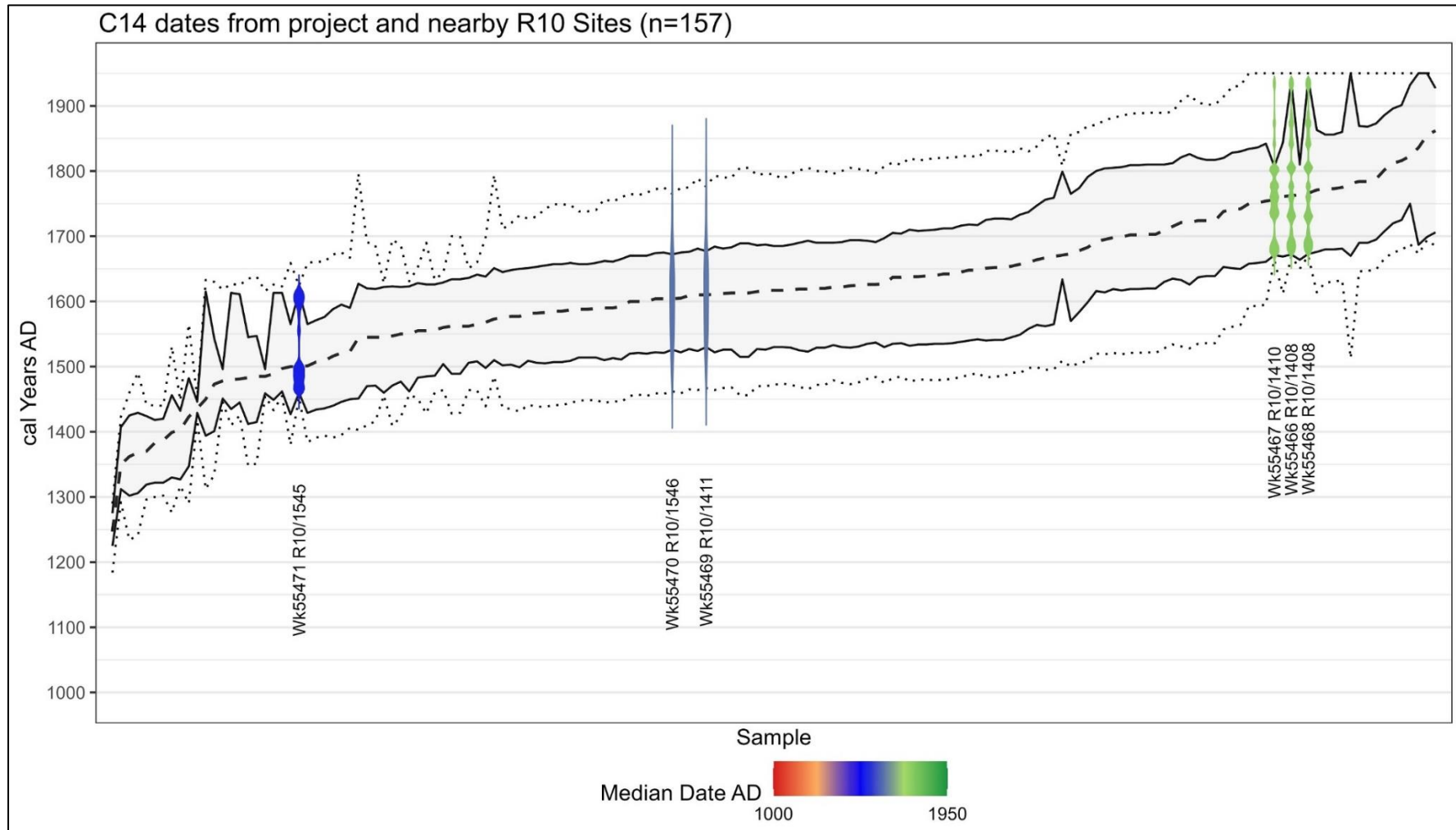


Figure 6-12. Calibrated radiocarbon dates from the wider Upper Waitematā Harbour (wide band) with the dates from the investigation area at Deacon Point overlaid and labelled (provided by Dr Simon Bickler)

6. Environmental Analysis

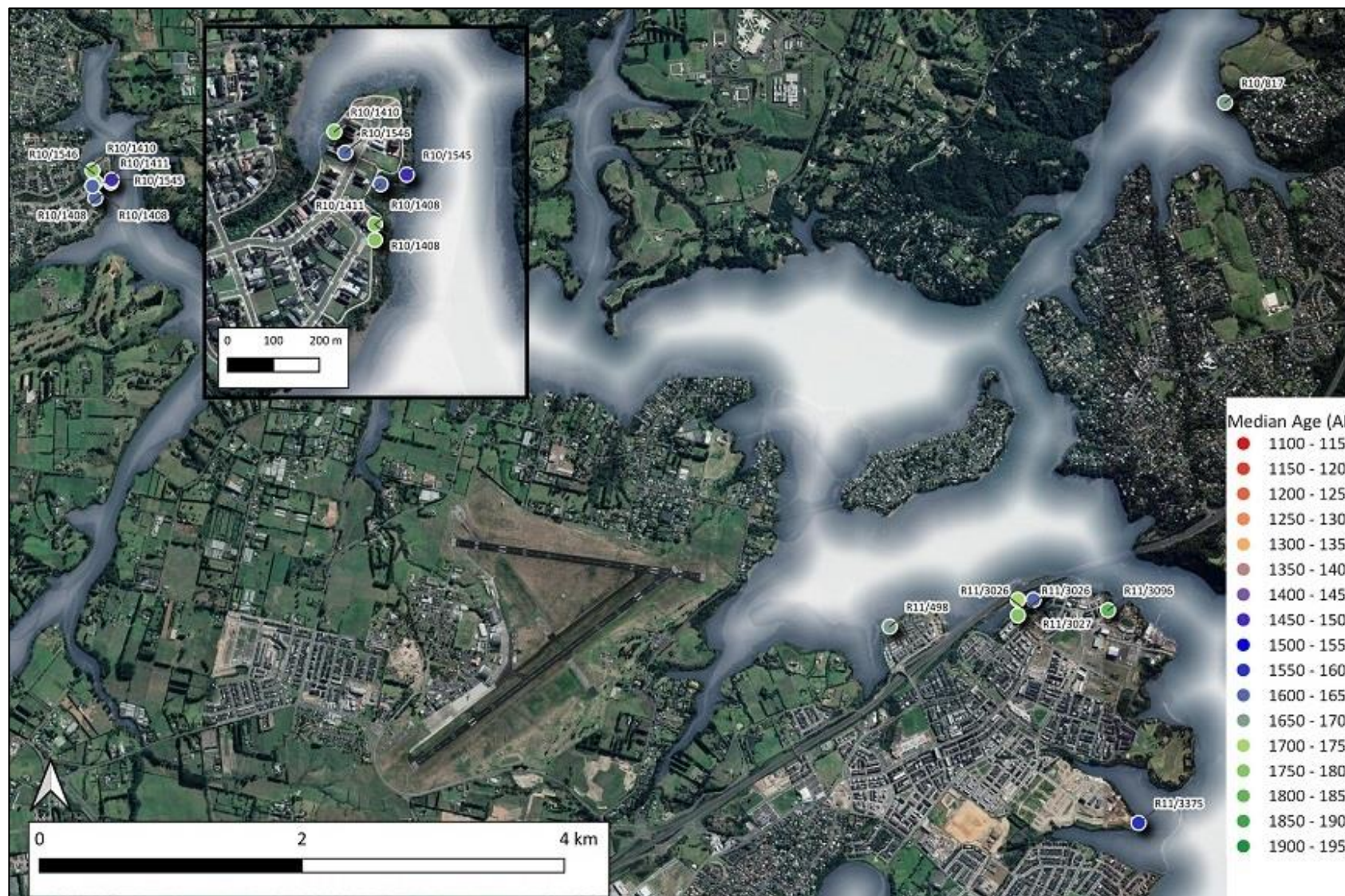


Figure 6-13. Aerial showing calibrated radiocarbon dates from the wider Upper Waitematā Harbour area. NB. The dates from the project area at Deacon Point are seen at top left and inset (provided by Dr Simon Bickler)

7 DISCUSSION

The archaeological investigations at Dinning Road/Deacon Point have resulted in a wealth of new knowledge and information relating to pre-European Māori settlement of the Upper Waitematā Harbour as well as information relating to European settlement and enterprise. No archaeological sites relating to Māori or European settlement had been recorded on the property prior to the assessments undertaken for the development. However, six sites were identified at the assessment stage, of which one was Deacon's Inn (R10/1377), and the remaining five sites were recorded as midden sites (R10/1407–R10/1411). A further six new sites were exposed and recorded during earthworks for the development, comprising the possible location of Deacon's store (R11/1547), fencelines relating to cattle/stock movement (R11/1548), and midden/Māori settlement remains (R11/1425; R10/1545-1546, and R10/1551). Overall, 11 of the 12 sites were investigated, while site R10/1407 was contained entirely within the esplanade reserve and left in situ. Parts of sites R10/1377, R10/1408, R10/1409, R10/1411 and R10/1545 also fell within the esplanade reserve and were protected in situ (see below for further details).

In terms of artefacts, a varied and interesting range of 19th century items were recovered during the investigations, relating to the use of Deacon's Inn and domestic wares that were like being sold at the store to local settlers. This not only included the usual dinner services, glassware and the like, but also items of personal adornment such as buttons, and cricket belt and rowing buckles. Of note is the glimpse of children's lives represented by the marbles and perhaps the slate writing stylus. Māori artefacts were less well presented, with mostly informal tools and manufacturing debris, which is likely due to the lack of evidence for kainga/permanent settlement. A connection between the archaeological evidence investigated for this project and the Riverhead Portage/Te Taonga Waka located adjacent to the land on the northern side of the peninsula, as well as a canoe portage also described as Te Taonga Waka, cannot be ignored. This was a location where the movement of people and waka would have been frequent, and therefore the evidence for more temporary occupation on the peninsula fits well with the type of land (and water) travel that took place here, rather than permanent settlement. This is discussed further below.

7.1 Site Avoidance and Protection

Of the 12 sites recorded all but one underwent some form of investigation – site R10/1407 was located within the esplanade reserve and outside of the development area and no other features were found in the vicinity of the midden during the investigation.

Five other sites were partially located within the esplanade reserve and were protected from development:

- R10/1408: the eastern extent of the site was protected within the esplanade reserve and planted only, with the western area being located within the earthworks footprint and investigated. This site was further protected by a boardwalk which extends over part of the surviving in situ midden.
- R10/1409: the northern extent of the midden was protected within the esplanade reserve.

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- R10/1410 and R10/1411: the recorded midden components were protected within the reserve and planted over; new features within the development area were exposed and investigated and were recorded as also being part of these sites.
- R10/1377: Deacon's Inn was investigated first to establish whether it should be protected within a historic reserve. However, following investigation and a meeting with Auckland Council's Heritage Unit it was established the majority of features relating to the site were postholes of limited significance, and there were no significant archaeological remains to warrant historic reserve status. Some postholes relating to fencing, etc are likely to survive within the Esplanade reserve.
- R10/1545: this site related to Māori settlement and was located within the same footprint as R10/1377. It was also noted to extend beyond the extent of works into the esplanade reserve area, so that some features of this site are preserved within the reserve area.

The midden sites protected within the esplanade reserve were planted with a selection of Pohuehue – *Muehlenbeckia complexa* and *Carex testacea* – native grass to provide a visual marker of the sites to both iwi/hapu and the wider public.

7.2 Māori Occupation

The archaeology of the Māori occupation of the Deacon Point peninsula at Riverhead is of significance, these being some of only a small number of sites recorded and investigated in the upper Waitematā Harbour. That there are many more sites unrecorded is also highly likely, with similar small peninsulas and inlets extending on both sides of the harbour up to the Wautaiti Stream.

Of the 12 sites recorded, 10 related to Māori occupation of the peninsula from at least the 15th/16th century AD onwards. This was evidenced by archaeological remains consisting of ovens and firescoops, post and stakeholes including board and slot features, buried cultural layers, and shell midden remains. Of note is that site R10/1408, which was the largest recorded site prior to the development, also produced the largest volume of artefacts (chert, obsidian, as well as probable greywacke and basalt), and also samples for shell midden and charcoal analysis and radiocarbon dating. Lithic analysis indicates resource procurement links (either directly or indirectly) to Great Barrier Island and Mayor Island with regards to obsidian, and potentially the Whangārei Harbour for some of the chert. Local materials are represented by a possible greywacke flake tool and basalt.

Other sites with chert tools were R10/1409, R10/1410, R10/1545 (core), R10/1546, which also had a likely basalt hammerstone, and R10/1547, which also had an ochre stained hammerstone.

None of the midden produced any fish or other bone, or organics other than shell. Resource gathering indicated a focus on muddy shore species which would be expected considering the surrounding estuarine environment.

In terms of settlement, the majority of the remains are likely to relate to temporary camps linked to resource procurement and overland travel, as mentioned above. The fact that there are two recorded Te Taonga Waka portages located either side of the peninsula cannot be ignored, with tangata whenua heading to the Kaipara, and likely stopping overnight or for a few days first on the peninsula before the inland crossing and/or continuing by waka further up or down the Waitematā Harbour. The larger midden sites may represent repeated stops, or larger groups on the move leaving a larger footprint.

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The earliest evidence for settlement was from a small site (R10/1545) in the same location as the 19th century Deacon's Inn, which was characterised by small firescoops/ovens and post/board slots, around the late 1400s, with a shell midden near the point (R10/1546) dating to the turn of the late 16th/early 17th century. One of the large ovens found on the eastern side of the peninsula (R10/1411) dates to around the first quarter of 17th century, with the larger ovens suggestive of cooking for a larger group of people. The largest site (R10/1408) produced a date from a firescoop indicating the mid-18th century, with another earth oven on the northwest side of the peninsula producing a similar date. There was evidence for stakeholes and postholes likely relating to fish drying racks, and post/board slots relating to temporary shelters. Overall, only six dates were obtained so there is likely to have been more variability between the settlement remains. For example, the extents of the recorded archaeological sites are predominantly based upon proximity of features; however, many of the features could relate to individual events/camps by small seasonal groups transiting on their way to and from the Kaipara. Overall, however, it is clear that there is evidence indicating temporary occupation sites from the 15th/16th century through to the time of European settlement, with no evidence for a coastal kāinga.

The footprints of the sites recorded during earthworks also extended beyond those detected by probing, which does highlight the limitation of probing with a gum spear, as it very rarely detects postholes and other spatially compact features.

Of note is that there is also evidence for historic period Māori sites in the mid- to late 19th century (from R10/1411), with artefactual evidence (ceramic and bottle glass fragments) within middens and postholes. This period is often termed 'transitional' as it sees the utilisation of European tools/cultural material (such as axes, knives, blankets, etc) instead of the traditional stone/lithic, flax and avifaunal resources, for example, although this does not mean that traditional methods/materials were abandoned in their entirety. The few fires that utilised bricks instead of hangi stones, located along the western extent of the peninsula (part of site R10/1410), also provide evidence of the use of European materials with traditional practices. Whether this was out of necessity due to a lack of stones available, or experimentation, cannot be determined. However, the archaeological evidence is present to indicate cross-cultural links between tangata whenua and the European settlers. Māori presence during the development of the European landscape can also be argued to be found in the large number of the postholes that formed the long fences for cattle movement and loading (R10/1548). Many are not typically 'European' in character, i.e. square/rectangular and cut by spade, but are irregular and some appear to have been cut by digging stick/kō. This suggests that tangata whenua were actively involved in constructing the fences.

7.3 Comparison with other Upper Harbour Māori Sites

The pre-European archaeological landscape of the Upper Harbour area predominantly consists of dispersed sites situated along the coast, reflecting seasonal and perhaps long-term exploitation/occupation of the area, with the exception of Tauhinu Pā on the opposite side of the harbour from Hobsonville Landing. The sites consist almost exclusively of shell middens which reflect the gathering, processing and consumption of shellfish by Māori.

As previously stated, there are few recorded sites and even fewer archaeological investigations that have taken place in the Upper Waitematā Harbour. However, at Hobsonville there is some comparable archaeological evidence.

An archaeological investigation of midden site R11/498 at Monterey Park located to the west of Hobsonville Point identified a number of archaeological features such as postholes,

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post and board slots that indicated the presence of structures such as a number of fish drying racks, a cooking shed (kāuta), an elevated food storage structure (pātaka), as well as obsidian cutting tools (Shakles and Foster 2015). A sample of cockle shell midden from the site dated the site to the mid-17th century (Shakles and Foster 2015).

In a report discussing the archaeological monitoring and investigation of three sites (R11/3026, R11/3027 and R11/3096) affected by the construction of the coastal walkway at Hobsonville Point (Shakles et al. 2019: 54-55), it is apparent that these midden sites are similar to those at Riverhead, with shellfish species consistent with the estuarine environment surrounding the Peninsula and with cockle being the main species exploited. Like Riverhead, no fishbone or avifaunal remains were recovered from any of the four midden samples. Shakles et al. (2019) argue that this may be due to soil conditions not being conducive to the survival of fishbone, or taphonomic factors such as the scavenging of fishbones by dogs. It is also possible, however, that the remains of fish or bird were absent when the deposits were formed.

In discussing the evidence of the chronology of Māori settlement, Shakles et al. (2019: 56) state that the extremely limited number of radiocarbon dates available from Māori sites in the Upper Harbour confirm that the area was utilised by Māori primarily for resource procurement from the latter half of the 1400s to the late 18th century. The dates obtained from the Riverhead investigation are generally similar in age range. However, many more dates are required from the Upper Waitematā Harbour to allow a more detailed understanding of the settlement history of the area by Māori.

7.4 Deacon's Inn R10/1377

As discussed in the Historical Background, by the mid-1850s Thomas William Deacon had acquired part of the eastern end of the headland (owned by William Blake) as a site for a public house. The earliest reference to Deacon's Inn is dated October 1855, when it was selected as a polling place for the Northern Division. The inn was described to potential voters as being at 'Kaipara, landing place, at the head of the Waitemata River' and the date corroborates the approximate arrival of Deacon in Riverhead after he came to New Zealand via the Navy and then eventually settled in Riverhead. The position of Deacon's Inn is first shown on a plan dated 1857 (SO 1114, see Figure 2-6). He also took over the proprietorship of the Riverhead Hotel by the 1860s, and the family managed both the Inn and Hotel simultaneously for a time. In 1870 Deacon was formally conveyed the Riverhead Hotel land, and one Edward Ellis was given the bush licence for the Deacon's Arms (likely Deacon's Inn) in 1870 also. No further licences for Deacon's Inn appeared after 1871. The success of the Deacon's Riverhead Hotel appears to have outdone that of the original inn, with the last references to the inn being in 1873, when John Blake's property is described on the electoral record as adjoining Deacon's Inn, Riverhead.

So the Inn appears to have been present on the Peninsula from c.1855 until 1873. The historical research indicates that the building would have been fairly substantial, with at least two storeys, and at the assessment stage it was considered highly likely that a significant number of subsurface archaeological features were present in the location of the inn. The results of the investigation of the site were successful in identifying the building's footprint, and also two outbuildings as well as another substantial building which was likely to have been the store (but was located further north and recorded as R11/1547). Other postholes were also present, which could relate to smaller enclosures, fences, etc. Of note was that there were no building demolition layers, or remnant posts in the postholes at

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R10/1377. This suggests that the building was removed and relocated rather than demolished, with the most likely location being Deacon's newly acquired Riverhead Hotel, expanding it from the two-roomed and one attic structure it was originally to a proper hotel with more accommodation.

A small number of artefacts were recovered from the topsoil close to the location of the Inn, and a few were recovered from within posthole fills. The artefacts were dominated by ceramics from tableware, although some gin and black beer bottle fragments were also recovered as well as part of a drinking glass, which is not surprising considering the relationship with the Inn.

7.5 19th Century House/Store

Perhaps of more interest was the remains of the house and likely store found to the northwest of Deacon's Inn. Postholes were identified that form the footprint of a house and verandah, and a cultural layer/spread in the topsoil that most likely formed during building demolition provided many artefacts relating to 19th century settlement, from housewares, bottles, glass and stoneware, to underwear garment buttons, writing slates and pencils to glass marbles and dentures! A high number of some artefacts (such as teacups and saucers equating to 14 tea sets) and the range of artefacts found would fit with this being a store as well as a residence.

Three items of particular interest were found that provide a link to Thomas Deacon – a cricket belt and rowing belt buckle and a Royal Navy button. We know that Thomas Deacon joined the Royal Navy at an early age, and came to Auckland in 1843 on HMS *Calliope*, and after leaving the *Calliope* at Wellington he settled at Riverhead after some travelling around (The Cyclopedia Company Limited 1902). The navy button is considered likely to have belonged to Thomas Deacon, who owned the property. It is possible that all three belonged to Thomas Deacon, as both cricket and rowing were popular in the navy also.

It is not clear if the structure was demolished or relocated. However, the level of fragmentation of artefacts could support an argument for demolition and clearance.

8 CONCLUSION

The archaeological investigation at Deacon Point, 29 Dinning Road, Riverhead took place at the end of 2016 under two archaeological authorities – 2017/207 and 2017/377. In total, 12 archaeological sites were recorded, six of which were new sites exposed by the project works. Eleven of the sites were investigated or partly investigated, with one site wholly and five sites partly protected within the esplanade reserve. A wealth of data and new information has been obtained relating to both Māori and European settlement of the Deacon Point area and Riverhead. Of note is the history of use by Māori from the 15th/16th century to the 18th century and into the 19th, with a clear relationship to Te Taonga Waka – Kaipara-Waitematā Harbour portage.

There was also a clear footprint during the European settlement period, both of Deacon's Inn and a second site where a house/store was located, and of the fencelines relating to stock movement and enclosure. These sites provided abundant evidence relating to 19th century life in Riverhead. This information provides tangible evidence of the settlement and provides new information to show that the present Riverhead Tavern does not date to 1857 as previously thought – Deacon's Inn, on land formerly known as 29 Dinning Road and now known as Deacon Point, was in fact the location of the earliest tavern in Riverhead.

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APPENDICES

APPENDIX 1 – CONTEXT LIST

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1000	Layer	layer	Dark brown silty loam, moderately compact; rock action, unstratified artefacts, frequent glass and ceramic, occasional metal and pipe stems. Topsoil			0.15m - 0.7m	Topsoil		R10/1377
1001	Layer	layer	Yellowish-brown clay mottled with grey clay, compact; degraded rock fragments, and charcoal flecks. Subsoil			~0.40m	Subsoil - with degraded rocks and lumps of infrequent grey clay		R10/1377
1002	Cut	bin pit	Oval in plan, very steep East side but all other sides near vertical, West half of base is flattish to gentle slope towards centre, East half steps down to a flattish base with small concave depression in its centre. Bin pit	0.95m E-W	0.65m N-S	W half 0.37m-0.45m, E half 0.52m & 0.56m at depression	Bin pit with posthole and post pipe	(1003) (1118) (1119) (1120)	R10/1545
1003	Fill		Mid brown slightly clayey silt, moderately compact; frequent rootlets, rare small roots. Top fill			0.1m maximum		[1002]	R10/1545
1004	Cut	post and board	Sub rectangular in plan, near vertical East side, steep West side, concave-flattish base. Posthole/ post board slot?	0.7m N-S	0.28m E-W	0.08m	Post and board slot, possibly root. Looks like it truncates [1006]	(1005)	R10/1545
1005	Fill		Greyish mid brown silt, moderately compact; rare charcoal and bark.					(1004)	R10/1377
1006	Cut	posthole	Rectangular posthole, unexcavated	0.37	0.24	0.02m max		(1007)	R10/1377
1007	Fill		not excavated.					[1006]	R10/1377
1008	Cut	posthole	Rectangular in plan, vertical sides, the base gently slopes from North to centre then steps down to a flattish base with another step down in its centre. Posthole?	0.8m N-S	0.7m E-W	N half 0.33m, S half 0.39m, 0.57m at 2nd step down	Posthole with deeper part where post was positioned. Could be historic	(1009) (1207) (1208)	R10/1377
1009	Fill		Mid greyish brown slightly clayey silt with light yellowish brown mottling, moderately to firm compaction; rare charcoal and ceramic sherds. Top fill			Surface to 0.06mbs		[1008]	R10/1377
1010	Cut	posthole	Sub circular in plan, unexcavated. Truncated in north west by root. Posthole	0.3m	0.3m		Cut for Posthole - truncated in NW by root	(1010)	R10/1377
1011	Fill		Mid brown silt, moderately compact; flecks of charcoal, root action.					[1011]	R10/1377

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1012	Cut	posthole	Square in plan, vertical sides, flattish in west half, south east corner slopes up and north east corner slopes down. Square Historic posthole	0.33m N-S	0.29m E-W	0.29m in W half, 0.25m in SE corner, 0.31m in NE corner	Rectangular posthole, Historic	(1013)	R10/1377
1013	Fill		Mid brown silt mottled with yellowish brown and white clay, soft to moderately compact; occasional Glass bottle fragments, frequent rocks and rootlets					[1012]	R10/1377
1014	Cut	posthole	Square in plan, unexcavated. Square Posthole	0.4m	0.4m		Square posthole	(1015)	R10/1377
1015	Fill		Greyish brown silt, loose; Degraded rock.					[1014]	R10/1377
1016	Cut	posthole	Square in plan, unexcavated. Square Posthole	0.3m	0.3m		Square posthole- inline with [1011], [1018], [1116] in W-E direction	(1017)	R10/1377
1017	Fill		Mid-brown to black silt, moderately compact; flecks of charcoal.					[1016]	R10/1377
1018	Cut	posthole	Rectangular in plan, unexcavated. Posthole	0.4m N-S	0.36m E-W		Posthole	(1019)	R10/1377
1019	Fill		Dark brown mottled with yellow brown silt, moderately compact.					[1018]	R10/1377
1020	Cut	posthole	Rectangular in plan, unexcavated. Posthole	0.4m NW-SE	0.39m NE-SW		Rectangular posthole	(1021)	R10/1377
1021	Fill		Dark brown mottled with yellow brown silt, moderately compact. occasional Mudstone.					[1020]	R10/1377
1022	Cut	posthole	Cut of rectangular posthole - unexcavated.	0.43	0.27	unex			R10/1377
1023	Fill		Greyish mid brown silt, moderately compact but friable; occ charcoal.			unex			R10/1377
1024	Cut	posthole	Cut of rectangular posthole - unexcavated.	0.44	0.32	unex			R10/1377
1025	Fill		Greyish mid brown silt, moderately compact but friable; occ charcoal.			unex			R10/1377
1026	Cut	posthole	Square in plan, vertical sides, slightly concave base. Posthole	0.30m E-W	0.29m N-S	0.28m		(1027)	R10/1377
1027	Fill		Greyish brown clayey silt, moderately compact; occasional Charcoal and shell. Glass and metal also found.					[1026]	R10/1377
1028	Cut	posthole	Rectangular in plan, vertical sides with a flat base. Posthole	0.47m E-W	0.32m N-S	0.14m	Part of out building	(1029)	R10/1377
1029	Fill		Greyish mid brown silt, moderately compact but friable; occ charcoal.					[1028]	R10/1377

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1030	Cut	posthole	Square with rounded corners in plan, with vertical sides and a flat base.	0.35m	0.32m	0.27m	Part of out building	(1031)	R10/1377
1031	Fill		Mottled mid-brown, grey, and orange silt. soft and friable; occ charcoal.				Part of out building	[1030]	R10/1377
1032	Cut	posthole	Rounded rectangle in plan, near vertical to vertical sides and a flat slightly sloping base. Posthole	0.59m NW-SE	0.46m NE-SW	0.25m in NE corner, 0.12m in SE corner	Part of out building	(1032)	R10/1377
1033	Fill		Mid brown silt mottled with mid yellowish-brown clayey silt, soft to moderately compact; A piece of ceramic found on surface. Fill of 1032				Part of out building	[1032] – see fig. 4-6	R10/1377
1034	Cut	posthole	Rectangular in plan, unexcavated. Posthole	0.18m E-W	0.15m N-S		Part of out building	(1035)	R10/1377
1035	Fill		Mid greyish brown silt, soft to moderately compact; light grey clay and degraded rock inclusions.				Part of out building	[1034]	R10/1377
1036	Cut	posthole	Rectangular in plan, vertical sides and flattish base. Posthole	0.38m NE-SW	0.27m NW-SE	0.35m	Part of out building	(1037)	R10/1377
1037	Fill		Mid brown clayey silt mottled with mid yellow brown clayey silt and light grey clay, moderately compact; freq rootlets. Fill of 1036				Part of out building	[1036]	R10/1377
1038	Cut	posthole		0.18	0.14		Part of out building		R10/1377
1039	Fill			0.18			Part of out building		R10/1377
1040	Cut	posthole	Rectangular in plan, unexcavated. Posthole	0.48	0.25			(1041)	R10/1377
1041	Fill		Dark brown mottled with yellow brown silt, moderately compact; glass shard found on surface.					[1042]	R10/1377
1042	Cut	posthole	Rectangular in plan, unexcavated. Posthole	0.24	0.23	Unexcavated	Square posthole	(1043)	R10/1377
1043	Fill		Mid greyish brown silt, moderately compact; clumps of light grey clay . Fill of 1042.					[1042]	R10/1377
1044	Cut	posthole	Square in plan, unexcavated. Square Posthole	0.20 E-W	0.19 N-S		Square posthole	(1045)	R10/1377
1045	Fill		Mid greyish brown silt, moderately compact; rare degraded rock					[1044]	R10/1377
1046	Cut	posthole	Rectangular posthole, unexcavated	0.55	0.40	unexcavated			R10/1377
1047	Fill		Mid-greyish brown silt						R10/1377

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1048	Cut	posthole	Rectangular in plan, Slope in slightly downwards, step on south side, flat base. Posthole?	0.6m N-S	0.3m E-W	0.42m in N, 0.08m deep in S		(1049) (1132) (1133)	R10/1377
1049	Fill		Yellowish brown and mid brown mottled silt, moderately compact; occasional rock and rootlets. Top Fill of 1048	0.6m N-S	0.3m E-W	0.08m deep	Top Fill	[1048]	R10/1377
1050	Cut	posthole	Rectangular in plan, unexcavated. Posthole	0.39m NE-SW	0.30m NW-SE		Square posthole, Deacons inn	(1051)	R10/1377
1051	Fill		Greyish brown silt, moderately compact; occasional charcoal.					[1050]	R10/1377
1052	Cut	posthole	Square posthole	0.30	0.28				R10/1377
1053	Fill		Greyish brown silt, moderately compact; occasional charcoal.						R10/1377
1054	Cut	posthole	Rectangular in plan, unexcavated. Posthole	0.41	0.32		Square posthole	(1055)	R10/1377
1055	Fill		Mid greyish brown mottled with mid yellowish brown silt, Moderately compact; frequent rock.					[1054]	R10/1377
1056	Cut	posthole	Square posthole.	0.32	0.28	0.15m	Large rectangular posthole	(1057)	R10/1377
1057	Fill		Mid greyish brown silt, moderately compact; occasional rocks and a piece of heavily corroded metal.					[1056]	R10/1377
1058	Cut	posthole	Rectangular in plan, unexcavated. Posthole	0.3m E-W	0.26m N-S		Rectangular posthole, historic	(1059)	R10/1377
1059	Fill		Mid to greyish brown mottled with yellow brown silt, moderately compact.					[1058]	R10/1377
1060	Cut	posthole	Square in plan, unexcavated. Square Posthole	0.23m NW-SE	0.21m NE-SW		Square posthole, truncated by root or rabbit hole in W corners	(1061)	R10/1377
1061	Fill		Mid greyish brown mottled with yellowish brown silt, moderately compact; occasional charcoal.					[1060]	R10/1377
1062	Cut	posthole	Rectangular in plan, unexcavated. Posthole	0.33m N-S	0.26 E-W		Rectangular posthole, historic	(1063)	R10/1377
1063	Fill		Dark brown silt, soft to moderately compact ; occasional rock (mudstone)				Rectangular posthole, historic	[1062]	R10/1377
1064	Cut	posthole	Square in plan, moderate slope on E, steep to near vertical on N & W. Posthole	0.27 E-W	0.25 N-S	0.16m	Rectangular posthole	(1065)	R10/1377
1065	Fill		Mid brown mottled with light grey and yellow brown silt, soft to moderately compact; mod rock (mudstone)					[1064]	R10/1377

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1066	Cut	posthole	Rectangular in plan, unexcavated. Posthole	0.30m N-S	0.27 E-W		Rectangular posthole, historic	(1067)	R10/1377
1067	Fill		Dark brown mottled with yellowish brown and light grey silt, soft to moderately compact; a ceramic sherd poking out of surface.					[1066]	R10/1377
1068	Cut	posthole	Rectangular posthole. Unexcavated	0.48	0.30		Posthole not euro, oval	(1069)	R10/1377
1069	Fill		Mid slightly greyish brown silt, moderately compact; occasional rock (mudstone)					[1068]	R10/1377
1070	Cut	posthole	Rectangular in plan, West and South sides slightly undercut, East slightly sloping. Posthole	0.34m N-S	0.33m E-W	0.15m?	Historic Posthole, Sample Numbers 17-18	(1071) (1123)	R10/1377
1071	Fill		Mid brown silt, moderately loose; occasional charcoal (sample 17) , nails (sample 18) , and rootlets. Central fill.				29cm E-W, sloping inwards to 15cm at base. In plan on surface of N half extends 10cm at surface, 4cm at base. Postpipe?	[1070]	R10/1377
1072	Cut	posthole	Rectangular in plan, unexcavated. Posthole	0.26	0.23		Square posthole	(1073)	R10/1377
1073	Fill		Dark brown silt, soft to moderately compact; occasional charcoal					[1072]	R10/1377
1074	Cut	posthole	Rectangular in plan, unexcavated, truncated by rabbit hole in SE corner. Posthole	0.36	0.30		Square posthole	(1075)	R10/1377
1075	Fill		Blackish brown mottled with light grey and yellowish brow silt, firm to moderately compact; frequent charcoal.					[1074]	R10/1377
1076	Cut	posthole	Square posthole	0.23	0.22				R10/1377
1077	Fill		Dark brown greyish silt.						R10/1377
1078	Cut	posthole	Sub Oval in plan, Sides are concave with steps and a concave base. Posthole?	0.55m NW-SE	0.32m across NW end, 0.38m across SE end	0.36m SE end, stepping up to 0.12m NW end	Māori posthole predates inn	(1079)	R10/1545
1079	Fill		Mid brown silt with large yellow and white silt patches, moderately compact; occasional rock and rootlets, with rare charcoal and pottery near surface. Fill of 1078				Māori posthole predates inn	[1078]	R10/1545
1080	Cut	posthole	Square in plan, vertical sides, and flat base. Truncated by [1082] in E corner. Posthole	0.28m N-S	0.28m E-W	0.6m	Square posthole with postpipe, crosscut/truncated in E corner by vaguely round [1082]	(1081) (1239)	R10/1377

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1081	Fill		Mid brown clayey silt, compact. Post pipe		0.26m	0.4m		[1080]	R10/1377
1082	Cut	pit	Sub Circular in plan, irregular/concave sides with an irregular to concave base. Truncates [1080] to West. Roundish hole?	0.26m	0.26m	0.08m	Māori posthole predates inn	(1083) (1240)	R10/1545
1083	Fill		Grey clay, compact; occasional rock. Top fill	0.26m	0.26m	0.03m	Māori posthole predates inn	[1082]	R10/1545
1084	Cut	posthole	Circular in plan, unexcavated. Posthole	0.24m	0.24m		Circular Posthole, Historic?? Glass on surface but...	(1085)	R10/1377
1085	Fill		Mottled mid greyish brown and light grey silt, soft to moderately compact; glass shard poking out of surface.					[1084]	R10/1377
1086	Cut	posthole	Rectangular in plan, unexcavated. Posthole	0.31m E-W	0.3m N-S		Square posthole	(1087)	R10/1377
1087	Fill		Mid greyish brown Silt mottled with light grey and yellow, moderately compact; rare charcoal flecks.					[1086]	R10/1377
1088	Cut	stakehole	Circular in plan, unexcavated. Stakehole	0.1m	0.1m		Stake hole, Very hard to see	(1089)	R10/1377
1089	Fill		Light greyish brown Silt with yellow mottles, firm to moderately compact.					[1088]	R10/1377
1090	Cut	posthole	Oval in plan, unexcavated, posthole	0.24m E-W	0.19 N-S		Oval Posthole historic?	(1091)	R10/1377
1091	Fill		Light greyish brown Silt with light grey and yellow mottles, firm to moderately compact; glass shard poking out of surface.					[1090]	R10/1377
1092	Cut	posthole	Cut of square posthole - unexcavated.	0.29	0.30				R10/1377
1093	Fill		Light greyish brown Silt with light grey and yellow mottles, firm to moderately compact. Fill of posthole 1092.						R10/1377
1094	Cut	posthole	Oval in plan, unexcavated, posthole	0.3m E-W	0.28M N-S		Oval Posthole	(1095)	R10/1377
1095	Fill		Mid greyish brown silt, moderately compact; 1 root, occasional charcoal flecks.					[1094]	R10/1377
1096	Cut	posthole	Rectangular in plan, near vertical-to-vertical sides, with a flat base. Posthole	0.38m E-W	0.33m N-S	0.14m	Square posthole	(1097)	R10/1377
1097	Fill		Dark greyish brown clayey silt, moderately compact; glass shards, bottle chunks (black), ceramic sherds, rusty metal, pipe stem pieces, a gizzard stone and charcoal.					[1096]	R10/1377

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1098	Cut	posthole	Rectangular in plan, unexcavated. Posthole	0.43	0.32	Unexcavated	Rectangular posthole, historic	(1099)	R10/1377
1099	Fill		Mid greyish brown Silt, soft to moderately compact; ceramic, metal, glass.					[1098]	R10/1377
1100	Cut	post	Rectangular in plan, unexcavated, rabbit hole or root in NW corner. Posthole	0.44m N-S	0.37m E-W		Rectangular posthole, historic	(1101)	R10/1377
1101	Fill		Mid brownish grey Silt with light greyish and yellow mottles, moderately compact; occasional rock.					[1100]	R10/1377
1102	Cut	post	Rectangular in plan, unexcavated. Posthole	0.37m N-S	0.34m E-W		Rectangular posthole, historic	(1103)	R10/1377
1103	Fill		Mid greyish brown Silt, firm to moderately compact.					[1102]	R10/1377
1104	Cut	post	Rectangular in plan, unexcavated. Posthole	0.44m E-W	0.42m N-S		Rectangular posthole, historic	(1105)	R10/1377
1105	Fill		Mid greyish brown Silt with yellow mottles, moderately compact; degraded rock, frequent mudstone					[1104]	R10/1377
1106	Cut	posthole	Rectangular in plan, unexcavated, truncated by tree root in S corner. Posthole	0.38m NE-SW	0.27m NW-SE		Rectangular posthole, historic	(1107)	R10/1377
1107	Fill		Slightly greyish dark brown Silt with light grey and yellowish brown mottles, Moderately compact; occasional charcoal.					[1106]	R10/1377
1108	cut	posthole	Rectangular posthole, unexcavated	0.36	0.30				R10/1377
1109	fill		Mid brownish grey Silt with light greyish and yellow mottles, moderately compact; occasional rock.						R10/1377
1110	Cut	posthole	Teardrop shaped in plan, sides are uneven and slightly sloping inwards then undercut, with a concave base. Posthole	0.34m N-S	0.22m across S end, 0.16m across N end	0.52m deep in center & S end, 0.36m deep at N end	Teardrop hole	(1111) (1212)	R10/1545
1111	Fill		Grey clay, compact. Top fill			Surface to 0.08m		[1110]	R10/1545
1112	Cut	posthole	Square posthole	0.36	0.35		Square posthole, historic	(1113)	R10/1377
1113	Fill		Mid greyish brown silt mottled with yellowish brown and light grey, moderately compact.					[1112]	R10/1377

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1114	cut	posthole	rectangular post	0.43	0.36				R10/1377
1115	fill		Grey clay, compact.						R10/1377
1116	Cut	posthole	Square in plan, unexcavated. Square Posthole	0.25m E-W	0.20m N-S		Square posthole with [1016] in a NW-SE direction. Slightly more vertically truncated	(1117)	R10/1377
1117	Fill		Mottled yellow and brown silty clay, compact; brown specks					[1116]	R10/1377
1118	Fill		Dark brown slightly clayey silt, soft to moderately compact; rootlets, rare charcoal. Post pipe fill		0.09m	0.09mbs-0.48mbs		[1002]	R10/1377
1119	Fill		Mottled Dark and light brown clayey silt with yellowish clay, moderately compact; frequent rootlets. West of (1118). Lens		0.44m	0.1mbs-0.2mbs		[1002]	R10/1377
1120	Fill		Mottled greyish brown clayey silt and yellowish clay, moderate - firm compaction. Main fill			0.1mbs-base on E side of [1118], 0.2mbs-base on W side		[1002]	R10/1377
1121	Cut	posthole	Oval in plan, steep sides and concave base. Posthole	0.38m E-W	0.32m N-S	0.15m		(1122)	R10/1545
1122	Fill		Dark brown clayey silt, moderately compact; mudstone and rootlets.					[1121]	R10/1545
1123	Fill		Light yellowish orange clay, compact; rootlets. Outer Fill				In section 2 cm on east surface and 5cm at base, 5cm on west surface and 1cm on base	[1070]	R10/1377
1124	Cut	oven	Circular in plan, concave sides and flattish to concave base, truncated by posthole [1130]. Oven/hangi.	1.23m	1.23m	0.03-0.08m	Circular fire pit truncated by historic posthole [1130], Sample 19	(1125)	R10/1545
1125	Fill		Mid brown silt, moderately loose; frequent FCR and charcoal (Sample 19), rootlets. Fill of 1124. Sample 19					[1124]	R10/1545
1126	Cut	oven/hangi	Oval in plan, 45° smooth sides and flattish base. Oven/hangi	1.12m N-S	1.08m E-W	0.10m	Oven/firescoop, vertically truncated probably when the land was cleared / levelled for the construction of Deacons inn	(1127)	R10/1545
1127	Fill		Dark greyish brown Silt, loose compaction; frequent heat fractured rock, moderate charcoal and root action.					[1126]	R10/1545

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1128	Cut	oven	Sub oval in plan, steep side and concave base. Firescoop	0.84m N-S	0.73m E-W	0.09m	Firescoop/oven vertically truncated as [1126]	(1129)	R10/1545
1129	Fill		Brownish grey silt, sub-circular(what?); occasional charcoal, heat fractured rock, and rootlets.					[1128]	R10/1545
1130	Cut	posthole	Square in plan, vertical sides and a flat base with slight dent in SW corner. Cuts into firepit [1124]. Posthole	0.28m N-S	0.28m E-W	0.14m	Historic posthole cut through fire pit.	(1131)	R10/1377
1131	Fill		Dark brown Silt, loose to moderately compact; occasional charcoal, a piece of metal. Fill of 1130					[1130]	R10/1377
1132	Fill		Yellowish brown clay with mid brown silt and white clay mottling that transitions to mostly white clay at base, moderately compact; contains (1133). Lower Fill of 1048			0.08mbs - 0.42m	lower fill	[1048]	R10/1377
1133	Fill		Mid brown silt, loose to moderately compact. Post Pipe in 1048		0.11m at top, 0.08m at base	0.08mbs-0.36m deep	post pipe	[1048]	R10/1377
1134	Cut	posthole	Square in plan, unexcavated. Truncated by root. Square Posthole. No listed orientation	0.25m N-S	0.25m E-W		Square posthole, historic. with ceramic inclusions-related o 19th century. Cut for ph - blown cut on the south side	(1135)	R10/1377
1135	Fill		Dark brown to black Silt, moderately compact; frequent charcoal flecks, ceramic					[1134]	R10/1377
1136	Cut	posthole	Rectangular in plan, unexcavated. Posthole	0.27m N-S	0.23m E-W		Historic rectangular posthole, see [1140] for posthole line	(1137)	R10/1377
1137	Fill		Dark brown Silt mottled with yellow, soft to moderately compact; 1 ceramic sherd from cleaning.					[1136]	R10/1377
1138	Cut	beamslot	Rectilinear in plan, concave sides, and an uneven base dipping at N end.	0.56m N-S	0.12m E-W across S, 0.18m E-W across N	unstated	beamslot	(1139)	R10/1377
1139	Fill		Dark brown Silt with mid brown mottling, moderately compact; occasional rock, 1 piece of pottery, pipe stem, metal, and charcoal found near surface of S end.				beamslot	[1138]	R10/1377

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1140	Cut	posthole	Square in plan, unexcavated, slightly vertically truncated on W side. Posthole	0.25m N-S	0.25m E-W		Square Historic posthole adjacent NE of [1060] in line with [1058], [1136], and [1042] in a ~E-W direction.	(1141)	R10/1377
1141	Fill		Greyish brown silty clay, moderately compact; flecks of charcoal and degraded rock.					[1140]	R10/1377
1201	Cut	post	Square posthole.	0.44m N-S	0.37m E-W		Firescoop		R10/1377
1202	Fill		Greyish brown silty clay, moderately compact; flecks of charcoal and degraded rock.				Oval posthole, probably non european. Blown out on N side	(1144)	R10/1377
1144	Fill		Mid greyish brown silt, moderately compact but friable; occasional degraded rock, small pebbles, and charcoal flecks.					[1143]	R10/1545
1145	Cut	posthole	Rectangular in plan, unexcavated truncated by [1052] in NE corner. Posthole	0.42m N-S	0.40m E-W		Rectangular Historic posthole,	(1146)	R10/1377
1146	Fill		Mid greyish brown Silt with yellow mottles, moderately compact; rare rock					[1045]	R10/1377
1147	Cut	posthole	Rectangular posthole, unexcavated	0.46	0.39	0.14m		(1148)	R10/1377
1148	Fill		Dark brown Silt, moderately compact.					[1147]	R10/1377
1149	Cut	posthole	Oval in plan, unexcavated, posthole	0.5m N-S	0.35m E-W		Oval shaped posthole- could be a very small bin pit. Slightly more vertically truncated	(1150)	R10/1545
1150	Fill		Greyish mid brown Silt, moderately compact; infrequent charcoal flecks.					[1149]	R10/1545
1151	Cut	posthole	Sub rectangular in plan, unexcavated and blown out on N-W side. Posthole	0.29m N-S	0.17m E-W		Square post hole blown out on the N-W side. Slightly more vertically truncated	(1152)	R10/1377
1152	Fill		Mid brown Silt, moderately compact; flecks of charcoal					[1151]	R10/1377
1153	Cut	posthole	square posthole. Part of Deacon's Inn						R10/1377
1154	Fill								R10/1377
1155	Cut	posthole	square posthole. Part of Deacon's Inn						R10/1377
1156	Fill								R10/1377

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1157	Cut	posthole	Rectangular in plan, unexcavated. Posthole no orientation mentioned	0.42	0.34		Square posthole probably related to deacons inn. Slightly more vertically truncated	(1158)	R10/1377
1158	Fill		Mid brown Silt, moderately compact; flecks of charcoal					[1157]	R10/1377
1159	Cut	posthole	Sub circular in plan, unexcavated. Truncated in west by root. Posthole	0.21m E-W	0.20m N-S		Posthole with western root intrusion	(1160)	R10/1545
1160	Fill		Mid greyish brown Silt mottled with yellow, moderately compact; occasional rock and degraded rock.					[1159]	R10/1545
1161	Cut	stakehole	Sub circular in plan, unexcavated. Post/Stakehole	0.15m E-W	0.12m N-S		Small posthole or stakehole. Slightly more vertically truncated	(1162)	R10/1545
1162	Fill		Mid brown Silt, moderately compact; flecks of charcoal					[1161]	R10/1545
1163	Cut	post and board slot	Circular with linear western extension in plan, steep to near vertical side and concave base. Post and board	P: 0.20m N-S, B: 0.6m E-W	P:0.20m E-W, B: 0.10m N-S	P: 0.09m, B: 0.05m	Post and board slot	(1164)	R10/1545
1164	Fill		Dark brown Silt, soft compaction.					[1163]	R10/1545
1165	Cut	bin pit	Oval in plan, steep sides and an irregular base with posthole in one end. Bin pit	1.55m N-S	0.5m E-W	0.11m at half section, 0.32m in posthole	Narrow bin pit	(1166)	R10/1545
1166	Fill		Mid brown clayey Silt with patches of dark greyish brown clayey Silt, moderate to firm compaction; rare charcoal, occasional mudstone and rootlets.					[1165]	R10/1545
1167	Cut	posthole	rectangular posthole. Part of Deacon's Inn						R10/1377
1168	Fill								R10/1377
1169	Cut	pit?	Oval in plan, concave? sides and concave base. No interpretation	0.58m E-W	0.32m NW-SE, 0.20m across S end, 0.23m across NW end	0.34m	Natural in base was unusually soft, maybe due to rain post excavation.	(1170) (1209)	R10/1545
1170	Fill		Mid brown Silt, moderately compact; occasional rootlets. Upper fill			0.06m	Upper fill	[1169]	R10/1545

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1171	Cut	posthole	Rounded triangle in plan, unexcavated. Posthole	0.26m N-S	0.25m E-W		Posthole	(1172)	R10/1377
1172	Fill		Mid brown Silt, moderately compact.					[1171]	R10/1377
1173	Cut	posthole	Oval in plan, steep on W side, 45 degrees on E. the base slopes to the west. Stakehole/ small posthole.	0.12m N-S	0.1m E-W	0.04m	Truncated base of stakehole /small posthole. Probably truncated by works related to construction of Deacons inn	(1174)	R10/1545
1174	Fill		Greyish mid brown Silt, moderately compact; occasional charcoal.					[1173]	R10/1545
1175	Cut	posthole	Round, concave sides, oven.	0.90	0.80	0.30		1176	R10/1545
1176	Fill		Fill of 1175. Moderate charcoal, mid brown silt.				Oven	1175	R10/1545
1177	Cut	posthole	Square in plan, unexcavated. Posthole, blown out N corner	0.34m E-W	0.32m N-S		Square posthole blown out north corner	(1178)	R10/1377
1178	Fill		Dark brown silt mottled with yellow, moderately compact; occasional charcoal flecks.					[1177]	R10/1377
1179	Cut	posthole	Square in plan, unexcavated but truncated by root on northern side. Posthole	0.29m N-S	0.29m E-W		Square posthole truncated northern side by root action	(1180)	R10/1377
1180	Fill		Greyish yellow silt, compact; degraded rock					[1179]	R10/1377
1181	Cut	posthole	Sub rectangular in plan, unexcavated. Posthole	0.37m E-W	0.30m N-S		Rectangular posthole probably associated with post-contact activity - Inn? Slightly vertically truncated	(1182)	R10/1545
1182	Fill		Greyish brown Silt, compacted; degraded rock less than 5cm.					[1181]	R10/1545
1183	Cut	posthole	Square in plan, unexcavated. Posthole	0.19m NW-SE	0.17m NE-SW		Square posthole with possible postpipe in the middle. Slightly vertically truncated	(1184)	R10/1545
1184	Fill		Mid brown Silt, moderately compact; charcoal flecks.					[1183]	R10/1545
1185	Cut	posthole	Square in plan, unexcavated. Posthole	0.2m N-S	0.2m E-W		unexcavated square posthole	(1186)	R10/1377
1186	Fill		Mid brown Silt, moderately loose.					[1185]	R10/1377
1187	Cut	posthole	square posthole. Part of Deacon's Inn						R10/1377

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1188	Fill								R10/1377
1189	Cut	posthole	Sub circular in plan, vertical to short sloping sides and a concave to flattish base. Possible posthole	0.24m N-S	0.24m E-W	0.46m	Possible posthole shape and abundance of charcoal indicates association with Māori. Slightly vertically truncated	(1190)	R10/1545
1190	Fill		Black to mid brown silty clay, moderately compact; abundant charcoal lumps.					[1189]	R10/1545
1191	Cut	stakehole	Sub circular in plan, vertical sides and flattish base. Stakehole	0.14m E-W	0.11m N-S	0.24m	stakehole probably truncating [1140], slightly vertically truncated.	(1192)	R10/1545
1192	Fill		Mid brown Silt, moderately compact; flecks of charcoal.					[1191]	R10/1545
1193	Cut	posthole	square posthole. Part of Deacon's Inn						R10/1377
1194	Fill								R10/1377
1195	Cut	posthole	Rectangular in plan, vertical sides and a flat base with a small indent in centre. Posthole	0.3m N-S	0.26m E-W	0.17m at N&E, 0.27m at centre and west	posthole with postpipe	(1196)	R10/1377
1196	Fill		Mottled Mid brown and dark brown clayey Silt, moderately compact; occasional charcoal near surface and rootlets.					[1195]	R10/1377
1197	Cut	posthole	Square in plan, unexcavated. Posthole	0.36m N-S	0.3m E-W		Square posthole, historic	(1198)	R10/1377
1198	Fill		Mid greyish brown Silt with yellow mottles, moderately compact; rare charcoal chunks					[1197]	R10/1377
1199	Cut	posthole	Square in plan, unexcavated. Posthole	0.44m E-W	0.42m N-S		Square posthole historic, southern most post of a N-S line of postholes, the other four are in the reserve and are not numbered	(1200)	R10/1377
1200	Fill		Greyish mid brown Silt with yellow mottles, moderately compact; occasional degraded rock.					[1199]	R10/1377

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1203	Cut	posthole	Sub rectangular/pentagonal in plan, steep to near vertical sides and flatish base. Posthole	0.54m N-S	0.32m E-W at ends, 0.37m across centre	0.08m at centre, 0.11m at N side	Rectangular posthole	(1204)	R10/1377
1204	Fill		Mid to dark brown Silt with yellowish brown mottles, moderately compact; rootlets and occasional small roots.					[1203]	R10/1377
1205	Cut	posthole	Sub rectangular/pentagonal in plan, steep to near vertical sides and flatish base. Posthole	0.54m N-S	0.32m E-W at ends, 0.37m across centre	0.08m at centre, 0.11m at N side	Rectangular posthole	1206	R10/1377
1206	Fill		Mid to dark brown Silt with yellowish brown mottles, moderately compact; rootlets and occasional small roots.					1205	R10/1377
1207	Fill		Yellowish-brown clay with patches of mid and light brown silt, firm compaction; frequent rootlets. Main fill			0.7mbs to base		[1008]	R10/1377
1208	Fill		Dark brown silt, soft compaction; frequent rootlets. Starts 0.3m from south side. Post pipe fill		0.15m at top, 0.1m at base	0.10mbs to 0.48mbs		[1008]	R10/1377
1209	Fill		Dark brown Silt in SE gradually becoming lighter moving NW, moderately loose; occasional charcoal, partially burnt wood, and rootlets. Lower fill			0.06m below surface to 0.34m below surface	lower fill	[1169]	R10/1377
1210	Cut	post and board slot	Circular with sub rectangular extension in plan. Steep sides in posthole, long sloping in board slot, concave bases. Post and board slot	0.67m NE-SW	0.19m NW-SE and posthole, 0.1m NW-SE at board slot	not recorded	Post and board slot, but possibly rabbit	(1211)	R10/1545
1211	Fill		Greyish mid brown Silt, soft to moderately compact; rootlets and rare charcoal.					[1210]	R10/1545
1212	Fill		Mid brown clayey silt, moderately compact at top to loose at base; occasional charcoal, wood and bark at bottom. Lower fill			from 0.08m to base		[1110]	R10/1545
1213	Cut	firescoop	Oval in plan, gently sloping sides to a concave base. Fire scoop	1.05m N-S	0.94m E-W	0.18m	Fire scoop with root intrusion in base of pit.	(1214)	R10/1545

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1214	Fill		Greyish black silt, soft to moderately compact; oven stones and abundant charcoal.					[1213]	R10/1545
1215	Cut	posthole	square posthole. Part of Deacon's Inn						R10/1377
1217	Cut	posthole	Square in plan, unexcavated. Posthole	0.36m N-S	0.3m E-W		Square posthole, historic	1218	R10/1377
1218	Fill		Mid greyish brown Silt with yellow mottles, moderately compact; rare charcoal chunks					1217	R10/1377
1219	1162	firescoop	firescoop					1220	R10/1545
1220	1163		Fill		P: 0.20m N-S, B: 0.6m E-W	P:0.20m E-W, B: 0.10m N-S		1219	R10/1545
1221	Cut	posthole	Square in plan, unexcavated. Posthole	0.36m N-S	0.3m E-W		Square posthole, historic	1221	R10/1377
1222	Fill		Mid greyish brown Silt with yellow mottles, moderately compact; rare charcoal chunks					1220	R10/1377
1223	Cut	firescoop	suboval firescoop					1223	R10/1545
1224	Fill		Mid brown clay silt with charcoal.					1224	R10/1545
1225	Fill							1223	R10/1377
1226	Cut	posthole	square posthole. Part of Deacon's Inn					1227	R10/1377
1227	Fill							1226	R10/1377
1228	Cut	posthole	square posthole. Part of Deacon's Inn					1229	R10/1377
1229	Fill							1228	R10/1377
1230	Cut	posthole	square posthole. Part of Deacon's Inn					1231	R10/1377
1231	Fill							1230	R10/1377
1232	cut	beamslot	elongated beam slot						R10/1377
1233	Cut	firescoop	Oval firescoop					1234	R10/1545
1234	Fill		fill of 1233					1233	R10/1545
1235	Cut	post	posthole					1236	R10/1377
1236	Fill		fill					1235	R10/1377
1237	Cut	post	Oval in plan, vertical side and a slightly concave base. Posthole	0.21m N-S	0.17m E-W	0.27m	Round posthole	(1238)	R10/1545
1238	Fill		Mid brown Silt with white and yellow clay lumps, moderately compact; occasional rocks and rootlets					[1237]	R10/1545

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1239	Fill		Pale yellow silty clay with brown mottling, moderately compact. Outer fill				Mostly in W corner of section, extends 2cm in, and curves below 10cm of (1081).	[1080]	R10/1545
1240	Fill		Mottled light yellow and light brown silty clay, moderately compact. Lower fill [1082]			0.05-0.08m		[1082]	R10/1545
1241	Cut	drainage ditch	Linear in plan (drain-like) with regular edges not perfectly straight with a bend partway across the excavation area. The sides taper but not in a perfectly symmetrical way with the east side more sloping and the west more vertical but steep each side. The base is fairly flat. Big drain/ditch	~35m N-S as of excavated area but probably extends a bit further,	~0.42m wide at top, ~0.22m wide at base	~0.4m measured from bottom of topsoil.	Ditch	(1242) (1243)	R10/1548
1242	Fill		Grey and yellow Mottled Silt lumps, moderately compact; frequent glass and ceramic, occasional charcoal and metal. Upper fill/ backfill		~0.42m	~0.31m	Fill with probably unstratified historic material - BBB - glass, green ceramic, and metal. Probably rapid backfill of drain indicated by thickness of the layer. Drain/Ditch no longer needed so rapidly backfilled	[1241]	R10/1548
1243	Fill		Greyish brown silt, firm but friable; occasional lumps of clay and degraded rock. Bottom Fill/Silt Accumulation		~0.22m	~0.03m to 0.05m thick starting ~0.31m deep	Silt accumulation fill, probably related to use through time	[1241]	R10/1548
1244	Cut	post and board slot	Boardslot	0.18	0.16			1245	R10/1545
1245	Fill		Fill of 1244	Not Measured	Not measured	n/a		1244	R10/1545
1246	Cut			Not Measured	Not measured	n/a			
1247	cut	posthole	Square posthole	Not Measured	Not measured	n/a		1248	R10/1377
1248	fill		Fill of 1247	Not Measured	Not measured	n/a		1247	R10/1377
1249	cut	firescoop	Oval firescoop	Not Measured	Not measured	n/a		1250	R10/1545
1250	fill		fill of 1249	Not Measured	Not measured	n/a		1249	R10/1545

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1251	cut	stakehole	Small stakehole	Not Measured	Not measured	n/a		1251	R10/1545
1252	fill		fill of 1251	Not Measured	Not measured	n/a		1251	R10/1545
1253	Cut	firescoop	sub oval firescoop.	Not Measured	Not measured	n/a		1254	R10/1545
1254	Fill		Fill or 1253	Not Measured	Not measured	n/a		1253	R10/1545
1255	Cut	pit?	suboval pit possibly bin pit	Not Measured	Not measured	n/a		1256	R10/1545
1256	Fill		fill of 1255	Not Measured	Not measured	n/a		1255	R10/1545
1257	Cut	stakehole	small stakehole.	Not Measured	Not measured	n/a		1258	R10/1545
1258	Fill		fill of 1257	Not Measured	Not measured	n/a		1257	R10/1545
1259	cut	oven	partial oven, extended into reserve area.	Not Measured	Not measured	n/a		1260	R10/1545
1260	fill		fill of 1259	Not Measured	Not measured	n/a		1259	R10/1545
1261	cut	posthole	square posthole	Not Measured	Not measured	n/a		1262	R10/1377
1262	fill		fill of 1261	Not Measured	Not measured	n/a		1261	R10/1377
1263	cut	posthole	square posthole	Not Measured	Not measured	n/a		1264	R10/1377
1264	fill		fill of 1263	Not Measured	Not measured	n/a		1263	R10/1377
1265	cut	posthole	square posthole	Not Measured	Not measured	n/a		1266	R10/1377
1266	fill		fill of 1265	Not Measured	Not measured	n/a		1265	R10/1377

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1267	cut	posthole	square posthole	Not Measured	Not measured	n/a		1268	R10/1377
1268	fill		fill of 1267	Not Measured	Not measured	n/a		1267	R10/1377
1269	cut	pit	oval in plan.	Not Measured	Not measured	n/a		1270	R10/1545
1270	Fill		fill of 1268	Not Measured	Not measured	n/a		1269	R10/1545
1271	cut	posthole	ovalish round posthole	Not Measured	Not measured	n/a		1272	R10/1545
1272	Fill		fill of 1271	Not Measured	Not measured	n/a		1271	R10/1545
1273	cut	posthole	round posthole	Not Measured	Not measured	n/a		1274	R10/1545
1274	Fill		fill of 1273	Not Measured	Not measured	n/a		1273	R10/1545
1275	cut	pit	oval in plan	Not Measured	Not measured	n/a		1276	R10/1545
1276	Fill		fill of 1275	Not Measured	Not measured	n/a		1275	R10/1545
1277	cut	posthole	square large posthole	Not Measured	Not measured	n/a		1278	R10/1377
1278	Fill		fill of 1277	Not Measured	Not measured	n/a		1277	R10/1377
1279	cut	posthole	partial square posthole. Extends into reserve and not excavated.	Not Measured	Not measured	n/a		1280	R10/1377
1280	Fill		fill of 1279	Not Measured	Not measured	n/a		1279	R10/1377
1281	cut	stakehole	triangular stake hole, associated with 1283	Not Measured	Not measured	n/a		1282	R10/1377
1282	Fill		fill of 1281	Not Measured	Not measured	n/a		1281	R10/1377
1283	cut	stakehole	triangular stake hole, associated with 1281	Not Measured	Not measured	n/a		1284	R10/1377
1284	Fill		fill of 1283	Not Measured	Not measured	n/a		1283	R10/1377
1285	cut	6x postholes in group	Context group - 6 square postholes clustered together.	Not Measured	Not measured	n/a		1286	R10/1377

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1286	Fill	fills of group 1285	fills of context group 1285	Not Measured	Not measured	n/a		1285	R10/1377
1287	cut	5x postholes in group	Context group - 5 square postholes of out building	Not Measured	Not measured	n/a		1288	R10/1377
1288	Fill	fills of group 1287	fill of 1287	Not Measured	Not measured	n/a		1287	R10/1377
1289	cut	posthole	roundish posthole	Not Measured	Not measured	n/a		1290	R10/1545
1290	fill		fill of 1289	Not Measured	Not measured	n/a		1289	R10/1545
1291	cut	post and board	elongated pit for board slot	Not Measured	Not measured	n/a		1292	R10/1545
1292	fill		fill of 1291	Not Measured	Not measured	n/a		1291	R10/1545
1293	cut	board and slot	posthole with board slot	Not Measured	Not measured	n/a		1294	R10/1545
1294	Fill		fill of 1293	Not Measured	Not measured	n/a		1293	R10/1545
1295	cut	firescoop	small firescoop next to 1293	Not Measured	Not measured	n/a		1296	R10/1545
1296	Fill		fill of 1295	Not Measured	Not measured	n/a		1295	R10/1545
1297	cut	posthole	round posthole	Not Measured	Not measured	n/a		1298	R10/1545
1298	Fill		fill of 1297	Not Measured	Not measured	n/a		1297	R10/1545
1299	cut	posthole	large square posthole	Not Measured	Not measured	n/a		1300	R10/1377
1300	Fill		fill of 1299	Not Measured	Not measured	n/a		1299	R10/1377
1301	cut	posthole	small square posthole	Not Measured	Not measured	n/a		1302	R10/1377
1302	fill		fill of 1301	Not Measured	Not measured	n/a		1301	R10/1377
1303	cut	posthole	square posthole	Not Measured	Not measured	n/a		1304	R10/1377
1304	Fill		fill of 1303	Not Measured	Not measured	n/a		1303	R10/1377

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1305	cut	posthole	square posthole	Not Measured	Not measured	n/a		1306	R10/1377
1306	Fill		fill of 1305	Not Measured	Not measured	n/a		1305	R10/1377
1307	cut	posthole	square posthole	Not Measured	Not measured	n/a		1308	R10/1377
1308	Fill		fill of 1307	Not Measured	Not measured	n/a		1307	R10/1377
1309	cut	posthole	oval posthole	Not Measured	Not measured	n/a		1310	R10/1545
1310	Fill		fill of 1309	Not Measured	Not measured	n/a		1309	R10/1545
1311	cut	posthole	oval posthole	Not Measured	Not measured	n/a		1312	R10/1545
1312	fill		fill of 1311	Not Measured	Not measured	n/a		1311	R10/1545
1313	cut	posthole	oval posthole	Not Measured	Not measured	n/a		1314	R10/1545
1314	fill		fill of 1313	Not Measured	Not measured	n/a		1313	R10/1545
1315	cut	posthole	oval posthole	Not Measured	Not measured	n/a		1316	R10/1545
1316	Fill		fill of 1315	Not Measured	Not measured	n/a		1315	R10/1545
1317	cut	posthole	oval posthole	Not Measured	Not measured	n/a		1318	R10/1545
1318	Fill		fill of 1317	Not Measured	Not measured	n/a		1317	R10/1545
1319	cut	posthole	oval posthole	Not Measured	Not measured	n/a		1320	R10/1545
1320	Fill		fill of 1319	Not Measured	Not measured	n/a		1319	R10/1545
1321	cut	firescoop	oval shaped firescoop	Not Measured	Not measured	n/a		1322	R10/1545
1322	fill		fill of 1321	Not Measured	Not measured	n/a		1321	R10/1377
1323	cut	posthole	square posthole	Not Measured	Not measured	n/a		1324	R10/1377

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1324	fill		fill of 1323	Not Measured	Not measured	n/a		1323	R10/1377
1325	cut	posthole	square posthole	Not Measured	Not measured	n/a		1326	R10/1377
1326	fill		fill of 1326	Not Measured	Not measured	n/a		1325	R10/1377
1327	cut	posthole	squarish posthole	Not Measured	Not measured	n/a		1328	R10/1377
1328	fill		fill of 1327	Not Measured	Not measured	n/a		1327	R10/1377
1329	cut	posthole	square posthole	Not Measured	Not measured	n/a		1330	R10/1377
1330	fill		fill of 1329	Not Measured	Not measured	n/a		1329	R10/1377
1331	cut	posthole	square posthole	Not Measured	Not measured	n/a		1332	R10/1377
1332	fill		fill of 1331	Not Measured	Not measured	n/a		1331	R10/1377
1333	cut	posthole	square posthole	Not Measured	Not measured	n/a		1334	R10/1377
1334	fill		fill of 1333	Not Measured	Not measured	n/a		1333	R10/1377
1335	cut	posthole	square posthole	Not Measured	Not measured	n/a		1336	R10/1377
1336	fill		fill of 1335	Not Measured	Not measured	n/a		1335	R10/1377
1337	cut	posthole	round posthole	Not Measured	Not measured	n/a		1338	R10/1545
1338	fill		fill of 1337	Not Measured	Not measured	n/a		1337	R10/1545
1339	cut	posthole	oval posthole	Not Measured	Not measured	n/a		1340	R10/1545
1340	fill		fill of 1339	Not Measured	Not measured	n/a		1339	R10/1545
1341	cut	posthole	oval posthole	Not Measured	Not measured	n/a		1342	R10/1545
1342	fill		fill of 1340	Not Measured	Not measured	n/a		1341	R10/1545

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1343	cut	posthole	square posthole	Not Measured	Not measured	n/a		1344	R10/1377
1344	fill		fill of 1343	Not Measured	Not measured	n/a		1343	R10/1377
1345	cut	posthole	sqaure posthole	Not Measured	Not measured	n/a		1346	R10/1548
1346	fill		fill of 1345	Not Measured	Not measured	n/a		1345	R10/1548
1347	cut	stakehole	small stakehole	Not Measured	Not measured	n/a		1348	R10/1545
1348	fill		fill of 1347	Not Measured	Not measured	n/a		1347	R10/1545
1349	cut	stakehole	small stakehole	Not Measured	Not measured	n/a		1350	R10/1545
1350	fill		fill of 1349	Not Measured	Not measured	n/a		1349	R10/1545
1351	cut	stakehole	small stakehole	Not Measured	Not measured	n/a		1352	R10/1545
1352	fill		fill of 1351	Not Measured	Not measured	n/a		1351	R10/1545
1353	cut	stakehole	small stakehole	Not Measured	Not measured	n/a		1354	R10/1545
1354	fill		fill of 1353	Not Measured	Not measured	n/a		1553	R10/1545
1355	cut	posthole	Square posthole	Not Measured	Not measured	n/a		1356	R10/1548
1356	fill		fill of 1355	Not Measured	Not measured	n/a		1355	R10/1548
1357	cut	posthole	Square posthole	Not Measured	Not measured	n/a		1358	R10/1548
1358	fill		fill of 1357	Not Measured	Not measured	n/a		1358	R10/1548
1359	cut	posthole	Square posthole	Not Measured	Not measured	n/a		1360	R10/1548
1360	fill		fill of 1359	Not Measured	Not measured	n/a		1359	R10/1548
1361	cut	posthole	Square posthole	Not Measured	Not measured	n/a		1362	R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1362	fill		fill of 1361	Not Measured	Not measured	n/a		1361	R10/1548
1363	cut	posthole	Square posthole	Not Measured	Not measured	n/a		1364	R10/1548
1364	fill		fill of 1363	Not Measured	Not measured	n/a		1363	R10/1548
1365	cut	posthole	square posthole	Not Measured	Not measured	n/a		1366	R10/1548
1366	fill		fill of 1365	Not Measured	Not measured	n/a		1365	R10/1548
1367	cut	posthole	oval posthole	Not Measured	Not measured	n/a		1368	R10/1545
1368	fill		fiill of 1367	Not Measured	Not measured	n/a		1367	R10/1545
1369	cut	posthole	round posthole	Not Measured	Not measured	n/a		1370	R10/1545
1370	fill		fill of 1369	Not Measured	Not measured	n/a		1369	R10/1545
1371	cut	posthole	square posthole	Not Measured	Not measured	n/a		1372	R10/1545
1372	fill		fill of 1371	Not Measured	Not measured	n/a		1371	R10/1545
1373	cut	posthole	round posthole	Not Measured	Not measured	n/a		1374	R10/1545
1374	fill		fill of 1373	Not Measured	Not measured	n/a		1373	R10/1545
1375	cut	posthole	round posthole	Not Measured	Not measured	n/a		1376	R10/1545
1376	fill		fill of 1375	Not Measured	Not measured	n/a		1375	R10/1545
1377	cut	boardslot	elongated board slot	Not Measured	Not measured	n/a		1378	R10/1545
1378	fill		fill of 1377	Not Measured	Not measured	n/a		1377	R10/1545
1379	cut	posthole	round posthole	Not Measured	Not measured	n/a		1380	R10/1545
1380	fill		fill of 1379	Not Measured	Not measured	n/a		1379	R10/1545

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
1381	cut	posthole	square posthole	Not Measured	Not measured	n/a		1383	R10/1377
1382	fill		fill of 1381	Not Measured	Not measured	n/a		1382	R10/1377
1383	cut	posthole	square posthole	Not Measured	Not measured	n/a		1384	R10/1377
1384	fill		fill of 1383	Not Measured	Not measured	n/a		1383	R10/1377
1385	cut	posthole	square posthole	Not Measured	Not measured	n/a		1386	R10/1377
1386	fill		fill of 1385	Not Measured	Not measured	n/a		1385	R10/1377
1387	cut	posthole	square posthole	Not Measured	Not measured	n/a		1388	R10/1377
1388	fill		fill of 1387	Not Measured	Not measured	n/a		1387	R10/1377
1389	cut	posthole	square posthole	Not Measured	Not measured	n/a		1390	R10/1377
1390	fill		fill of 1389	Not Measured	Not measured	n/a		1389	R10/1377
1391	cut	posthole	square posthole	Not Measured	Not measured	n/a		1392	R10/1377
1392	fill		fill of 1391	Not Measured	Not measured	n/a		1391	R10/1377
1393	cut	posthole	square posthole	Not Measured	Not measured	n/a		1394	R10/1377
1394	fill		fill of 1393	Not Measured	Not measured	n/a		1393	R10/1377
2000	Layer	Topsoil	Loose dark brown to brownish black silt with high organic content; frequent roots, frequent roots, and occasional midden (just above subsoil). Topsoil.			0.20			R10/1546
2001	Layer	Subsoil	Moderately compact yellowish light brown clayey silt; occasional mudstone inclusions and occasional soft patches. Subsoil.			0.05			R10/1546
2002	Layer	natural	Moderately compact yellowish light brown silt; frequent mudstone inclusions. Natural.						R10/1546
2003	Fill		Loose brown silty clay; degraded bedrock inclusions. Fill of 2004.	0.12	0.11	0.08			R10/1546

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2004	Cut	stakehole	Sub-circular in plan, steep sloping (35°) sides, flattish base. 19th century stake hole in line with 2008 in E-W direction.	0.12	0.11	0.08		2008	R10/1546
2005	Fill		Loose brown silty clay; degraded bedrock inclusions. Fill of 2006.	0.30	0.18				R10/1546
2006	Cut	posthole	Circular (or square? -- 2 diff descriptions) in plan. Unexcavated. 19th century posthole.	0.30	0.18	0.08			R10/1546
2007	Fill		Loose blackish dark brown loamy clay; small pebbles. Fill of 2008.	0.10	0.10	0.10			R10/1546
2008	Cut	stakehole	Circular in plan, vertical sides, flat slightly undercut base. 19th century stake hole. In line with 2004.	0.10	0.10	0.10		2004	R10/1546
2009	Fill	oven	Loose brown loam; frequent burnt and fragmented cockle, frequent FCR, and frequent charcoal. Fill of 2010.	1.60	0.70				R10/1546
2010	Cut	oven	Oval in plan. Unexcavated. (Probably) Māori oven.	1.60	0.70				R10/1546
2011	Fill		Loose blackish dark brown loamy clay; small orange pebbles. Fill of 2012.	0.09	0.09	0.20			R10/1546
2012	Cut	stakehole	Circular in plan, vertical sides except undercut on S side, flat base. Stake hole very similar to 2008 on a 70° E. [Not sure what that means]	0.09	0.09	0.20		2008	R10/1546
2013	Fill		Loose brown loamy clay; charcoal inclusions. Secondary fill of 2014.	0.38	0.30	0.40			R10/1546
2014	Cut	posthole	Circular in plan. Unexcavated. 19th century posthole. Truncated by posthole 2016.	0.38	0.30			2016	R10/1546
2015	Fill		Loose brown loamy clay; charcoal inclusions. Fill of 2016.	0.25	0.20				R10/1546
2016	Cut	posthole	Sub-circular-squarish in plan. Unexcavated. 19th century posthole. Truncates 2014.	0.25	0.20			2014	R10/1546
2017	Fill		Loose brownish black loamy clay; cobble-sized oven stones, large pebbles, cockle, and charcoal inclusions. Fill of 2018.	1.90	1.10	0.06			R10/1546
2018	Cut	oven	Oval in plan. Unexcavated. Oven floor. Near oven 2010.	1.90	1.10	0.06		2010	R10/1546
2019	Fill		Loose dark brown clayey loam; bleached and fragmented cockle inclusions. Fill of 2020.	0.16	0.16	0.12			R10/1546
2020	Cut	posthole	Square in plan, vertical sides, flattish base. Posthole in line with 2036 and 2014.	0.16	0.16	0.12		2036, 2014	R10/1546

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2021	void	void	rabbit hole						
2022	void	void	rabbit hole						
2023	Fill	void	rabbit hole	0.13	0.13				
2024	Cut	posthole	Circular in plan. Unexcavated. Posthole. In line with 2030 along E-W axis.					2030	R10/1546
2025	Fill		Loose light brown silty loam; fragmented shell and charcoal chunks. Fill of 2026.	0.15	0.15				R10/1546
2026	Cut	posthole	Circular in plan. Unexcavated. Posthole truncated by rocks and vegetation.	0.15	0.15				R10/1546
2027	Fill		Firm blackish dark brown silty loam; whole and fragmented cockle inclusions. Fill of 2028. Quick deposition? Fill of 2028.	0.20	0.20				R10/1546
2028	Cut	posthole	Circular in plan. Unexcavated. Posthole.	0.20	0.20				R10/1546
2029	Fill		Loose brown loamy clay; whole cockle shells. Fill of 2030.	0.20	0.13				R10/1546
2030	Cut	posthole	Sub-circular in plan. Unexcavated. Posthole. Near 2028.	0.20	0.13			2028	R10/1546
2031	void	void	rabbit hole						
2032	void	void	rabbit hole						
2033	void	void	rabbit hole						
2034	void	void	rabbit hole						
2035	Fill		Loose dark brown silt; cockle shells (midden). Fill of 2036.	0.36	0.31				R10/1546
2036	Cut	posthole	Sub-rectangular in plan, vertical sides, base not reached. Posthole. Truncated by rabbit hole.	0.36	0.31				R10/1546
2037		void							
2038		void							
2039	Fill		Loose black loamy clay; whole and fragmented oven stones (measuring approx. 5cm). Fill of 2040.	0.52	0.40				R10/1546
2040	Cut	oven	Sub-rectangular in plan. Unexcavated. Māori oven.	0.52	0.40				R10/1546
2041	Fill		Compacted dark brown loam; cockle inclusions. Fill of 2042.	0.72	0.42				R10/1546
2042	Cut	bin pit	Oval. Unexcavated. Bin pit.	0.72	0.42				R10/1546

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2043	Fill		Loose brown loam. Fill of 2044.	0.11	0.11				R10/1546
2044	Cut	stakehole	Circular. Unexcavated. Stake hole.	0.11	0.11		not drawn		R10/1546
2045	Void	void	rabbit hole						
2046	Void	void	rabbit hole						
2047	Void	void	rabbit hole						
2048	Void	void	rabbit hole						
2049	Void	void	rabbit hole						
2050	void	void	rabbit hole						
2051	Fill		Loose brown loam. Fill of 2052.	0.11	0.10	0.20			R10/1546
2052	Cut	posthole	Circular in plan, straight sides, pointed base. Small posthole. In line with 2046 (N-S).	0.11	0.10	0.20	not drawn		R10/1546
2053	Void	void	rabbit hole						
2054	Void	void	rabbit hole						
2055	Void	void	rabbit hole						
2056	Void	void	rabbit hole						
2057	Fill		Firm brown loam. Fill of 2058.	0.25	0.20	0.10			R10/1546
2058	Cut	posthole	Sub-circular in plan, short sloping sides, flattish base. Posthole.	0.25	0.20	0.10			R10/1546
2059	Fill		Loose mid-brown silt; degraded bedrock, frequent root action, and occasional charcoal inclusions.	0.42	0.11	0.04			R10/1546
2060	Cut	beam slot	Oval in plan, long sloping sides, flattish base. Beam slot or plough mark. Near 2058.	0.42	0.11	0.04	2058		R10/1546
2061	void	void	rabbit hole						
2062	void	void	rabbit hole						
2063	void	void	rabbit hole						
2064	void	void	rabbit hole						
2065	void	void	rabbit hole						
2066	void	void	rabbit hole						
2067	Fill		Loose greyish mid-brown silt; very frequent shell (midden); occasional charcoal. Fill of 2068.	0.20	0.17	0.04			R10/1546

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2068	Cut	posthole	Oval in plan, gradual sloped sides, concave base. Posthole (midden filled).	0.20	0.17	0.04			R10/1546
2069	Fill		Moderately compact dark greyish brown silt; frequent shell and frequent charcoal. Fill of 2070.	0.65	0.47	0.07			R10/1546
2070	Cut	pit	Oval in plan, gradual sloped sides, slightly concave to flattish base. Small pit.	0.62	0.47	0.07			R10/1546
2071	Fill		Moderately compact to soft mid greyish brown silt; moderate mudstone, moderate shell, and rare charcoal. Fill of 2072.	0.75	0.51	0.04			R10/1546
2072	Cut	bin pit	Oval in plan, gradual sloping sides, flattish and irregular base. Bin pit.	0.75	0.51	0.04			R10/1546
2073	void	void	rabbit hole						
2074	void	void	rabbit hole						
2075	void	void	rabbit hole						
2076	void	void	rabbit hole						
2077	void	void	rabbit hole						
2078	void	void	rabbit hole						
2079	Fill		Soft mid greyish brown silt; charcoal. Fill of 2080	0.24	0.23				R10/1546
2080	Cut	posthole	Circular in plan. Unexcavated. Posthole	0.24	0.23				R10/1546
2081	void	void							
2082	void	void							
2083	Layer	midden	Moderately compact dark greyish blackish brown silt; very frequent shell, frequent charcoal, moderate mudstone, occasional oven stones, and rare historic artefacts. Historic midden.	2.00	1.50	0.04			R10/1546
2084	Fill		Moderately compact to soft mid greyish brown silt; occasional mudstone. Primary fill of 2084.	0.81	0.73				R10/1546
2085	Cut	posthole	Oval in plan, gradual sides except steep on N, concave base.	0.81	0.73		sketch plan on back of context sheet		R10/1546
2086	Fill		Soft dark slightly greyish brown silt; occasional charcoal and occasional mudstone. Primary fill of 2087.						R10/1546
2087	Cut	bin pit	Oval in plan, gradual sloping sides, concave base. Bin pit.						R10/1546
2088	Fill		Greyish brown. Fill of 2089.	0.42	0.38				R10/1546
2089	Cut	posthole	Rectangular in plan. Unexcavated. Posthole.						R10/1546

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2090	Fill		Mid brown; occasional charcoal. Fill of 2091.	0.20	0.20				R10/1546
2091	Cut	posthole	Square in plan. Unexcavated. Posthole.	0.20	0.20				R10/1546
2092	Layer	midden	Dark greyish blackish brown silt and shell; charcoal fragments, mottled mudstone, oven stones, and very scarce historic artefacts. Historic midden.			0.04-0.10			R10/1546
2093	Layer		Moderately compact to firm dark greyish brown silt and shell; frequent FCR, frequent roots, and occasional charcoal.			0.02-0.10			R10/1546
2094	void	void	rabbit hole						
2095	void	void	rabbit hole						
2096	void	void	rabbit hole						
2097	void	void	rabbit hole						
2098	void	void	rabbit hole						
2099	void	void	rabbit hole						
2100	void	void	rabbit hole						
2101	void	void	rabbit hole						
2102	Fill		Loose mid brown silty clay; charcoal. Fill of 2103.	0.09	0.09	0.11			R10/1546
2103	Cut	stakehole	Sub-circular in plan, vertical sides except slightly undercut on SE side, flattish base. Stake hole, probably placed at an angle.	0.09	0.09	0.11			R10/1546
2104	Fill		Loose to moderately compact light greyish brown very slightly clayey silt. Fill of 2105.	0.12	0.12	0.06			R10/1546
2105	Cut	stakehole	Circular in plan, sloping sides, concave base. Stake hole on NW edge of midden 2093.	0.12	0.12	0.06		2093	R10/1546
2106	Fill		Loose mid brown silty clay; charcoal. Fill of 2107.	0.16	0.16	0.07			R10/1546
2107	Cut	posthole	Sub-circular in plan, sides sloping at 35°, flattish base. Shallow posthole.	0.16	0.16	0.07			R10/1546
2108	Fill		Light brown mottled clayey silt. Primary fill of 2104.						R10/1546
2109	Fill		Loose to moderately compact mottled yellowish light brown, grey, and mid brown silty clay; 1 small piece of green bottle glass. Fill of 2110.	0.46	0.40	0.45			
2110	Cut	posthole	Rounded rectangular in plan, vertical sides, flat base. Posthole in alignment 2291.	0.46	0.40	0.45		2291	R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2111	Fill		Moderate to loose mottled light yellowish brown and grey; rootlets. Primary fill of 2112.	0.52	0.44	0.50			R10/1548
2112	Cut	posthole	Rounded rectangular in plan, vertical sides, flat base. Posthole in alignment 2291.	0.52	0.44	0.50		2291	R10/1548
2113	Fill		Moderately compact dark greyish brown clayey silt; small flecks brown natural and charcoal. Upper fill of 2114.	0.67	0.45	0.49			R10/1548
2114	Cut	posthole	Rectangular to oval in plan, steep sides with step on S side, flat to concave base. Posthole in alignment 2291.	0.67	0.45	0.49		2291	R10/1548
2115	Fill		Fill of 2116.						R10/1548
2116	Cut	posthole	Large posthole.						R10/1548
2117	Fill		Moderately compact mid brownish grey silt and mid yellowish brown slightly clayey silt; occasional shell and occasional charcoal. Fill of 2116.	0.67	0.42	0.60			R10/1548
2118	Cut	posthole	Oval to rectangular in plan, vertical to near vertical sides, concave base. Posthole in alignment 2291.	0.67	0.42	0.60		2291	R10/1548
2119	Fill		Moderately compact mid yellowish brown mottled with mid greyish brown slightly clayey silt; frequent rootlets and 1 piece of metal (head of nail). Primary fill of 2120.	0.67	0.54	0.47	Recorded as Same as 2184.		R10/1548
2120	Cut	posthole	Rectangular to oval in plan, vertical sides except sloping on E, flattish to concave base. Posthole in alignment 2291.	0.67	0.54	0.47		2291	R10/1548
2121	Fill		Moderately compact mid yellowish brown mottled with mid greyish brown slightly clayey silt; frequent rootlets. Primary fill of 2122.	0.68	0.50	0.66			R10/1548
2122	Cut	posthole	Rectangular to oval in plan, steep to slightly undercut sides, concave base. Posthole in alignment 2291.	0.68	0.50	0.66		2291	R10/1548
2123	Fill		Moderately compact mid yellowish brown mottled with mid greyish brown slightly clayey silt; frequent rootlets. Primary fill of 2124.	0.66	0.44	0.50			R10/1548
2124	Cut	posthole	Oval in plan, vertical sides with slight step on S side, flattish to concave base. Posthole in alignment 2291.	0.66	0.44	0.50		2291	R10/1548
2125	Fill		Moderately compact mid yellowish brown mottled with mid greyish brown slightly clayey silt; frequent rootlets. Primary fill of 2126.	0.60	0.54	0.53			R10/1548
2126	Cut	posthole	Circular in plan, vertical sides, base sloped to E. Posthole in alignment 2291.	0.60	0.54	0.53		2291	R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2127	Fill		Moderately compact mid yellowish brown mottled with mid greyish brown slightly clayey silt; frequent rootlets. Primary fill of 2128.	0.66	0.50	0.50	more redeposited natural than other primary fills in alignment		R10/1548
2128	Cut	posthole	Oval in plan, steep sides with step at base, sloped and pointed base. Posthole in alignment 2291.	0.66	0.50	0.50		2291	R10/1548
2129	Fill		Loose yellowish brown silt; rootlets. Fill of 2129.	0.08	0.08				R10/1548
2130	Cut	stakehole	Circular in plan, steeply sloped sides, concave base. Stake hole.	0.80	0.80				R10/1548
2131	Fill		Moderately compact mid yellowish brown mottled with mid greyish brown slightly clayey silt; frequent rootlets. Primary fill of 2132.	0.50	0.46	0.46			R10/1548
2132	Cut	posthole	Squarish to oval in plan, vertical to stepped sides, concave base. Posthole in alignment 2291.	0.50	0.46	0.46		2291	R10/1548
2133	Fill		Moderately compact mid yellowish brown mottled with mid greyish brown slightly clayey silt; frequent rootlets. Primary fill of 2134.	0.64	0.59	0.48	more mottled than other primary fills in alignment		R10/1548
2134	Cut	posthole	Circular in plan, steep then sloping sides, irregular flat and concave base. Bracing post stepped into SW corner. Posthole in alignment 2291.	0.64	0.59	0.48		2291	R10/1548
2135	Fill		Loose greyish brown to dark greyish brown silt; charcoal and rootlets. Burnt layer with charcoal midway to base. Fill of 2136.	0.40	0.40	0.30			R10/1548
2136	Cut	posthole	Circular in plan, steep sloping sides, concave base. Posthole. Just to west of posthole alignment 2291.	0.40	0.40	0.30			R10/1548
2137	Fill		Loose mid yellowish brown silt; roots and rootlets. Fill of 2128.	0.52	0.52	0.20			R10/1548
2138	Cut	posthole	Sub-circular in plan, sloped sides except steep on W side, concave base. Posthole.	0.52	0.52	0.20			R10/1548
2139	Fill		Moderately compact mid yellowish brown mottled with mid greyish brown slightly clayey silt; frequent rootlets. Primary fill of 2140.	0.63	0.55	0.51			R10/1548
2140	Cut	posthole	Squarish to circular in plan, steep sides, flat base. Posthole in alignment 2291.	0.63	0.55	0.51		2291	R10/1548
2141	Fill		Moderately compact mid greyish brown clayey silt. Primary fill of 2142.	0.68	0.50	0.53			R10/1548
2142	Cut	posthole	Rounded rectangular in plan, vertical sides except steep slope in ENE, flattish to concave base. Posthole in alignment 2291.	0.68	0.50	0.53		2291	R10/1548
2143									R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2144	Fill		Moderately compact to firm mid yellowish brown mottled with mid greyish brown. Primary fill of 2145.	0.60	0.53	0.44		2291	R10/1548
2145	Cut	posthole	Rounded rectangular in plan, near vertical sides except sloped in E corner, flattish to concave base. Posthole in alignment 2291.	0.60	0.53	0.44	double numbers	2291	R10/1548
2145	Cut	stakehole	Circular in plan, near vertical to vertical sides, concave base. Stake hole.	0.13	0.13	0.20			R10/1548
2146	Fill		Moderately compact mid greyish brown slightly clayey silt. Fill of 2145.	0.13	0.13	0.20			R10/1548
2146	Fill		moderately compact dark greyish brown mottled with yellow slightly clayey silt; occasional charcoal. Primary fill of 2147.	0.50	0.44				R10/1548
2147	Cut	posthole	Oval to rounded rectangular in plan, vertical to near vertical sides, flattish to concave base. Posthole in alignment 2291.	0.50	0.44			2291	R10/1548
2148	Fill		Moderately compact mid yellowish brown mottled with mid greyish brown slightly clayey silt; rare rootlets. Primary fill of 2149.	0.78	0.59	0.45			R10/1548
2149	Cut	posthole	Rounded rectangular in plan, near vertical sides except off-shoots (from digging sticks?) in E corner and steep slope in SW centre, flattish base with circular post point. Posthole in alignment 2291. Post point measures 0.07m dia x 0.06 deep.	0.78	0.59	0.45		2291	R10/1548
2150	Fill		Loose yellowish brown silt; rootlets. Fill of 2151.	0.60	0.40	0.08			R10/1546
2151	Cut	pit	Rectangular in plan, sloped sides, concave base. Small pit.	0.60	0.40	0.08			R10/1546
2152	Fill		Moderately compact mid brownish yellow clay. Redeposited natural. Secondary fill of 2085.						R10/1546
2153	Fill		Moderately compact mid brownish yellow clay; occasional mudstone. Redeposited natural. Secondary fill of 2087.						R10/1546
2154	Fill		Moderately compact mid greyish brown slightly clayey silt; rocks. Fill of 2155.	0.19	0.17	0.10			R10/1546
2155	Cut	posthole	Oval in plan, near vertical on NW side and steeply sloping on other sides, concave base. Posthole.	0.19	0.17	0.10			R10/1546
2156	Fill		Moderately compact dark greyish brown slightly clayey silt. Fill of 2157.	0.36	0.25	0.25			R10/1546
2157	Cut	posthole	Sub-oval in plan, near vertical sides, concave base. Posthole.	0.36	0.25	0.25			R10/1546

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2158	Fill		Loose mid brown silt; rootlets. Fill of 2159.	0.21	0.19	0.06			R10/1546
2159	Cut	posthole	Circular in plan, sloping sides, concave base. Posthole. Truncated from topsoil removal.	0.21	0.19	0.06			R10/1546
2160	Fill		Loose mid brown silt; rootlets. Fill of 2161.	0.34	0.19	0.10			R10/1546
2161	Cut	posthole	Only very slightly slanted sides, flattish to slightly concave base. Posthole in posthole feature [??].	0.34	0.19	0.10			R10/1546
2162	Void	void	rabbit hole						R10/1546
2163	Void	void	rabbit hole						R10/1546
2164	Fill		Moderately compact to loose mottled greyish brown clayey silt with brown and yellow subsoil; rootlets and occasional charcoal. Postpipe in 2120.	0.32	0.30	0.45			R10/1548
2165	Fill		Light greyish brown slightly clayey silt. Postpipe in 2112.	0.16	0.16	0.50			R10/1548
2166	Fill		Light greyish brown slightly clayey silt. Postpipe in 2122.	0.40	0.35	0.71	Recorded as Same as 2165		R10/1548
2167	Fill		Light greyish brown slightly clayey silt. Postpipe in 2124.	0.35	0.21	0.50	Recorded as Same as 2165		R10/1548
2168	Fill		This postpipe was given 2 numbers. In register as Postpipe in 2133, but 2281 is also recorded (on register and context sheet) as Postpipe in 2133/2134.						R10/1548
2169	Cut	posthole	Rectangular to oval in plan. Unexcavated. Posthole in alignment 2291.	0.60	0.37			2291	R10/1548
2170	Fill		Moderately compact mix of mid greyish brown, yellowish brown, and very light grey slightly clayey silt; rare charcoal and frequent mudstone. Fill of 2169.	0.60	0.37				R10/1548
2171	Cut	posthole	Oval in plan. Unexcavated. Midden filled posthole in alignment 2291.	0.49	0.40			2291	R10/1548
2172	Fill		Moderate to firm mid brownish grey silt and shell; frequent charcoal. Fill of 2171.	0.49	0.40				R10/1548
2173	Cut	posthole	Oval to rectangular in plan. Unexcavated. Posthole in alignment 2291.	0.51	0.39			2291	R10/1548
2174	Fill		Moderately compact mid greyish brown mixed with mid yellowish brown slightly silty clay; rare rocks. Fill of 2173.	0.51	0.39				R10/1548
2175	Cut	posthole	Oval to rectangular in plan. Unexcavated. Posthole in alignment 2291.	0.45	0.35			2291	R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2176	Fill		Moderately compact mid brownish grey (midden) mottled with mid yellowish brown and very light grey silt and clayey silt; frequent shell and occasional mudstone. Fill of 2175.	0.45	0.35				R10/1548
2177	Cut	posthole	Oval to rectangular in plan. Unexcavated. Posthole in alignment 2291.	0.51	0.42			2291	R10/1548
2178	Fill		Moderately compact mid brownish grey (midden) mottled with mid yellowish brown and very light grey silt and clayey silt; frequent shell and occasional mudstone. Fill of 2177.	0.51	0.42				R10/1548
2179	Cut	posthole	Oval to rectangular in plan. Unexcavated. Posthole in alignment 2291.	0.52	0.40			2291	R10/1548
2180	Fill		Moderately compact mid brownish grey (midden) mottled with mid yellowish brown and very light grey silt and clayey silt; frequent shell and occasional mudstone. Fill of 2179.	0.52	0.40				R10/1548
2181	Cut	posthole	Oval to rectangular in plan. Unexcavated. Posthole in alignment 2291.	0.52	0.40			2291	R10/1548
2182	Fill		Moderately compact mid yellowish brown mottled with mid greyish brown (midden) slightly clayey silt; frequent shell (midden) and moderate rocks. Fill of 2181	0.52	0.40				R10/1548
2183	Cut	posthole	Rounded rectangular in plan, vertical to near vertical sides, flattish base. Posthole in alignment 2291.	0.49	0.37	0.35		2291	R10/1548
2184	Fill		Moderately compact mid yellowish brown mottled with mid greyish brown slightly clayey silt; frequent rootlets and 1 piece of metal (head of nail). Fill of 2183.	0.49	0.37	0.35			R10/1548
2185	Cut	posthole	Rounded rectangular in plan, vertical to near vertical sides, flattish base. Posthole in alignment 2291.	0.51	0.50	0.40		2291	R10/1548
2186	Fill		Moderately compact mid yellowish brown mottled with mid greyish brown slightly clayey silt; moderate rootlets and moderate mudstone. Fill of 2185.	0.51	0.50	0.40			R10/1548
2187	Fill		Lower fill of posthole 2118.						R10/1546
2188	Fill		Lower fill of posthole 2110.						R10/1546
2189	Fill		Loose to moderately compact mottled brown natural and grey subsoil; rootlets and occasional charcoal flecks. Lower fill of 2114.	0.67	0.45	0.49			R10/1546
2190	Cut	posthole	Sub-circular in plan. Unexcavated. Māori posthole.	0.30	0.24				R10/1546

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2191	Fill		Loose to moderately compacted mid brown silt; charcoal specks and fragmented shell. Fill of 2190.	0.30	0.24				R10/1546
2192	Cut	posthole	Rectangular in plan. Unexcavated. Posthole, or possibly beam slot associated with a house structure.	0.27	0.12				R10/1546
2193	Fill		Loose and friable mid brown silt; fragmented and whole cockle shell, charcoal, and small pebbles. Fill of 2192.	0.27	0.12				R10/1546
2194	Cut	stakehole	Square in plan, vertical sides, undulating base. Stake hole in line (NE-SW) with 2196.	0.10	0.10	0.40		2196	R10/1546
2195	Fill		Friable and loose blackish dark brown silty clay; specks of charcoal. Fill of 2194.	0.10	0.10	0.40			R10/1546
2196	Cut	stakehole	Square in plan, vertical sides, undulating base. Stake hole in line with 2194.	0.14	0.07	0.04		2194	R10/1546
2197	Fill		Friable and loose blackish dark brown silty clay; specks of charcoal. Fill of 2196.	0.14	0.07	0.04			R10/1546
2198	Void	void	rabbit hole						
2199	Void	void	rabbit hole						
2200	Void	void	rabbit hole						
2201	Void	void	rabbit hole						
2202	Cut	posthole	Sub-rectangular in plan. Unexcavated. Posthole associated with beam slot.	0.74	0.14	0.10			R10/1546
2203	Fill		Moderately compacted greyish mid brown silt; moderate charcoal. Fill of 2202.	0.74	0.14	0.10			R10/1546
2204	Cut	posthole	Circular in plan, gradual sides, base sloping towards SW to point. Midden filled posthole.	0.18	0.12	0.30			R10/1546
2205	Fill		Moderately compact dark brownish grey silt and shell (midden); occasional rock and occasional charcoal. Fill of 2204.	0.18	0.12	0.30			R10/1546
2206	Cut	bin pit	Sub-circular in plan, vertical to long sloping sides, concave base. Bin pit with small hollow to the NE side.	0.38	0.36	0.11			R10/1546
2207	Fill		Loose greyish brown silt; frequent shell and frequent charcoal. Fill of 2206.	0.38	0.36	0.11			R10/1546
2208	Cut	post and board	Sub-rectangular in plan, vertical to long sloping sides, concave base. Posthole and board slot.	0.64	0.15	0.08			R10/1546
2209	Fill		Loose; frequent charcoal and fragmented shell. Fill of 2208.	0.64	0.15	0.08			R10/1546
2210	Cut	posthole	Oval to rectangular in plan. Unexcavated. Posthole.	0.27	0.20				R10/1546

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2211	Fill		Moderately compact mid greyish brown slightly clayey silt; frequent charcoal flecking. Fill of 2210.	0.27	0.20				R10/1546
2212	Cut	posthole	Sub-circular in plan, vertical to undercut sides, concave base. Posthole. Possibly related to 2202.	0.33	0.39	0.49	windbreak structure or related to a house		R10/1546
2213	Fill		Loose greyish brown silty alluvium; frequent cockle, moderate charcoal, occasional FCR, and rare pipi. Fill of 2212.	0.33	0.39	0.49			R10/1546
2212	Cut	posthole	Oval in plan. Unexcavated. Posthole.	0.31	0.24				R10/1546
2213	Fill		Moderately compact to firm dark greyish brown silt and shell; frequent charcoal. Fill of 2212.	0.31	0.24				R10/1546
2214	Cut	posthole	Oval in plan, near vertical sides except steeply sloping on E side, concave base. Midden fill posthole.	0.30	0.28	0.53			R10/1546
2215	Fill		Moderately compact dark brownish grey silt and shell (midden); frequent charcoal. Fill of 2214.	0.30	0.28	0.53			R10/1546
2216	Cut	posthole	Circular in plan, steeply sloping to near vertical sides, undulating slightly concave base. Oven.	0.64	0.61	0.10			R10/1546
2217	Fill		Moderately compact to soft dark greyish brown mottled with yellowish brown silt; frequent shell and occasional charcoal. Fill of 2216.	0.64	0.61	0.10			R10/1546
2218	Cut	stakehole	Oval in plan, near vertical sides except steeply sloping on E side, concave base. Midden filled stake hole.	0.14	0.12	0.11			R10/1546
2219	Fill		Moderately compact dark greyish brown mottled with yellow slightly clayey silt; frequent shell and rare charcoal. Fill of 2218	0.14	0.12	0.11			R10/1546
2220	Cut	posthole	Sub-circular in plan, vertical sides, concave base. Small posthole near 2222.	0.09	0.09	0.09			R10/1546
2221	Fill		Moderately compact mid brown silt; occasional charcoal. Fill of 2220.	0.09	0.09	0.09			R10/1546
2222	Cut	stakehole	Sub-circular in plan, vertical sides, concave base. Stake hole.	0.07	0.07	0.11			R10/1546
2223	Fill		Moderately compact mid greyish brown silt; occasional charcoal. Fill of 2222.	0.07	0.07	0.11			R10/1546
2224	Cut	stakehole	Sub-rectangular in plan. Unexcavated. Stake hole. Possibly related to stake hole 2194.	0.11	0.11			2194	R10/1546
2225	Fill		Moderately compact mid brown silt. Fill of 2224.	0.11	0.11				R10/1546
2226	Cut	stakehole	Circular in plan. Stake hole.	0.08	0.08				R10/1546
2227	Fill		Moderately compact mid greyish brown slightly clayey silt. Fill of 2226.	0.08	0.08				R10/1546

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2228	Cut	posthole	Sub-circular in plan, vertical to slightly undercut sides, concave base. Posthole. Near posthole 2230.	0.15	0.15	0.29		2230	R10/1546
2229	Fill		Loose brown silt; infrequent charcoal. Fill of 2228.	0.15	0.15	0.29			R10/1546
2230	Cut	posthole	Sub-circular in plan, vertical to slightly undercut sides, concave base. Posthole.	0.11	0.11	0.30		2228	R10/1546
2231	Fill		Loose brown silt; infrequent charcoal. Fill of 2230.	0.11	0.11	0.30			R10/1546
2232	Cut	posthole	Rectangular in plan. Unexcavated. Posthole.	0.48	0.25				R10/1546
2233	Fill		Moderately compact mid greyish brown silt mottled with mid yellow brown slightly clayey silt. Fill of 2232.	0.48	0.25				R10/1546
2234	Fill		Light greyish brown slightly clayey silt. Postpipe in 2126.	0.38	0.30	0.50			R10/1546
2235	Cut	posthole	Sub-oval in plan, near vertical sides except moderate slope on W side, concave base. Posthole.	0.44	0.30	0.20			R10/1546
2236	Fill		Moderately compact mid greyish brown silt; moderate charcoal. Fill of 2235.	0.44	0.30	0.20			R10/1546
2237	Cut	posthole	Eye-shaped in plan, near vertical side on NE and steep sloping sides on SE and NW, concave base. Posthole.	0.28	0.16	0.10			R10/1546
2238	Fill		Moderately compact mid greyish brown slightly clayey silt; occasional rootlets. Fill of 2237.	0.28	0.16	0.10			R10/1546
2239	Cut	stakehole	Circular in plan, near vertical sides except steep slope on W side, concave base. Stake hole.	0.12	0.12	0.10			R10/1546
2240	Fill		Moderately compact mid greyish brown slightly clayey silt. Fill of 2239.	0.12	0.12	0.10			R10/1546
2241	Cut	stakehole	Oval in plan, near vertical sides except slightly undercut on NE side, concave base. Stake hole.	0.13	0.14	0.25			R10/1546
2242	Fill		Moderately compact mid greyish brown slightly silty clay. Fill of 2241.	0.13	0.14	0.25			R10/1546
2243	Cut	stakehole	Circular in plan. Unexcavated. Stake hole.	0.08	0.08				R10/1546
2244	Fill		Moderately compact mid greyish brown silt. Fill of 2243.	0.08	0.08				R10/1546
2245	Cut	posthole	Posthole						R10/1546
2246	Fill		Fill of 2245.						R10/1546
2247	Cut	stakehole	Oval in plan, vertical sides except steep slope on NW side, concave base. Stake hole.	0.14	0.10	0.13			R10/1546
2248	Fill		Moderately compact mid greyish brown silt. Fill of 2247.	0.14	0.10	0.13			R10/1546
2249	Cut	stakehole	Circular in plan, gradual to moderate (45°) sloped sides, concave base. Stake hole.	0.13	0.13	0.03			R10/1546

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2250	Fill		Moderately compact mid greyish brown slightly clayey silt. Fill of 2249.	0.13	0.13	0.03			R10/1546
2251	Cut	stakehole	Circular in plan. Unexcavated. Stake hole.	0.11	0.11				R10/1546
2252	Fill		Moderately compact mid greyish brown slightly clayey silt. Fill of 2251.	0.11	0.11				R10/1546
2253	Cut	posthole	Sub-oval in plan, near vertical sides except gradual slope on W side, convex base. Midden fill posthole.	0.30	0.14	0.13			R10/1546
2254	Fill		Moderate to loose dark brownish grey silt and shell; frequent rocks and occasional rootlets. Fill of 2253.	0.30	0.14	0.13			R10/1546
2255	Cut	posthole	Rounded triangular in shape. Unexcavated. Posthole?	0.43	0.21				R10/1546
2256	Fill		Moderately compact mid greyish brown slightly clayey silt; occasional mudstone. Fill of 2255.	0.43	0.21				R10/1548
2257	Cut	po	Rectangular to oval in plan. Unexcavated. Posthole in alignment 2291.	0.57	0.47			2291	R10/1548
2258	Fill		Moderately compact mix of mid greyish brown, yellowish brown, and very light grey slightly clayey silt; rare charcoal, large root, and moderate rocks. Fill of 2257.	0.57	0.47				R10/1548
2259	Cut	po	Rectangular to oval in plan. Unexcavated. Posthole in alignment 2291.	0.53	0.40			2291	R10/1548
2260	Fill		Moderately compact mix of mid greyish brown, yellowish brown, and very light grey slightly clayey silt; rare charcoal. Fill of 2259.	0.53	0.40				R10/1548
2261	Cut	po	Rectangular in plan. Unexcavated. Posthole in alignment 2291. SW side not completely exposed.	0.53	min 0.39			2291	R10/1548
2262	Fill		Moderately compact mid greyish brown silt. Fill of 2261.	0.53	min 0.39				R10/1548
2263	Cut	po	Sub-circular in plan, vertical to long sloping sides, concave base. Posthole and board slot. Possibly associated with beam slot 2202.	beam: 0.07; post: 0.2	beam: 0.4; post: 0.2	beam: 0.05; post: 0.15		2202	R10/1576
2264	Fill		Moderately compact greyish brown silt; rare charcoal. Fill of 2263.	beam: 0.07; post: 0.2	beam: 0.4; post: 0.2	beam: 0.05; post: 0.15			R10/1576
2265	Cut	po	Sub-circular in plan, long sloping sides, flattish base. Very shallow posthole.	0.15	0.20	0.04			R10/1576
2266	Fill		Compacted mid brown silt. Fill of 2265.	0.15	0.20	0.04			R10/1576
2267	Cut	board slot	Rectangular in plan. Unexcavated. Board slot.	0.19	0.09				R10/1576
2268	Fill		Moderately compact greyish brown silt; occasional charcoal. Fill of 2267.	0.19	0.09				R10/1576

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2269	Cut	posthole	Oval in plan. Unexcavated. Midden filled posthole.	0.31	0.26				R10/1548
2270	Fill		Moderate to firm mid brownish grey silt and shell; frequent charcoal. Fill of 2269.	0.31	0.26				R10/1548
2271	Fill		Light greyish brown slightly clayey silt. Postpipe of stake or bracing post of 2128.	0.50	0.30	0.45			R10/1548
2272	Cut	posthole	Oval in plan. Unexcavated. Midden filled posthole.	0.19	0.16				R10/1546
2273	Fill		Moderately compact light brownish grey silt and shell; occasional charcoal. Fill of 2272.	0.19	0.16				R10/1546
2274	Cut	post and board	Key-shaped in plan. Unexcavated. Posthole and board slot.	0.52	0.17				R10/1546
2275	Fill		Moderately compact mid greyish brown silt; occasional charcoal flecking. Fill of 2274.	0.52	0.17				R10/1546
2276	Cut	posthole	Circular in plan, vertical sides except steep slope on S side, concave base. Posthole.	0.13	0.13	0.12			R10/1546
2277	Fill		Moderately compact mid greyish brown silt. Fill of 2276.	0.13	0.13	0.12			R10/1546
2278	cut	posthole							R10/1546
2279	Fill								R10/1546
2280	Fill		Light greyish brown slightly clayey silt. Postpipe in 2132.	0.45	0.55	0.44			R10/1548
2281	Fill		Moderately compact to loose mottled greyish brown clayey silt with brown and yellow subsoil; rootlets and occasional charcoal. Postpipe in 2134.	0.20	0.12	0.48			R10/1548
2282	Fill		Moderately compact to loose mottled light greyish brown clayey silt with brown and yellow subsoil; rootlets and occasional charcoal. Postpipe in 2140.	0.42	0.30	0.50			R10/1548
2283	Fill		Moderately compact to loose mottled greyish brown clayey silt with brown and yellow subsoil; rootlets and occasional charcoal. Postpipe in 2142.	0.35	0.23	0.35	Recorded as Same as 2164.		R10/1548
2284	Fill		Moderately compact mid greyish brown slightly clayey silt; occasional rootlets. Postpipe in 2145.	0.13	0.10	0.40			R10/1548
2285	Fill		Moderately compact to loose darkish greyish brown slightly clayey silt; occasional rootlets. Postpipe in 2147.	0.19	0.15	0.36			R10/1548
2286	Fill		Moderately compact mid greyish brown slightly clayey silt; rare rootlets. Postpipe in 2149.	0.15	0.10	0.52			R10/1548
2287	Fill		Moderately compact to loose mid greyish brown slightly clayey silt; occasional rootlets. Postpipe in 2183.	0.11	0.11	0.27			R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2288	Fill		Moderately compact to loose mid greyish brown slightly clayey silt; occasional rootlets, and occasional mudstone. Postpipe in 2185.	0.29	0.27	0.15	Recorded as Same as 2287		R10/1548
2289	Cut	posthole	Linear in plan. Unexcavated. Dripline? running along the SE/S side of large posthole alignment. Very ephemeral.	approx. 25				2291	R10/1548
2290	Fill		Light greyish brown silt. Fill of 2289.						R10/1548
2291	Context Group		ESE-WSW alignment of 28 large postholes: 2110, 2112, 2114, 2118, 2120, 2122, 2124, 2126, 2128, 2132, 2134, 2140, 2142, 2145, 2147, 2149, 2171, 2173, 2175, 2177, 2179, 2181, 2183, 2185, 2257, 2259, and 2261.						R10/1548
2400	Cut	board slot	Circular posthole with elongated board slot. Unexcavated.	0.66	0.20				R10/1411
2401	Fill		Moderately compact dark greyish brown clayey silt; rootlets. Fill of 2400.	0.66	0.20				R10/1411
2402	Cut	posthole	Square in plan. Unexcavated. Posthole.	0.37	0.26				R10/1411
2403	Fill		Moderate to compact dark greyish brown clayey silt; moderate charcoal and occasional rootlets. Fill of 2403.	0.37	0.26				R10/1411
2404	Cut	board slot	Circular posthole with elongated board slot. Unexcavated.	0.42	0.22				R10/1411
2405	Fill		Moderate to compact dark greyish brown clayey silt; rootlets. Fill of 2404.	0.42	0.22				R10/1411
2406	Cut	pit	Rounded rectangle in plan. Unexcavated. Pit.	5.70	1.1-1.4				R10/1411
2407	Fill		Moderately compact dark greyish brown clayey silt; rootlets. Fill of 2406.	5.70	1.1-1.4				R10/1411
2408	Cut	stakehole	Stakehole.						R10/1411
2409	Fill		Fill of 2408.						
2410	Void	void	rabbit hole						
2411	Void	void	rabbit hole						
2412	Cut	posthole	Oval in plan. Unexcavated. Posthole.	0.19	0.18				R10/1411
2413	Fill		Moderately compact mid greyish brown silt. Fill of 2412.	0.19	0.18				R10/1411
2414	Cut	posthole	Circular in plan. Unexcavated. Posthole.	0.13	0.13				R10/1411
2415	Fill		Loose brown silt; rootlets and rocks. Fill of 2414.	0.13	0.13				R10/1411
2416	Cut	posthole	Circular in plan. Unexcavated. Posthole.	0.15	0.15				R10/1411
2417	Fill		Moderately compact light greyish brown silt; rootlets and clay inclusions. Fill of 2416.	0.15	0.15				R10/1411

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2418	Cut	stakehole	Circular in plan. Unexcavated. Stake hole.	0.14	0.14				R10/1411
2419	Fill		Loose light brown silty clay; rootlets. Fill of 2418.	0.14	0.14				R10/1411
2420	Cut	posthole	Circular in plan. Unexcavated. Posthole.	0.32	0.32				R10/1411
2421	Fill		Moderate-firm brown silty clay; occasional charcoal and occasional rootlets.	0.32	0.32				R10/1411
2422	Cut	stakehole	Circular in plan. Unexcavated. Stake hole.	0.10	0.10				R10/1411
2423	Fill		Moderately compact light brown silt; rootlets. Fill of 2422.	0.10	0.10				R10/1411
2424	Cut	posthole	Square in plan. Unexcavated. Posthole.	0.40	0.40				R10/1411
2425	Fill		Moderately compact light greyish brown silt; occasional charcoal and occasional rootlets. Fill of 2424.	0.40	0.40				R10/1411
2426	Cut	stakehole	Circular in plan. Unexcavated. Stake hole.	0.09	0.09				R10/1411
2427	Fill		Moderately compact mid brown slightly clayey silt. Fill of 2426.	0.09	0.09				R10/1411
2428	Cut	oven	Circular in plan, gradually sloping sides, slightly concave to flattish base. Oven.	1.70	1.70	0.29			R10/1411
2429	Fill		Moderately compact dark blackish brown/brownish black silt, charcoal, and ash; frequent rock and occasional shell. Fill of 2428.	1.70	1.70	0.29			R10/1411
2430	Cut	firescoop	Circular in plan, very gradually sloping sides, flattish to concave base. Oven. Firescoop.	1.32	1.19	0.07			R10/1411
2431	Fill		Moderately compact dark blackish brown/brownish black silt, charcoal, and ash; frequent rock. Fill of 2430.	1.32	1.19	0.07			R10/1411
2432	Cut	posthole	Circular in plan, gradually sloping sides except near vertical on E side, concave base. Posthole.	0.19	0.18	0.04			R10/1411
2433	Fill		Moderate-firm mid greyish brown silt; rare charcoal. Fill of 2432.	0.19	0.18	0.04			R10/1411
2434	Cut	posthole	Circular in plan, gradually sloping sides, concave base. Posthole.	0.19	0.19	0.04			R10/1411
2435	Fill		Moderately compact mid greyish brown silt. Fill of 2434.	0.19	0.19	0.04			R10/1411
2436	Cut	posthole	Sub-rectangular in plan, near vertical to steeply sloping sides, concave base. Posthole.	0.19	0.13	0.54			R10/1411
2437	Fill		Moderately compact mid greyish brown clayey silt. Fill of 2437.	0.19	0.13	0.54			R10/1411
2439	Cut	post and board	Key-shaped in plan, near vertical sides at E and W ends and steep slope in centre, concave base at E and W ends and flattish base in centre. Posthole and board slot.	0.61	0.23	0.10			R10/1411

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2440	Fill		Moderately compact mid greyish brown silt. Fill of 2439.	0.61	0.23	0.10			R10/1411
2441	Cut	post and board	Pear-shaped in plan. Unexcavated. Posthole and board slot (very short) or blown out posthole.	0.44	0.18				R10/1411
2442	Fill		Moderate to soft mid brown silt. Fill of 2441.	0.44	0.18				R10/1411
2443	Cut	posthole	Rounded rectangle with linear extension to NE in plan, near vertical sides, concave base. Posthole with rooting in NE corner.	0.46	0.34	0.52			R10/1411
2444	Fill		Moderately compact mid greyish brown silt. Fill of 2443.	0.46	0.34	0.52			R10/1411
2445	Cut	posthole	Oval in plan, near vertical to vertical sides, concave base. Posthole.	0.33	0.27	0.16			R10/1411
2446	Fill		Moderately compact mid greyish brown silt. Fill of 2445.	0.33	0.27	0.16			R10/1411
2447	Cut	posthole	Pear-shaped in plan, near vertical side in W and moderately sloping in E, concave base. Blown out posthole.	0.38	0.20	0.14			R10/1411
2448	Fill		Moderately compact mid greyish brown silt; occasional charcoal. Fill of 2447.	0.38	0.20	0.14			R10/1411
2449	Layer	midden	Moderately compact black to mid greyish black silt and charcoal matrix; frequent cockle shell; frequent FCR, occasional pipi, occasional mudsnail, occasional chert, occasional greywacke, and occasional basalt flakes. Pre-European midden. Thicker towards eastern river bank, thins out to west. Covers multiple features and is near ovens and firescoops.	12m	16m				R10/1408
2450	Cut	firescoop	Sub-circular in plan, vertical to long-sloping sides, flattish base. Firescoop.	1.40	1.20	0.20			R10/1408
2451	Fill	firescoop	Moderately compact greyish brown silt mottled with yellow; frequent charcoal, basalt greywacke flakes, FCR and occasional shell. Fill of 2450.	1.40	1.20	0.20			R10/1408
2452	Void								
2453	Layer	rake out	Loose white-grey silt-ash; frequent whole cockle, oyster, and trough shell, charcoal, and FCR inclusions. One of three distinct fills (2503, 2453, 2459) representing a rake out of a Māori oven onto the remnant topsoil 2498. No clear cut observed.	0.60	0.50	0.20		2503, 2459	R10/1408
2454	Cut	posthole	Circular in plan, vertical sides, concave base. Posthole cutting 2449 & 2498.	0.10		0.16			R10/1408
2455	Fill	posthole	Soft mid brown silt; charcoal speck inclusions. Fill of 2454.	0.10		0.16			R10/1408

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2456	Cut	posthole	Sub-circular in plan, vertical to short sloping sides, concave to flattish base. Small oven or firescoop.	0.35	0.17	0.17			R10/1408
2457	Fill	posthole	Moderately compaction black silt; occasional FCR and shell inclusions. Fill of 2456.	0.35	0.17	0.17			R10/1408
2458	Void	void							
2459	Layer	rake out	Moderately compact black silt ash; frequent FCR and fragmented and whole cockle shell inclusions. One of three distinct fills (2503, 2453, 2459) representing a rake out of a Māori oven onto the remnant topsoil 2498. No clear cut observed.	0.30	0.20	0.15		2503, 2453	R10/1408
2460	Cut	oven	Sub-circular in plan, long sloping sides, concave to flattish base. Oven/fire pit cut into midden 2249.	0.80		0.30			R10/1408
2461	Fill	oven	Moderately compact, yet friable, black silt; frequent whole and fragmented cockle shell, FCR, and charcoal specks. Fill of 2460.	0.80		0.30			R10/1408
2462	Cut	posthole	Sub-circular in plan, vertical to short sloping sides, concave base. Posthole truncating 2492.	0.20		0.40		2492	R10/1408
2463	Fill	posthole	Moderately compact black to mid brown silt; frequent charcoal and occasional shell. Fill of 2462.	0.20		0.40			R10/1408
2464	Cut	firescoop	Sub-circular in plan, long sloping sides, concave base. Firepit oven truncated by 2462.	0.30		0.20		2462	R10/1408
2465	Fill	firescoop	Moderately compact, yet friable, brownish black silt; frequent whole and fragmented cockle shell, occasional FCR and charcoal. Fill of 2464.	0.30		0.20			R10/1408
2466	Void								
2467	Void								
2468	Cut	oven	Sub-rectangular in plan, gradual slope giving way to a flattish base. Large oven.	1.62	0.96	0.17			R10/1408
2469	Fill	oven	Moderately compact black subsoil and topsoil; very frequent oven stones. Fill of 2468.	1.62	0.96	0.17			R10/1408
2470	Void	Void							
2471	Void	Void							
2472	Void	Void	tree throw						
2473	Void	Void	tree throw						
2474	Void	Void	tree throw						
2475	Void	Void	tree throw						

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2478	Cut	firescoop	Oval in plan, concave sides, undulating base. Firescoop.	0.66	0.59	0.06			R10/1408
2479	Fill	firescoop	Moderately compact mid brown with black matrix at surface ashy, charcoal rich silt; frequent charcoal and FCR and occasional kauri gum and shell. Fill of 2478.	0.66	0.59	0.06			R10/1408
2480	Cut	posthole	Oval in plan, near vertical sides with under cut on south side, base unknown (not fully excavated). Deep posthole.	0.34	0.27				R10/1408
2481	Fill	posthole	Loose mid brown silt; occasional small rocks and rootlets. Fill of 2480.	0.34	0.27				R10/1408
2482	Cut	posthole	Sub-circular in plan, vertical sides, base unknown (not fully excavated). Māori posthole. On an angle -- possibly used as part of a drying rack.	0.13		0.55			
2483	Fill	posthole	Moderately compact mid brown silt; occasional shell. Fill of 2482.	0.13		0.55			R10/1408
2484	Cut	posthole	Circular in plan, vertical sides, concave base. Posthole truncating midden 2449.	0.15	0.15	0.11		2449	R10/1408
2485	Fill	posthole	Moderately compact mid brown silt; charcoal fleck inclusions. Fill of 2484.	0.15	0.15	0.11			R10/1408
2486	Cut	posthole	Sub-circular in plan, vertical sides, concave base. Māori posthole truncating midden 2449.	0.15	0.15	0.22		2449	R10/1408
2487	Fill	posthole	Moderately compact, but friable, mid brown silt; occasional fragmented shell inclusions. Fill of 2486.	0.15	0.15	0.22			R10/1408
2488	Cut	posthole	Sub-circular in plan, short-sloping to vertical sides, concave base. Māori posthole truncating 2498.	0.20		0.25		2498	R10/1408
2489	Fill	posthole	Firm mid brownish black silt; occasional cockle shell inclusions. Fill of 2488.	0.20		0.25			R10/1408
2490	Cut	oven	Oval in plan, gradually sloping sides, flattish base. Oven.	2.00	1.60	0.20			R10/1408
2491	Fill	oven	Moderately compact black or very dark greyish brown mix of topsoil and subsoil; frequent charcoal and moderate burnt stone inclusions. Fill of 2490.	2.00	1.60	0.20			R10/1408
2492	Cut	firescoop	Sub-circular in plan, long-sloping sides, flattish base. Firescoop/oven truncated by 2462.	0.50		0.25		2462	R10/1408
2493	Fill	firescoop	Moderately compact black to mid brown silt; frequent charcoal flecks and FCR and occasional shell. Fill of 2492.	0.50		0.25			R10/1408
2494	Cut	posthole	Sub-circular in plan, vertical sides, concave base. Māori posthole truncating midden 2449.	0.11		0.23		2449	R10/1408
2495	Fill	posthole	Moderately compact mid brown silt; occasional shell. Fill of 2494.	0.11		0.23			R10/1408

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2496	Cut	posthole	Sub-circular in plan, vertical sides, concave base. Māori posthole truncating midden 2449.	0.11		0.60		2449	R10/1408
2497	Fill	posthole	Moderately compact mid brown silt; fragmented shell and charcoal speck inclusions. Fill of 2496.	0.11		0.60			R10/1408
2498	Layer	Layer palaeosol	Moderately compact, but friable, mottled black with yellow silty clay; occasional shell, FCR, and charcoal inclusions. Buried topsoil, almost a paleo-like soil, on which midden 2449 was deposited. Pre-European.	vairable	variable	variable		2449	R10/1408
2499	Cut		Sub-circular in plan, short sloping to vertical sides, flattish base. Oven/firepit cut through 2449.	0.40		0.21		2449	R10/1408
2500	Fill		Moderately compact black silt; occasional cockle and frequent FCR. Fill of 2499.	0.40		0.21			R10/1408
2501	Cut	posthole	Circular in plan, gradual to steep sloping sides, concave base. Small Māori posthole.	0.22	0.15	0.20		2449	R10/1408
2502	Fill	posthole	Moderately compact mid brown silt; fragmented shell and charcoal speck inclusions. Fill of 2501.	0.22	0.15	0.20			R10/1408
2503	Layer		Moderately compact black silt/charcoal fill; FCR and whole and fragmented shell (mostly cockle). One of three distinct fills (2503, 2453, 2459) representing a rake out of a Māori oven onto the remnant topsoil 2498. No clear cut observed.	0.40	0.40	0.16		2453, 2459	R10/1408
2504	Layer		Firm dark brown silt; rare charcoal and rock inclusions.			0.10-0.15			R10/1408
2505	Layer		Moderately compact mid-dark brown silt; frequent metal (iron, copper, occasional lead), ceramic pipe pieces, and bottle glass and occasional brick fragments. Mid-late 19th century artefacts in mostly fragmentary state. Probably a rubbish dump ploughed and scattered through the topsoil.			0.10-0.05			R10/1547
2505	Layer		Moderate to firm greyish mid brown topsoil [?] alluvial silt; occasional stones, moderate [?] fragments of coal and charcoal, occasional bone (mammal)						R10/1547
2506	Cut		Rectangular in plan, unexcavated. Posthole in Context Group 2735.	0.37	0.35			2735	R10/1548
2507	Fill		Moderately compacted mid greyish brown silt; rootlet inclusions. Fill of 2506.	0.37	0.35				R10/1548
2508	Cut		Rectangular in plan, near vertical to vertical sides, stepped then concave base. Posthole in Context Group 2735.	0.60	0.46	0.40		2735	R10/1548
2509	Fill		Moderately compacted mid greyish brown silt; rootlet inclusions. Fill of 2508.	0.60	0.46	0.40			R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2510	Cut		Rectangular in plan, vertical sides, flattish-concave base. Posthole in Context Group 2735.	0.40	0.32	0.29		2735	R10/1548
2511	Fill		Moderately compacted mid greyish brown silt; rootlet inclusions. Fill of 2508.	0.40	0.32	0.29			R10/1548
2512	Cut		Rectangular in plan, near vertical to vertical sides, flattish base. Posthole in Context Group 2735.	0.47	0.37	0.33		2735	R10/1548
2513	Fill		Moderately compacted mid greyish brown silt; rootlet inclusions. Fill of 2508.	0.47	0.37	0.33			R10/1548
2514	Cut		Rectangular in plan, vertical sides, concave base. Posthole in Context Group 2735.	0.46	0.37	0.40		2735	R10/1548
2515	Fill		Moderately compacted mid greyish brown silt; rootlet inclusions. Fill of 2514.	0.46	0.37	0.40		2735, 2638	R10/1548
2516	Cut		Rectangular in plan, near vertical to vertical sides, concave base. Posthole in Context Group 2735.	0.50	0.47	0.37		2735	R10/1548
2517	Fill		Moderately compacted mid greyish brown silt; rootlets and occasional mudstone inclusions. Fill of 2517.	0.50	0.47	0.37			R10/1548
2518	Cut		Square in plan, unexcavated. Posthole.	0.40	0.40				R10/1548
2519	Fill		Moderately compacted mid brown silt; occasional yellow clay lumps. Fill of 2518.	0.40	0.40				R10/1548
2520	Cut		Rounded rectangular in plan, unexcavated. Posthole in Context Group 2735.	0.40	0.30			2735	R10/1548
2521	Fill		Moderately compacted mid greyish brown silt; rootlet inclusions. Fill of 2520.	0.40	0.30				R10/1548
2525	Cut		Rectangular in plan, vertical to near vertical sides, flattish base. Posthole in Context Group 2735.	0.34	0.32	0.19		2735	R10/1548
2526	Fill		Moderately compacted mid greyish brown silt; rootlet inclusions. Fill of 2525.	0.34	0.32	0.19			R10/1548
2527	Cut		Rectangular in plan, vertical on E & S side and step to sloping, flattish to slightly concave base. Posthole in Context Group 2735.	0.26	0.40	0.09 at step, 0.22 at bas		2735	R10/1548
2528	Fill		Moderately compacted mid greyish brown silt; rootlet inclusions. Fill of 2527.	0.26	0.40	0.22			R10/1548
2529	Cut		Oval in plan, gentle slope on south side and steep slope on north side, irregular concave base. Fire pit.	0.85	0.65	0.22			R10/1548
2530	Fill		Moderately compact dark grey brown clayey silt; frequent charcoal, rocks (oven stones). Fill of 2530.	0.85	0.65	0.22			R10/1548
2531	Cut		Circular in plan, unexcavated. Māori oven/firepit.	0.80	0.60		heavily truncated by digger	2533	R10/1548
2532	Fill		Loose black ashy silt; frequent FCR (pebble and cobble size). Fill of 2531.	0.80	0.60				R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2533	Cut		Oval in plan, gentle to non existent sides, flattish irregular base. Fire pit dug into old tree throw.	0.73	0.66				R10/1548
2534	Fill		Soft to moderately compact dark grey brown clayey silt; frequent charcoal and oven stones. Fill of 2533.	0.73	0.66				R10/1548
2535	Cut		Key-shaped in plan, steep to near vertical sides, flattish base. Posthole and board slot.	0.67	0.22	0.10			R10/1548
2536	Fill		Moderately compact mid greyish brown silt. Fill of 2535.	0.67	0.22	0.00			R10/1548
2537	Cut		Rectangular in plan, near vertical to steep sides, flattish base sloping slightly to NE. European posthole.	0.42	0.33	0.13			R10/1548
2538	Fill		Moderately compact mid greyish brown silt. Fill of 2537.	0.42	0.33	0.13			R10/1548
2539	Cut		Square in plan, vertical sides, flat base. European posthole.	0.30	0.30	0.11	truncates 2541; sketch plan and section on context sheet	2541	R10/1548
2540	Fill		Moderately compacted friable greyish brown silt; yellow lumps of clay inclusions. Fill of 2539.	0.30	0.30	0.11			R10/1548
2541	Cut		Rectangular in plan, vertical sides, flattish base. European posthole.	0.43	0.31	0.35	truncated by 2539	2539	R10/1548
2542	Fill		Moderately compact mid greyish brown silt mottled with yellow clay; degraded rock inclusions. Fill of 2541.	0.43	0.31	0.35			R10/1548
2543	Cut		Rectangular in plan, unexcavated. European posthole.	0.35	0.26				R10/1548
2544	Fill		Moderately compacted greyish brown silt; yellow clay lump inclusions. Fill of 2543.	0.35	0.26				R10/1548
2545	Cut		Oval/diamond in plan, unexcavated. European posthole.	0.50	0.35				R10/1548
2546	Fill		Moderately compacted mid brown silt; yellow clay lump inclusions. Fill of 2545.	0.50	0.35				R10/1548
2547	Cut		Squarish in plan, unexcavated. Posthole.	0.40	0.50				R10/1548
2548	Fill		Compacted and friable greyish brown fine silt; yellow clay lump inclusions. Fill of 2547.	0.40	0.50				R10/1548
2549	Cut		Rectangular in plan, vertical to short sloping sides, flattish base. European posthole in Context Group 2736.	0.40	0.31	0.35		2736	R10/1548
2550	Fill		Moderately compacted greyish brown silt; root action. Fill of 2549.	0.40	0.31	0.35			R10/1548
2551	Cut		Rectangular in plan, vertical sides, flattish base. European posthole.	0.35	0.31	0.40			R10/1548
2552	Fill		Moderately compacted greyish brown silt; one metal nail inclusion. Fill of 2552.	0.35	0.31	0.40			R10/1548
2553	Cut		Square in plan, unexcavated. European posthole.	0.35	0.35				R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2554	Fill		Moderately compacted greyish brown silt; degraded rock inclusions. Fill of 2553.	0.35	0.35				R10/1548
2555	Cut		Sub-rectangular in plan, unexcavated. Board slot.	0.40	0.25				R10/1548
2556	Fill		Moderately compacted greyish brown silt; occasional yellow clay lump inclusions. Fill of 2555.	0.40	0.25				R10/1548
2557	Cut		Square in plan, vertical sides, flat base. European posthole.	0.35	0.30	0.14		2559, 2561	R10/1548
2558	Fill		Moderately compacted mid brown silt mottled with yellow clay. Fill of 2557.	0.35	0.30	0.14			R10/1548
2559	Cut		Rectangular in plan, vertical sides, flattish base. European posthole.	0.52	0.38	0.35		2557, 2561	R10/1548
2560	Fill		Moderately compacted mid brown grey silt; yellow clay lump inclusions. Fill of 2559.	0.52	0.38	0.35			R10/1548
2561	Cut		Sub-rectangular in plan, vertical to slightly undercut sides, flat base. European posthole.	0.50	0.48	0.30		2557, 2559	R10/1548
2562	Fill		Moderately compacted mid brown silt. Fill of 2561.	0.50	0.48	0.30			R10/1548
2563	Cut		Rectangular in plan, unexcavated. European posthole.	0.82	0.62				R10/1548
2564	Fill		Moderately compacted mid brown grey silt; occasional yellow clay lumps and occasional degraded rock. Fill of 2563.	0.82	0.62				R10/1548
2565	Cut		Rectangular in plan, vertical to short sloping sides, flattish base. European posthole.	0.60	0.50	0.42	similar to 2563	poss related to drain 1241	R10/1548
2566	Fill		Moderately compacted friable mid brown grey silt; occasional degraded rock and yellow clay lump inclusions. Fill of 2565.	0.60	0.50	0.42			R10/1548
2567	Cut		Rectangular in plan, unexcavated. Historic posthole.	0.57	0.50				R10/1548
2568	Fill		Moderately compacted mid greyish brown silt mottled with yellow clay; occasional charcoal flecking. Fill of 2568.	0.57	0.50				R10/1548
2569	Cut		circular	0.50	0.50	0.47		postpipe 2910	R10/1548
2570	Fill		Compacted mottled yellow and brown silty clay. Primary fill of 2569.	0.50	0.50	0.47			R10/1548
2571	Cut		Square in plan, vertical sides, flat base. European posthole with postpipe.	0.38	0.35	0.35		postpipe 2912	R10/1548
2572	Fill		Compacted mid brown greyish silt; occasional yellow clay lump inclusions. Primary fill of 2571.	0.38	0.35	0.35			R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2573	Cut		Rectangular in plan, vertical sides, flat base. Historic posthole with postpipe.	0.43	0.37	0.30		postpipe 2913	R10/1548
2574	Fill		Moderately compacted mid greyish brown silt; rare charcoal inclusions. Primary fill of 2573.	0.43	0.37	0.30			R10/1548
2575	Cut		Circular/oval in plan, unexcavated. Posthole.	0.42 dia					R10/1548
2576	Fill		Moderately compacted dark grey brown clayey silt; occasional charcoal and rare kauri gum inclusions. Fill of 2575.	0.42 dia					R10/1548
2577	Cut		Sub-circular in plan, near vertical sides, concave base. Māori posthole.	0.3 dia		0.27	root intrusion		R10/1548
2578	Fill		Moderately compacted dark grey brown clayey silt; occasional shell fragments (about 4cm thick)	0.3 dia		0.27			R10/1548
2579	Cut		Linear in plan, gradually sloping sides, concave base. Drain into tank.	min 2.0	min 0.3				R10/1548
2580	Fill		Moderately compacted mid brownish grey silt. Fill of 2579.	min 2.0	min 0.3				R10/1548
2581	Cut		Circular in plan, near vertical side on S and almost non-existent sides on E and W, flattish irregular base. Base for metal tank?	1.10 dia		0.04			R10/1548
2582	Fill		Moderately compacted mid brownish grey silt; frequent pieces corroded iron and 1 glass shard. Fill of 2581.	1.10 dia		0.04			R10/1548
2583	Cut		Rectangular in plan, unexcavated. Historic posthole.	0.60	0.37				R10/1548
2584	Fill		Moderately compacted mid brownish grey silt mottled with yellow clay. Fill of 2583.	0.60	0.37				R10/1548
2585	Cut		Oval/sub-rectangular in plan, vertical sides, flat base. Historic(?) posthole.	0.27	0.17	0.22			R10/1548
2586	Fill		Moderately compacted mid greyish brown silt. Fill of 2585.	0.27	0.17	0.22			R10/1548
2587	Cut		Rectangular in plan, unexcavated. Historic posthole.	0.28	0.20			poss associated with same alignment of 2589	R10/1548
2588	Fill		Moderately compacted mid greyish brown silt; occasional yellow clay lump inclusions. Fill of 2587.	0.28	0.20				R10/1548
2589	Cut		Rectangular in plan, vertical short sloping sides, flattish base. European posthole with postpipe.	0.50	0.35	0.40		postpipe 2914	R10/1548
2590	Fill		Moderately compacted mid greyish brown silt; occasional yellow clay lump inclusions. Fill of 2589.	0.50	0.35	0.40			R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2591	Cut		Square posthole. no description -- context sheet says "can't find feature"						R10/1548
2592	Fill		Fill of 2591.						R10/1548
2593	Cut		Rectangular in plan, near vertical sides, flat base. Posthole.	0.46	0.26	0.07	appears somewhat in alignment with 2591, 2589, 2585	poss 2591, 2589, 2589	R10/1548
2594	Fill		Moderate - firmly compacted light greyish brown clayey silt. Fill of 2593.	0.46	0.26	0.07			R10/1548
2595	Cut		Rectangular in plan, near vertical to vertical sides, flat base. Posthole.	0.28	0.22	0.12			R10/1548
2596	Fill		Moderate - firmly compacted light greyish brown clayey silt; rusted metal nail and burnt clay inclusions. Fill of 2595.	0.28	0.22	0.12			R10/1548
2597	Cut		Sub-rectangular in plan, near vertical to vertical sides, roughly flat base. Posthole.	0.30	0.28	0.20	W side N-S is 0.3m, E side N-S is 0.28m; N side E-W is 0.24m, S side is 0.28m		R10/1548
2598	Fill		Moderately compacted mid-dark brown clayey silt; at least 3 rusted nails and one small root inclusions.	0.30	0.28	0.20		R10/1548	R10/1548
2599	Cut		Sub-rectangular in plan, unexcavated. Historic posthole.	0.43	0.37			R10/1548	R10/1548
2600	Fill		Moderately compacted mid greyish brown silt; rare charcoal flecking inclusions. Fill of 2599.	0.43	0.37			R10/1548	R10/1548
2601	Cut		Rectangular in plan, unexcavated. Historic posthole.	0.50	0.30			R10/1548	R10/1548
2602	Fill		Moderately compacted mid greyish brown silt; rare charcoal flecking inclusions. Fill of 2601.	0.50	0.20			R10/1548	R10/1548
2603	Cut		Square in plan, vertical sides, flat base. European posthole with postpipe.	0.45	0.40	0.40		R10/1548	R10/1548
2604	Fill		Compact mid brown yellow silty clay mottled with yellow clay. Primary fill of 2603.	0.45	0.40	0.40		R10/1548	R10/1548
2605	Cut		Rectangular in plan, unexcavated. Historic posthole.	0.31	0.25			R10/1548	R10/1548
2606	Fill		Moderate - firmly compacted mid greyish brown silt mottled with yellow clay. Fill of 2606.	0.31	0.25			R10/1548	R10/1548
2607	Cut		Rectangular in plan, unexcavated. Historic posthole.	0.50	0.30			R10/1548	R10/1548
2608	Fill		Moderate - firmly compacted mid greyish brown silt; degrading rock (mudstone) inclusions. Fill of 2607.	0.50	0.30			R10/1548	R10/1548
2609	Cut		Rectangular in plan, unexcavated. Historic posthole.	0.32	0.27			R10/1548	R10/1548
2610	Fill		Moderately compacted mid greyish brown silt; yellow clay lump inclusions. Fill of 2609.	0.32	0.27				R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2611	Cut		Sub-rectangular in plan, near vertical to vertical sides, flattish to concave base. European posthole.	0.56	0.39	0.40			R10/1548
2612	Fill		Moderately compacted mid greyish brown clayey silt; occasional corroded metal, 1 glass shard. Fill of 2611.	0.56	0.39	0.40			R10/1548
2613	Cut		Circular in plan, unexcavated. Posthole.	0.43 dia					R10/1548
2614	Fill		Moderately compacted mid slightly greyish brown silt; 1 piece of charcoal.	0.43 dia					R10/1548
2615	Void	void							
2616	Void	void							
2617	Cut		Rectangular in plan, unexcavated. European posthole.	0.35	0.30			aligned with 2619, 25?2, 2848	R10/1548
2618	Fill		Moderately compacted friable greyish brown silt; yellow clay inclusions. Fill of 2617.	0.35	0.30				R10/1548
2619	Cut		Rectangular in plan, unexcavated. European posthole.	0.35	0.35			2617	R10/1548
2620	Fill		Moderately compacted greyish brown silt; yellow clay inclusions. Fill of 2619.	0.35	0.35				R10/1548
2621	Cut		Rectangular in plan, unexcavated. Historic posthole.	0.43	0.33				R10/1548
2622	Fill		Moderately compacted mid greyish brown silt. Fill of 2621.	0.43	0.33				R10/1548
2623	Cut		Square in plan, vertical sides, flat base. Historic posthole truncating posthole 2908.	0.56	0.54	0.47	truncates 2908	2908	R10/1548
2624	Fill		Moderately compacted yellowish mottled with brown silt; occasional rootlets.	0.56	0.54	0.47			R10/1548
2625	Cut		Square in plan, unexcavated. European posthole.	0.60	0.55		see 2629 for detailed info	2629	R10/1548
2626	Fill		Moderately compacted mid brown with yellow mottling silt; yellow clay lump inclusions. Fill of 2627.	0.60	0.55				R10/1548
2627	Cut		Rectangular in plan, vertical sides with steps on E and W sides, flat base. European posthole.	0.70	0.51	0.56	0.28 deep at W end, 0.3 deep at E end, 0.56 deep at centre		R10/1548
2628	Fill		Moderately compacted mid brown silt mottled with yellowish clayey silt; one large rock and occasional small rocks. Fill of 2627.	0.70	0.51	0.56			R10/1548
2629	Cut		Rectangular in plan, vertical sides (compromised by later root action), flat step giving way to concave central depression. European posthole truncated by 4051.	0.70	0.60	0.45	truncated by 4051; probably associated with the stables/corral?	4051; aligned with 2635, 2633, 2631, 2627	R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2630	Fill		Moderately compact mid greyish brown silt; degraded rock inclusions. Fill of 2629.	0.70	0.60	0.45			R10/1548
2631	Cut		Sub-rectangular in plan, unexcavated. European posthole.	0.45	0.45		may be posthole, may be tree throw.	aligned with 2633 and 2635	R10/1548
2632	Fill		Moderately compacted yellow-mixed brown silt; occasional degraded rock. Fill of 2631.	0.45	0.45				R10/1548
2633	Cut		Square in plan, unexcavated. European posthole.	0.70	0.65		very similar to 2631 and 2635; maybe foundation posts for stables?	2631, 2635	R10/1548
2634	Fill		Moderately compacted yellow-mixed brown silt; occasional degraded rock. Fill of 2633.	0.70	0.65				R10/1548
2635	Cut		Square in plan, vertical sides with step on W side, flat base with root hole on W side. European posthole.	0.64	0.40	0.31			R10/1548
2636	Fill		Moderately compacted mid brown silt mottled with yellow clayey silt; large root and occasional small rocks. Fill of 2636.	0.64	0.40	0.31			R10/1548
2637	Cut		Rectangular in plan, vertical to near vertical sides, concave/flatish base. Historic posthole.	0.38	0.33	0.21			R10/1548
2638	Fill		Moderately compacted mid greyish brown silt. Fill of 2637.	0.38	0.33	0.21			R10/1548
2638	Fill		Soft mid brownish grey silt. Postpipe in 2514.	0.07		0.40		2514	R10/1548
2639	Void	void							
2640	Void	void							
2641	Cut		Rectangular in plan, near vertical to vertical sides, flatish base. Historic posthole with postpipe.	0.46	0.39	0.50		postpipe 4215	R10/1548
2642	Fill		Moderately compacted greyish brown silt mottled with light yellow; occasional bottle glass, 1 piece coal, 1 burnt rock inclusions. Fill of 2641.	0.46	0.39	0.50			R10/1548
2643	Cut		Rectangular in plan, vertical sides slightly undercut on E side, flatish base. Historic posthole.	0.40	0.38	0.42			R10/1548
2644	Fill		Moderately compacted mid greyish brown silt; occasional glass and ceramic inclusions.	0.40	0.38	0.42			R10/1548
2645	Cut		Square in plan, vertical sides, concave base. Historic posthole.	0.37	0.31	0.45			R10/1548
2646	Fill		Moderately compacted mottled mid brown silt and yellow and white clay. Fill of 2645.	0.37	0.31	0.45			R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2647	Cut		Rectangular in plan, vertical sides, flattish/slightly concave base. Posthole.	0.51	0.48	0.58			R10/1548
2648	Fill		Moderately-firmly compacted mid greyish brown or brownish grey topsoil, silt, and subsoil; moderately frequent-occasional bottle glass pieces (black beer most abundant) and 2 small ceramic frags. Fill of 2647.	0.51	0.48	0.58			R10/1548
2649	Cut		Board slot.						R10/1548
2650	Fill		Fill of 2649.						R10/1548
2651	Cut		Rectangular in plan, vertical-near vertical sides, concave base. Historic posthole.	0.41	0.33	0.73			R10/1548
2652	Fill		Moderately compacted mid brown silt mottled with yellow brown clay; 1 piece of corroded metal and rare charcoal inclusions. Fill of 2651.	0.41	0.33	0.73			R10/1548
2653	Cut		Rectangular in plan, unexcavated. Historic posthole in Context Group 2735(?).	0.50	0.40			2735?	R10/1548
2654	Fill		Soft to moderately compacted dark slightly blackish brown silt; occasional mudstone inclusions. Fill of 2653.	0.50	0.40				R10/1548
2655	Cut		Sub-rectangular in plan, unexcavated. Blown out post-European posthole.	0.50	0.40				R10/1548
2656	Fill		Moderately compacted mid brown silt. Fill of 2655.	0.50	0.40				R10/1548
2657	Cut		Square in plan, unexcavated. Post-European posthole.	0.25	0.25				R10/1548
2658	Fill		Moderately compacted mid brown silt; root intrusion. Fill of 2657.	0.25	0.25				R10/1548
2659	Cut		Oval in plan, gently sloping sides to the E and vertical-slightly undercut to the S and W, base obscured by root damage. Posthole.	0.38	0.32	min 0.2	W and S sides and base broken by roots		R10/1548
2660	Fill		Moderately compacted mid brown silt mottled with yellow; frequent root inclusions. Fill of 2659.	0.38	0.32	min 0.2			R10/1548
2661	Cut		Square in plan, vertical sides with flat step at 0.16mbs followed by vertical sides; concave base. Historic posthole.	0.47	0.47	0.52			R10/1548
2662	Fill		Moderately compacted mid greyish brown silt mottled with yellowish and white clay; one nail inclusion. Fill of 2661.	0.48	0.18	0.51			R10/1548
2663	Cut		Square in plan, unexcavated. Post-European posthole.	0.40	0.40		5m E of 2655 and 5m E of 2854. Possible alignment boundary?	2655, 2854?	R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2664	Fill		Moderately compacted friable greyish brown fine silt; occasional charcoal flecking. Fill of 2663.	0.40	0.40				R10/1548
2665	Cut	stakehole	Long thin oval in plan, steeply sloping on E side and W side "is more up and down but matches the angle of the E side", slightly concave curved base. Stakehole.	0.10	0.07	0.09 (vertical depth); 0.13 (depth measured as the stakehole leans)	In line of 5 stakeholes running N-S, 2665-2673, looking like shaped battens? Probably a kind of postmould made by a driven post, suggests a shaped post flat-sided and not pointed, set at an angle, leaning towards water. [more notes and sketch plan on back of context sheet]	2665-2673	R10/1408
2666	Fill	stakehole	Moderately compacted black charcoal stained topsoil and subsoil; white shell fragment inclusions. Fill of 2665.	0.10	0.07	0.09 (vertical depth); 0.13 (depth measured as the stakehole leans)	All these fills [for stakeholes 2665-2673] are the same -- stood out as being dark black where as impressed midden material in the subsoil was a paler colour.		R10/1408
2667	Cut	stakehole	Long thin oval in plan, steeply sloping on E side and W side "is more up and down but matches the angle of the E side", slightly concave curved base. Stakehole.	0.10	0.07	0.09 (vertical depth); 0.13 (depth measured as the stakehole leans)			R10/1408
2668	Fill	stakehole	Moderately compacted black charcoal stained topsoil and subsoil; white shell fragment inclusions. Fill of 2667.			0.09 (vertical depth); 0.13 (depth measured as the stakehole leans)			R10/1408
2669	Cut	stakehole	Long thin oval in plan, steeply sloping on E side and W side "is more up and down but matches the angle of the E side", slightly concave curved base. Stakehole.			0.09 (vertical depth); 0.13 (depth measured as the stakehole leans)			R10/1408
2670	Fill	stakehole	Moderately compacted black charcoal stained topsoil and subsoil; white shell fragment inclusions. Fill of 2669.			0.09 (vertical depth); 0.13 (depth measured as the stakehole leans)			R10/1408

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2671	Cut	stakehole	Long thin oval in plan, steeply sloping on E side and W side "is more up and down but matches the angle of the E side", slightly concave curved base. Stakehole.			0.09 (vertical depth); 0.13 (depth measured as the stakehole leans)			R10/1408
2672	Fill	stakehole	Moderately compacted black charcoal stained topsoil and subsoil; white shell fragment inclusions. Fill of 2671.			0.09 (vertical depth); 0.13 (depth measured as the stakehole leans)			R10/1408
2673	Cut	stakehole	Long thin oval in plan, steeply sloping on E side and W side "is more up and down but matches the angle of the E side", slightly concave curved base. Stakehole.			0.09 (vertical depth); 0.13 (depth measured as the stakehole leans)			R10/1408
2674	Fill	stakehole	Moderately compacted black charcoal stained topsoil and subsoil; white shell fragment inclusions. Fill of 2673.			0.09 (vertical depth); 0.13 (depth measured as the stakehole leans)			R10/1408
2675	Cut	stakehole	Subcircular in plan, vertical-short sloping sides, concave base. Stakehole.	0.20	0.15	0.11			R10/1408
2676	Fill	stakehole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2675.	0.20	0.15	0.11			R10/1408
2677	Cut	posthole	Subcircular in plan, gradual to steep sides, concave base. Māori posthole.	0.25	0.25	0.08			R10/1408
2678	Fill	posthole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2677.	0.25	0.25	0.08			R10/1408
2679	Cut	posthole	Subcircular in plan, vertical sides, concave base. Māori posthole.	0.15	0.15	0.04	heavily vertically truncated by digger		R10/1408
2680	Fill	posthole	Moderately compacted mid brown silt; fragmented shell and charcoal inclusions. Fill of 2679.	0.15	0.15	0.04	Fill recorded as Same as (2678)		R10/1408
2681	Cut	stakehole	Subcircular in plan, vertical-short sloping sides, concave base. Māori stakehole.	0.15	0.15	0.05			R10/1408
2682	Fill	stakehole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2681.	0.15	0.15	0.05	Fill recorded as Same as (2678)		R10/1408

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2683	Cut	posthole	Subcircular in plan, gradually sloping sides, concave base. Māori posthole.	0.20	0.15	0.02			R10/1408
2684	Fill	posthole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2683.	0.20	0.15	0.02	Fill recorded as Same as (2678)		R10/1408
2685	Cut	stakehole	Subcircular in plan, vertical-short sloping sides, concave base. Māori stakehole.	0.10	0.10	0.04			R10/1408
2686	Fill	stakehole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2685.	0.10	0.10	0.04	Fill recorded as Same as (2678)		R10/1408
2687	Cut	stakehole	Subcircular in plan, vertical-short sloping sides, concave base. Māori stakehole.	0.12	0.12	0.04			R10/1408
2688	Fill	stakehole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2687.	0.12	0.12	0.04	Fill recorded as Same as (2678)		R10/1408
2689	Cut	oven	Oval in plan, unexcavated. Base of oven.	0.70	0.44				R10/1408
2690	Fill	oven	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2689.	0.70	0.44		Fill recorded as Same as (2678)		R10/1408
2691	Cut	posthole	Subcircular in plan, gradually sloping sides, concave base. Māori posthole.	0.10	0.10	0.03			R10/1408
2692	Fill	posthole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2692.	0.10	0.10	0.03	Fill recorded as Same as (2678)		R10/1408
2693	Cut	posthole	Subcircular in plan, vertical-short sloping sides, flattish base. Māori posthole.	0.29	0.17	0.05			R10/1408
2694	Fill	posthole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2693.	0.29	0.17	0.05	Fill recorded as Same as (2678)		R10/1408
2695	Cut	posthole	Subcircular in plan, short sloping sides, concave base. Posthole.	0.45	0.25	0.10	associated with 2711 NE-SW	2711	R10/1408
2696	Fill	posthole	Moderately compacted mid brown silt; fragmented shell and large charcoal chunk inclusions. Fill of 2695.	0.45	0.25	0.10	Fill recorded as Same as (2678) with large charcoal chunks		R10/1408
2697	Cut	posthole	Subcircular in plan, vertical sides, concave base. Māori posthole.	0.12	0.12			2699, 2703, 2701	R10/1408
2698	Fill	posthole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2697.	0.12	0.12		Fill recorded as Same as (2678)		R10/1408
2699	Cut	posthole	? In plan, vertical sides, concave base. Posthole.	0.15	0.11	0.05		2697, 2701, 2703	R10/1408
2700	Fill	posthole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2699.	0.15	0.11	0.05	Fill recorded as Same as (2678)		R10/1408
2701	Cut	posthole	Circular in plan, vertical sides, concave base. Posthole associated with 2703, 2699, 2697.	0.15 dia		0.06		2703, 2699, 2697	R10/1408

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2702	Fill	posthole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2702.	0.15 dia		0.06	Fill recorded as Same as (2678)		R10/1408
2703	Cut	posthole	Subcircular in plan, vertical sides, concave base. Māori posthole.	0.14 dia				2697, 2699, 2701	R10/1408
2704	Fill	posthole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2703.	0.14 dia			Fill recorded as Same as (2678)		R10/1408
2705	Cut	posthole	Subcircular in plan, vertical to gradually sloping sides, concave base. Posthole.	0.30	0.17	0.07			R10/1408
2706	Fill	posthole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2705.	0.30	0.17	0.07	Fill recorded as Same as (2678)		R10/1408
2707	Cut	posthole	Posthole.						R10/1408
2708	Fill	posthole	Fill of 2707.						R10/1408
2709	Cut	posthole	Sub-oval in plan, vertical to gradually sloping sides, concave base. Posthole.	0.20	0.30	0.06			R10/1408
2710	Fill	posthole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2709.	0.20	0.03	0.06	Fill recorded as Same as (2678)		R10/1408
2711	Cut	posthole	Oval in plan, long sloping gradual sides, concave base. Posthole.	0.47	0.35	0.10	associated with 2695; oven base?	2695	R10/1408
2712	Fill	posthole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2711.	0.47	0.35	0.10	Fill recorded as Same as (2678)		R10/1408
2713	Cut	stakehole	Circular in plan, vertical sides, concave base. Stakehole.	0.09 dia		0.07	heavily vertically truncated		R10/1408
2714	Fill	stakehole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2713.	0.09 dia		0.07	Fill recorded as Same as (2678)		R10/1408
2715	Cut	posthole	Oval in plan, vertical-short sloping sides, concave base. Posthole.	0.20	0.14	0.05			R10/1408
2716	Fill	posthole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2715.	0.20	0.14	0.05	Fill recorded as Same as (2678)		R10/1408
2717	Cut	stakehole	Subcircular in plan, vertical sides, concave base. Stakehole.	0.12	0.10	0.07	possibly associated with 2719 and 2715	2719, 2715	R10/1408

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2718	Fill	stakehole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2717.	0.12	0.10	0.07	Fill recorded as Same as (2678)		R10/1408
2719	Cut	posthole	Circular in plan, short sloping sides, concave base. Posthole.	0.2 dia		0.08			R10/1408
2720	Fill	posthole	not recorded -- probably same as 2678	0.2 dia		0.08			R10/1408
2721	Cut	stakehole	Sub-circular in plan, vertical sides, concave base w/ slope on W side. Stakehole.	0.09 dia		0.12			R10/1408
2722	Fill	stakehole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2721.	0.09 dia		0.12	Fill recorded as Same as (2678)		R10/1408
2723	Cut	stakehole	Sub-circular in plan, vertical sides, concave base. Stake hole.	0.1 dia		0.04			R10/1408
2724	Fill	stakehole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2723.	0.1 dia		0.04	Fill recorded as Same as (2678)		R10/1408
2725	Cut	posthole	Oval in plan, vertical sides, concave base. Posthole.	0.30	0.30	0.18			R10/1408
2726	Fill	posthole	Moderately compacted mid brown silt; fragmented shell inclusions. Fill of 2725.	0.30	0.30	0.18	Fill recorded as Same as (2678)		R10/1408
2727	Cut		Rectangular in plan, unexcavated. Posthole in Context Group 2735.	0.48	0.26		part of Context Group 2735	2735	R10/1548
2728	Fill		Moderately compacted mid greyish brown silt; rootlet inclusions. Fill of 2727.	0.48	0.26				R10/1548
2729	Cut		Rectangular in plan, unexcavated. Posthole in Context Group 2735.	0.50	0.30		part of Context Group 2735	2735	R10/1548
2730	Fill		Moderately compacted mid greyish brown silt; rootlet inclusions. Fill of 2729.	0.50	0.30		Fill recorded as Same as (2728)		R10/1548
2731	Cut		Rectangular in plan, unexcavated. Posthole in Context Group 2735.	0.38	0.31		part of Context Group 2735	2735	R10/1548
2732	Fill		Moderately compacted mid greyish brown silt; rootlet inclusions. Fill of 2731.	0.38	0.31		Fill recorded as Same as (2728)		R10/1548
2733	Cut		Rectangular in plan, unexcavated. Posthole in Context Group 2735.	0.61	0.48		part of Context Group 2735	2735	R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2734	Fill		Moderately compacted mid greyish brown silt; rootlet inclusions. Fill of 2733.	0.61	0.48		Fill recorded as Same as (2728)		R10/1548
2735	Context Group		N-S Alignment comprising: 2727, 2729, 2731, 2733, 2505, 2508, 2510, 2512, 2514, 2516, 2525, 2527, possibly 2518, possibly 2520, and possibly 2665						R10/1548
2736	Context Group		E-W Alignment comprising: 2593, 2591, 2589, 2587, 2585, 2583, 2573, 2599, 2571, 2601, 2603, 2567, 2565, 2563, 2557, 2559, 2561, 2555, 2549, 2541, 2539				2557, 2559, and 2561 are intercutting; 2541 and 2539 are intercutting		R10/1548
2737	Context Group		E-W Alignment comprising: 2635, 2633, 2631, 2629, 2627, 2625, 2623						R10/1548
2738	Fill		Soft mid brownish grey silt. Postpipe in 2514.	0.07		0.40		2514	R10/1548
2739	Cut		Rectangular in plan, unexcavated. Post-European stakehole.	0.15	0.11		in close proximity and E of 1241	poss 1241	R10/1548
2740	Fill		Moderately compact mid brown silt; degraded rock inclusions. Fill of 2739.	0.15	0.11				R10/1548
2741	Cut		Square(?) in plan, vertical sides, flat base. Historic posthole truncated by drain.	min 0.23	min 0.23	0.33	Posthole truncated by historic drain 1241.	1241	R10/1548
2742	Fill		Moderately compacted mid brown silt; occasional small yellow rock inclusions. Fill of 2741.	min 0.23	min 0.23	0.33			R10/1548
2743	Cut		Sub-rectangular in plan, unexcavated. Post-European posthole.	0.35	0.25				R10/1548
2744	Fill		Moderately compacted mid greyish brown silt; degraded rock inclusions. Fill of 2743.	0.35	0.25				R10/1548
2745	Cut		Rectangular in plan, unexcavated. Historic posthole.	0.47	0.37				R10/1548
2746	Fill		Moderately compacted mid brownish grey silt. Fill of 2745.	0.47	0.37				R10/1548
2747	Cut		Square in plan, unexcavated. Historic posthole.	0.44	0.44				R10/1548
2748	Fill		Moderately compacted dark brownish grey silt; rootlet inclusions. Fill of 2747.	0.44	0.44				R10/1548
2749	Cut		Rectangular in plan, unexcavated. Posthole.	0.30	0.25				R10/1548
2750	Fill		Moderately compacted mid brownish grey silt. Fill of 2749.	0.30	0.25				R10/1548
2751	Cut		Squarish in plan, unexcavated. Post-European posthole.	0.38	0.37				R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2752	Fill		Moderately compacted (postpipe loose) mid brown silt mottled with yellow clay lumps; degraded rock inclusions. Fill of 2751.	0.38	0.37				R10/1548
2753	Cut		Rectangular in plan, unexcavated. Posthole.	0.40	0.37				R10/1548
2754	Fill		Moderately compacted mid greyish brown silt. Fill of 2753.	0.40	0.37				R10/1548
2755	Cut		Rectangular in plan, unexcavated. Posthole.	0.50	0.50				R10/1548
2756	Fill		Moderately compacted mid greyish brown silt mottled with yellow and white; rare rock inclusions. Fill of 2755.	0.50	0.50				R10/1548
2757	Cut		Rectangular in plan, unexcavated. Posthole.	0.54	0.50				R10/1548
2758	Fill		Moderately compacted mid brown mottled w/ yellow brown silt. Fill of 2757.	0.54	0.50				R10/1548
2759	Cut		Posthole.						R10/1548
2760	Fill		Fill of 2759.						R10/1548
2761	Cut		Posthole.						R10/1548
2762	Fill		Fill of 2761.						R10/1548
2763	Cut		Rounded rectangular in plan, near vertical to steep sloping sides, concave base. Posthole.	0.29	0.27	0.12			R10/1548
2764	Fill		Moderately compacted mid greyish brown silt. Fill of 2763.	0.29	0.27	0.12			R10/1548
2765	Cut		Rectangular in plan, near vertical to vertical sides, slightly concave base. Posthole.	0.35	0.31	0.13			R10/1548
2766	Fill		Moderately to softly compacted mid greyish brown silt. Fill of 2765.	0.35	0.31	0.13			R10/1548
2767	Cut		Circular in plan, unexcavated. Posthole.	0.18 dia					R10/1548
2768	Fill		Moderately compacted mid brown silt. Fill of 2767.	0.18 dia					R10/1548
2769	Cut		Square in plan, unexcavated. Historic posthole.	0.33					R10/1548
2770	Fill		Moderately compacted mid brown silt. Fill of 2769.	0.33					R10/1548
2771	Cut		Sub-circular in plan, unexcavated. Posthole associated with midden 2829.	0.20	0.17		posthole associated with midden 2829	2829	R10/1409
2772	Fill		Moderately compacted mid greyish brown silt; frequent shell and occasional charcoal inclusions. Fill of 2771.	0.20	0.17				R10/1409

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2773	Cut		Subcircular in plan, unexcavated. Posthole associated with midden 2829.	0.17	0.16		posthole associated with midden 2829	2829	R10/1409
2774	Fill		Moderately compacted mid greyish brown silt; frequent shell and occasional charcoal inclusions. Fill of 2773.	0.17	0.16		recorded as Same as 2772		R10/1409
2775	Cut		Circular in plan, unexcavated. Posthole associated with midden 2829.	0.23 dia			posthole associated with midden 2829	2829	R10/1409
2776	Fill		Moderately compacted mid greyish brown silt; frequent shell and occasional charcoal inclusions. Fill of 2775.	0.23 dia			recorded as Same as 2772		R10/1409
2777	Cut		Roughly rectangular in plan, unexcavated. Posthole.	0.24	0.15				R10/1548
2778	Fill		Moderately compacted mid greyish brown silt. Fill of 2777.	0.24	0.15				R10/1548
2779	Cut		Rectangular in plan, unexcavated. Posthole possibly associated with 2785.	0.52	0.41		possibly associated with 2785	2785?	R10/1548
2780	Fill		Moderately compacted mid brownish grey mottled with yellow and white silt. Fill of 2779.	0.52	0.41				R10/1548
2781	Void	void	tree throw						
2782	Void	void	tree throw						
2783	Cut		Modern trench.	approx. 3.0m	max 1.5m			2787	Modern
2784	Fill		Fill of 2783.	approx. 3.0m	max 1.5m				Modern
2785	Cut		Rectangular in plan, near vertical sides, concave base. Posthole.	0.46	0.40	0.40		2787	R10/1548
2786	Fill		Moderately to firmly compacted mid greyish brown silt mottled with redeposited natural yellow brown clay; historic artefact inclusions. Fill of 2785	0.46	0.40	0.40			R10/1548
2787	Cut		Modern trench.	approx. 3.0m	max 1.5m		2787 possibly truncates 2785 on its easternmost edge	2783, 2785	Modern
2788	Fill		Fill of 2787.	approx. 3.0m	max 1.5m				Modern
2789	Cut		Oval in plan, unexcavated. Posthole.	0.25	0.19		near midden so poss associated w/ it		R10/1409

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2790	Fill		Moderately compacted mid brownish grey silt. Fill of 2789.	0.25	0.19				R10/1409
2791	Cut		Sub rectangular in plan, unexcavated. European posthole.	0.51	0.45				Modern farm post
2792	Fill		Moderately compacted mid brownish grey silt. Fill of 2791.	0.51	0.45				Modern farm post
2793	Cut		Oval in plan, gently sloping sides, very slightly concave base. Small firescoop/oven.	0.57	0.45	0.04			R10/1410
2794	Fill		Moderately compacted dark brownish grey silt; frequent charcoal, occasional oven stone. Fill of 2993.	0.57	0.45	0.04			R10/1410
2795	Cut	posthole	Oval in plan, unexcavated. Posthole possibly associated with midden to N and oven 2793 to E.	0.30	0.26		faint posthole	2793, midden ?	R10/1410
2796	Fill		Moderately compacted mid brown silt. Fill of 2795.	0.30	0.26				R10/1410
2797	Cut		Oven/firescoop - unexcavated.	0.74	0.59		firescoop/oven		R10/1409
2798	Fill		Fill of 2997.	0.47	0.59		fill of firescoop/oven 2797		R10/1409
2799	Cut		Circular in plan, concave sides, concave base. Posthole.	0.21 dia	0.21	0.02	very shallow circular depression -- possible vertically truncated posthole?		R10/1409
2800	Fill		Compacted mid brown silt; small rock inclusions. Fill of 2799	0.21		0.02			R10/1409
2801	Cut		Sub rectangular in plan, unknown sides, flattish base. Over-excavated posthole.	0.26	0.21	0.05	rectangular posthole that has been over-excavated?		R10/1409
2802	Fill		Moderately compacted mid greyish brown silt; frequent charcoal inclusions. Fill of 2801.	0.26	0.21	0.05			R10/1409
2803	Cut		Irregular oval in plan, concave side at S end and gently sloping from the N, concave irregular base. Possible posthole.	0.76	0.60	0.19	Possible posthole with post depositional animal/tree root/demolition damage. (sketch plan on context sheet)		R10/1409
2804	Fill		Moderately compacted mid-brown silt (0-0.03mbs) above yellowish silt (0.03-0.19mbs); brick and occasional rootlet inclusions. Fill of 2803.	0.76	0.60	0.19			R10/1409

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2805	Cut		Irregular shape in plan, concave sides, concave base. Possible posthole.	0.60	0.46	0.13	Possible posthole with post depositional animal/tree root/demolition damage. (sketch plan on context sheet)		R10/1409
2806	Fill		Moderately compacted mid brown silt; frequent brick inclusions. Fill of 2806.	0.60	0.46	0.13			R10/1409
2807	Void	void	rabbit hole						
2808	Void	void	rabbit hole						
2809	Cut		Rectangular in plan, steep slope on S side and near vertical on E and W sides, flattish base. Posthole.	0.30	0.25	0.04	shallow posthole		R10/1547
2810	Fill		Moderately to softly compacted mid greyish brown silt; root inclusion. Fill of 2809.	0.30	0.25	0.04			R10/1547
2811	Cut		Square in plan, vertical sides, flat/irregular base. Historic posthole with in situ post.	0.30	0.30	0.20	Historic posthole with in situ wooden post.		R10/1547
2812	Fill		Moderately compacted mid brown silt; remains of wooden post in situ.	0.30	0.30	0.20			R10/1547
2813	Cut		Square in plan with slightly rounded corners, steeply sloping sides, and a flattish to slightly concave base. Posthole.	0.31 dia		0.12	posthole		R10/1547
2814	Fill		Compacted orangey brown silt; frequent small rocks. Fill of 2813.	0.31 dia		0.12			R10/1547
2815	Cut		Rectangular in plan, unexcavated. Posthole.	0.42	0.38		Field boundary posthole		19th Century field boundary posthole
2816	Fill		Moderately to softly compacted mid greyish brown silt; moderate root inclusions. Fill of 2815.	0.42	0.38		Field boundary posthole		19th Century field boundary posthole
2817	Cut		Rectangular in plan, unexcavated. Small posthole/stakehole.	0.10	0.09				
2818	Fill		Moderately compacted mid brown silt. Fill of 2817.	0.10	0.09				
2819	Cut		Rectangular in plan, unexcavated. European posthole.	0.28	0.24		Field boundary posthole		19th Century field

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
									boundary posthole
2820	Fill		Moderately compacted mid greyish brown silt. Fill of 2819.	0.28	0.24		Field boundary posthole		19th Century field boundary posthole
2821	Cut		Cut of oval oven with steep sloping sides and a flattish base. Filled by 2822.	0.53	0.50	0.17	Raked out oven feature		R10/1409
2822	Fill		Moderately compacted mid greyish brown silt; rare (2) burnt rock inclusions. Fill of 2822	0.53	0.50	0.17			R10/1409
2823	Cut		Oval in plan, moderately sloping side in N half, gradually sloping side in S half, concave base. Oven/firescoop.	1.60	1.10	0.29	oven/firescoop with charcoal lens		R10/1409
2824	Fill		Moderately compacted mid brownish grey silt; frequent charcoal and frequent oven stone inclusions. Fill of 2823.	1.60	1.10	0.29			R10/1409
2825	Cut		Oval in plan, gradually sloping sides, concave base. Large oven.	2.20	1.50	0.30			R10/1409
2826	Fill		Moderately compacted dark grey silt; frequent oven stones and FCR and frequent charcoal inclusions. Fill of 2825.	2.20	1.50	0.30			R10/1409
2827	Cut		Sub rectangular, unexcavated. Posthole truncated by roots.	0.39	0.37		Posthole truncated by roots or rabbits on SE and NW sides		R10/1409
2828	Fill		Moderately compacted mid greyish brown mottled with yellowish brown silt; occasional charcoal inclusions.	0.39	0.37				R10/1409
2829	Layer		Moderately compacted midden with a dark brownish black matrix; frequent shell, occasional FCR, and 2 pieces of chert inclusions.	min approx. 10	min approx. 5	0.05-0.1	small finds: 2 pieces chert, samples: 2 bags bulk sample		R10/1409
2830	Cut		Key shaped in plan, unexcavated. Posthole and board slot.	0.60	0.20				R10/1409
2831	Fill		Moderately compacted mid greyish brown silt. Fill of 2830.	0.60	0.20				R10/1409
2832	Cut		Rectangular in plan, unexcavated. Posthole.	0.37	0.30				R10/1547
2833	Fill		Moderately compacted mid brown clayey silt with yellow clay mottling; frequent clay inclusions and rootlets. Fill of 2832.	0.37	0.30				R10/1547
2834	Cut		Rectangular in plan, unexcavated. Posthole.	0.39	0.28				R10/1547

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2835	Fill		Moderately compacted dark brown clayey silt with flecks of yellow brown clay; rare charcoal, clay, and rare mudstone inclusions. Fill of 2834.	0.39	0.28				R10/1547
2836	Cut		Posthole.						R10/1547
2837	Fill		Fill of 2836.						R10/1547
2838	Cut		Rectangular in plan, unexcavated. Posthole.	0.30	0.25				R10/1547
2839	Fill		Moderately compacted dark brown clayey silt mottled with yellow clay; frequent mudstone, occasional charcoal, and occasional clay inclusions. Fill of 2838.	0.30	0.25				R10/1547
2840	Cut		Sub rectangular in plan, unexcavated. Posthole.	0.35	0.23		posthole probably rectangular but unclear from surface, could be L-shaped; sketch plan on context sheet		R10/1547
2841	Fill		Moderately compacted light brown mottled with mid brown clayey silt. Fill of 2840.	0.35	0.23				R10/1547
2842	Cut		Rectangular in plan, unexcavated. Posthole.	0.28	0.22				R10/1547
2843	Fill		Moderately compacted mid brown with yellow mottling clayey silt; rare charcoal and clay inclusions. Fill of 2842.	0.28	0.22				R10/1547
2844	Cut		Square in plan, unexcavated. Posthole.	0.19	0.15		small rectangular posthole approx. 15cm N of ditch termination		R10/1548
2845	Fill		Moderately compacted mid brown silt. Fill of 2844.	0.19	0.15				R10/1548
2846	Cut		Rectangular in plan, unexcavated. Historic posthole.	0.42	0.37				R10/1548
2847	Fill		Softly to moderately compacted mid brownish grey silt; occasional mudstone inclusions. Fill of 2846.	0.42	0.37				R10/1548
2848	Cut		Rectangular in plan, unexcavated. Post-European posthole.	0.40	0.37				R10/1548
2849	Fill		Moderately compacted mid greyish brown silt; occasional yellow clay lumps. Fill of 2849.	0.40	0.37				R10/1548
2850	Cut		Square in plan, unexcavated. Post-European posthole.	0.39	0.37				R10/1548
2851	Fill		Moderately compacted mid brown silt with yellow clay lumps; occasional degraded rock inclusions.	0.39	0.37				R10/1548
2852	Cut		Square in plan, unexcavated. Post-European posthole.	0.21	0.21				R10/1548
2853	Fill		Moderately compacted mid brown silt with yellow clay lumps; occasional degraded rock inclusions.	0.21	0.21				R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2854	Cut		Squarish in plan, unexcavated. Post-European posthole.	0.40	0.40		5m W of 2663	2663	R10/1548
2855	Fill		Moderately compacted mid brown and blackish silt; occasional yellow clay lumps. Fill of 2854.	0.40	0.40				R10/1548
2856	Cut		Rectangular in plan, unexcavated. Blown out post-European posthole.	0.50	0.40		post-European posthole blown out by root action on the E side		R10/1548
2857	Fill		Compacted black mid brown silt ash; occasional chunks of charcoal.	0.50	0.40				R10/1548
2858	Cut		Squarish in plan, unexcavated. Post-European posthole.	0.26	0.26				R10/1548
2859	Fill		Moderately compacted mid brown silt; occasional yellow clay lumps. Fill of 2858.	0.26	0.26				R10/1548
2860	Cut		Square in plan, unexcavated. Posthole.	0.40	0.40				R10/1547
2861	Fill		Firmly compacted white clay mottled with yellow brown clay; occasional charcoal inclusions. Fill of 2860.	0.40	0.40				R10/1547
2862	Cut		Oval in plan, unexcavated. Posthole.	0.27	0.18				R10/1409
2863	Fill		Moderately compacted mid greyish brown silt; rare charcoal flecking. Fill of 2863.	0.27	0.18				R10/1409
2864	Cut	firescoop	Oval/sub oval in plan, gradual sloping sides, irregularly concave base. Fire pit.	1.80	1.60	0.12-0.18	Fire pit -- blown out on W; sample 93 charcoal		R10/1410
2865	Fill		Softly to moderately compacted dark brownish grey on E where fire pit completely visible and light brownish grey on W slightly clayey silt; frequent charcoal and frequent oven stone inclusions. Fill of 2864	1.80	1.60	0.12-0.18			R10/1410
2866	Cut		Square in plan, unexcavated. Posthole.	0.47	0.47				R10/1547
2867	Fill		Moderately compacted mid greyish brown silt; occasional mudstone and occasional charcoal. Fill of 2866.	0.47	0.47				R10/1547
2868	Cut	posthole	Oval in plan, unexcavated. Posthole.	0.40	0.30				R10/1410
2869	Fill		Moderately compacted mid brown silt; frequent charcoal inclusions. Fill of 2868.	0.40	0.30				R10/1410
2870	Cut	posthole	Oval in plan, unexcavated. Posthole.	0.30	0.20				R10/1410
2871	Fill		Moderately compacted mid brown silt; occasional charcoal inclusions. Fill of 2870.	0.30	0.20				R10/1410
2872	Void		Root						

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2873	Void		Root						
2874	Cut	posthole	Oval in plan, unexcavated. Posthole.	0.26	0.13				R10/1410
2875	Fill		Moderately compacted mid brown silt; rootlets. Fill of 2874.	0.26	0.13				R10/1410
2876	Cut	historic hangi	Circular in plan, moderately sloping sides, concave base. Brick hangi.	0.85 dia		0.18			R10/1410
2877	Fill		Firmly compacted orange bricks/brick fragments with grey silt matrix. Fill of 2876.	0.85 dia		0.18			R10/1410
2878	Cut		Rectangular in plan, near vertical sides, flattish base. Posthole.	0.28	0.24	0.23			modern
2879	Fill		Moderately compacted mid brown clayey silt. Fill of 2878.	0.28	0.24	0.23			modern
2880	Cut		Rectangular in plan, unexcavated. Posthole.	0.25	0.20				modern
2881	Fill		Moderately compacted mid-brown silt; root inclusions. Fill of 2880.	0.25	0.20				modern
2882	Cut		Square in plan, vertical sides, flattish base. Post-European posthole.	0.30	0.30	0.40			modern
2883	Fill		Moderately compacted grey silt; frequent degraded rock inclusions. Fill of 2882.	0.30	0.30	0.40			modern
2884	Cut		Sub rectangular in plan, unexcavated. Posthole.	0.55	0.38				modern
2885	Fill		Firm greyish mid brown silty clay; occasional charcoal fleck inclusions. Fill of 2884.	0.55	0.38	0.40			modern
2886	Cut		Square in plan, vertical sides, flat base. Posthole.	0.35	0.35	0.21			modern
2887	Fill		Moderately compacted mid brown grey silt; frequent degraded rock inclusions. Fill of 2886.	0.35	0.35	0.21			modern
2888	Cut	posthole	Circular in plan, vertical sides except undercut on N side, flattish base. Posthole truncating square posthole 2890.	0.40	0.38	0.25	Circular posthole truncating square posthole 2890.	2890	R10/1410
2889	Fill		Firm mid brown grey silty clay; rare charcoal inclusions. Fill of 2888.	0.40	0.38	0.25			R10/1410
2890	Cut	posthole	Rectangular in plan, unexcavated. Posthole truncated by posthole 2888 on E corner.	0.42	0.30		Square posthole truncated by circular posthole 2888 on E corner.	2888	R10/1410
2891	Fill		Moderately compacted light yellowish brown clayey silt, rare mudstone inclusions. Fill of 2890.	0.42	0.30				R10/1410
2892	Cut		Square in plan, unexcavated. Post-European posthole.	0.30	0.30				modern
2893	Fill		Firm greyish brown silt; infrequent degraded rock inclusions. Fill of 2892.	0.30	0.30				modern

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2894	Cut		Rectangular in plan, unexcavated. Posthole.	0.48	0.40				modern
2895	Fill		Compacted yellow silt with an outer red ring of clay; yellow clay clump inclusions. Fill of 2894.	0.48	0.40				modern
2896	Cut	posthole	Sub oval in plan, unexcavated. Posthole.	0.37	0.27				R10/1410
2897	Fill		Moderately compacted mid greyish brown silt; occasional charcoal and occasional mudstone inclusions. Fill of 2896.	0.37	0.27				R10/1410
2898	Cut		Rectangular in plan, unexcavated. Posthole.	0.38	0.30				R10/1548
2899	Fill		Moderately compacted mid brown clayey silt; rare charcoal inclusions. Fill of 2898.	0.38	0.30				R10/1548
2900	Cut		Posthole.						R10/1548
2901	Fill		Fill of 2900.						R10/1548
2902	Cut		Rectangular in plan, mostly unexcavated. Posthole.	0.52	0.30	min 0.23	only partly excavated		R10/1548
2903	Fill		Moderately compacted mid brown clayey silt; rootlets and clay clump inclusions. Fill of 2902.	0.52	0.30	min 0.23			R10/1548
2904	Cut		Diamond shaped in plan, long sloping sides, concave base. Possible posthole.	0.40		0.15		1242	R10/1548
2905	Fill		Moderately compacted friable mid brown black silt ash; occasional charcoal lump inclusions. Fill of 2904.	0.40		0.15			R10/1548
2906	Cut		Rectangular in plan, unexcavated. Posthole.	0.60	0.40		[on context sheet with 2518]		R10/1548
2907	Fill		Moderately compacted mid brown silt; occasional yellow clay lump inclusions. Fill of 2906.	0.60	0.40		[on context sheet with 2518]		R10/1548
2908	Cut		Rectangular in plan, vertical sides, flat base. Historic posthole truncated by historic posthole 2623.	0.27	0.23	0.24	Small square historic posthole truncated by large square historic posthole 2623.	2623	R10/1548
2909	Fill		Moderately loose mid brown silt; occasional rootlet and small rock inclusions. Fill of 2908.	0.27	0.23	0.24			R10/1548
2910	Fill		Loose mid brown silt; root action. Postpipe in 2569.	0.20	0.20	0.40		2569	R10/1548
2911	Fill		Loose mid brown silt; root action. Postpipe in 2603.	0.15	0.15	0.35		2603	R10/1548
2912	Fill		Loose mid brown silt; root action. Postpipe in 2571.			0.25		2571	R10/1548
2913	Fill		Loose mid brown silt; root action. Postpipe in 2573.	0.15		0.30		2573	R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2914	Fill		Loose mid brown silt; root action. Postpipe in 2589.	0.25	0.25	0.35		2589	R10/1548
2915	Cut		Sub rectangular in plan, unexcavated. Posthole.	0.35	0.30		possibly oval and not sub rectangular	Deacon's Residence	R10/1547
2916	Fill		Moderately compacted dark brown silt; rare charcoal and rootlet inclusions. Fill of 2915.	0.35	0.30		recorded as Same as 2918		R10/1547
2917	Cut		Sub oval in plan, unexcavated. Posthole.	0.40	0.35				R10/1548
2918	Fill		Moderately compacted dark brown silt; rootlet inclusions. Fill of 2917.	0.40	0.35				R10/1548
2919	Cut		Circular in plan, moderately sloping sides, concave base. Posthole.	0.13 dia		0.03	probably associated with other Māori features to the N, including 4087	4087?	R10/1410
2920	Fill		Moderate to soft mid greyish brown silt. Fill of 2919.	0.13 dia		0.03			R10/1410
2921	Cut		Rectangular in plan, unexcavated. Posthole.	0.50	0.50			2923?; Deacon's Residence	R10/1547
2922	Fill		Moderately compacted dark brown silt mottled with yellow and white; rare charcoal inclusions. Fill of 2921.	0.50	0.50				R10/1547
2923	Cut		Rectangular in plan, unexcavated. Posthole.	0.23	0.20		possibly associated with 2921	2921?; Deacon's Residence	R10/1548
2924	Fill		Moderately compacted dark brown silt mottled with yellow and white; rare charcoal inclusions. Fill of 2923.	0.23	0.20				R10/1548
2925	Cut		Sub rectangular in plan, unexcavated. Posthole.	0.36	0.35			Deacon's Residence	R10/1547
2926	Fill		Moderately compacted dark brown mottled with yellow brown silt; moderate charcoal inclusions. Fill of 2925.	0.36	0.35				R10/1547
2927	Cut		Oval in plan, steeply sloping sides, flat base. Posthole. Only partially excavated.	0.32	0.28	0.05	Drovers cattle fenceline		R10/1548
2928	Fill		Moderately compacted mid-dark greyish brown silt; moderate amounts of yellow brown clay lump inclusions. Fill of 2927.	0.32	0.28	0.05	Drovers cattle fenceline		R10/1548
2929	Cut		Sub rectangular in plan, vertical-near vertical sides, concave base. Posthole.	0.42	0.34	0.47	rounded rectangular posthole	Deacon's Residence	R10/1547
2930	Fill		Moderate-loose mid brownish grey mottled with mid yellow brown and white grey silt; 1 glass shard inclusion. Fill of 2929.	0.42	0.34	0.47			R10/1547

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2931	Cut		Square in plan, slopping in sides, flat base. Posthole truncating larger posthole 2933.	0.35	0.30	0.16	square posthole truncating larger posthole 2933	2933; Deacon's Residence	R10/1547
2932	Fill		Moderately compacted mid brown silt; occasional rootlet inclusions. Fill of 2931.	0.35	0.30	0.16			R10/1547
2933	Cut		Rectangular in plan, vertical sides, flat base with indent in W corner. Posthole truncated by smaller square posthole 2931.	0.31	0.28	0.32	Rectangular posthole truncated by smaller square posthole 2931.	2931; Deacon's Residence	R10/1547
2934	Fill		Moderately compacted mottled mid brown, white, and yellowish silt; occasional rootlet inclusions. Fill of 2933.	0.31	0.28	0.32			R10/1547
2935	Cut		Oval in plan, vertical sides, concave base. Posthole with root damage.	0.61	0.48	0.42	posthole		R10/1547
2936	Fill		Moderately loose in centre mid brown silt grading to moderately compact yellowish and white mottled silt towards edges; rootlet inclusions. Fill of 2935.	0.61	0.48	0.42	posthole		R10/1547
2937	Cut		Square in plan, vertical sides, flat base. Historic posthole.	0.36	0.35	0.25	posthole		R10/1547
2938	Fill		Moderately compacted mid brown mottled with occasional yellowish patches silt; coal, nail, and glass inclusions. Fill of 2937.	0.36	0.35	0.25	posthole		R10/1547
2939	Cut		Square in plan, vertical sides, flat base. Posthole.						R10/1548
2940	Fill		Moderately compacted mid brown silt with yellowish around edges. Fill of 2939.				Drovers cattle fenceline		R10/1548
2941	Cut		Square in plan, vertical sides, flat base. Posthole.	0.45	0.38	0.40	Drovers cattle fenceline	alignment 2941-2985?	R10/1548
2942	Fill		Moderately compacted mid brown silt with occasional yellowish patches; glass, coal, and nails inclusions. Fill of 2941.	0.45	0.38	0.40			R10/1548
2943	Cut		Oval in plan, vertical sides stepped 5cm down, flat base. Posthole with in situ post.	0.41	0.32	0.37	0.32 E-W at surface, then from 5cm down 0.16m E-W. Large section of wooden post remaining.	alignment	R10/1548
2944	Fill		Moderately compacted yellowish mottled with white and brown silt; wooden post in situ. Fill of 2943.	0.41	0.32	0.37			R10/1548
2945	Cut		Rectangular in plan, vertical sides, flat base. Historic posthole with postpipe 4110.	0.52	0.39	0.42		alignment; postpipe 4110.	R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2946	Fill		Firm white and yellowish brown mottled clay and clayey silt; rare black glass and brick fragment. Fill of 2945.	0.52	0.39	0.42			R10/1548
2947	Cut		Square in plan, near vertical sides, flat base. Historic posthole.	0.46	0.42	0.35		alignment	R10/1548
2948	Fill		Moderately compacted mottled dark brown, light brown, and yellowish brown clayey silt with white clay; rare glass (black, green, white) fragments and fragment of brick. Fill of 2947.	0.46	0.42	0.35			R10/1548
2949	Cut		Rectangular in plan, vertical to step at 0.04mbs then near vertical sides, concave base. Historic posthole with in situ post.	0.52	0.48	0.36	Rectangular posthole with in situ post. Part of SUPER alignment. [Sketch plan on context sheet.]	alignment	R10/1548
2950	Fill		Moderately compacted mottled mid greyish brown , white, and yellowish brown silt; in situ post. Fill of 2949.	0.52	0.48	0.36			R10/1548
2951	Cut		Rounded rectangular in plan, steeply sloping sides, concave base. Posthole truncating posthole 2953.	0.25	0.24	0.07		2953; alignment	R10/1548
2952	Fill		Moderately compacted mid greyish brown mottled with yellowish brown silt; rare mudstone inclusions. Fill of 2951.	0.25	0.24	0.07			R10/1548
2953	Cut		Rectangular in plan, vertical sides, flattish base. Posthole with postpipe and truncated by posthole 2951.	0.49	0.41	0.30		postpipe 4235, 2951, alignment	R10/1548
2954	Fill		Moderate to firm mottled mid greyish brown , white, and yellow brown silt; one small volcanic rock inclusion. Fill of 2953.	0.49	0.41	0.30			R10/1548
2955	Cut		Rectangular in plan, vertical sides, flat base. Historic posthole.	0.48	0.41	0.40		alignment	
2956	Fill		Moderately compacted light yellowish brown clayey silt, one ceramic sherd, occasional small roots, and frequent rootlet inclusions. Fill of 2955.	0.48	0.41	0.40	ceramic from 0.3 deep		R10/1548
2957	Cut		Rectangular in plan, unexcavated. Posthole.	0.56	0.51			alignment	R10/1548
2958	Fill		Moderate to firm mid greyish brown, white, and yellowish brown silt. Fill of 2957.	0.56	0.51				
2959	Void		rabbit hole						
2960	Void		rabbit hole						

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2961	Cut		Square in plan, vertical sides, flattish base with root intrusion in the centre. Posthole with postpipe 4093.	0.42	0.41	0.38		postpipe 4093; alignment	R10/1548
2962	Fill		Firm yellowish brown silty clay mottled with white silty clay and dark brown silt; 1 glass shard and frequent rootlet inclusions. Fill of 2961.	0.42	0.41	0.38			R10/1548
2963	Cut		Oval in plan, moderately sloping sides, concave base. Posthole.	0.46	0.38	0.07			R10/1548
2964	Fill		Moderately compacted mid greyish brown mottled with yellow brown silt. Fill of 2963.	0.46	0.38	0.07			R10/1548
2965	Void		rabbit hole						
2966	Void		rabbit hole						
2967	Cut		Rectangular in plan, unexcavated. Posthole.	0.51	0.45		recorded as Same as 2971	Super Alignment	R10/1548
2968	Fill		Moderately compacted mid to dark brown mottled with yellow brown silt. Fill of 2967.	0.51	0.45		recorded as Same as 2982		R10/1548
2969	Cut		Rectangular in plan, unexcavated. Posthole.	0.55	0.41		recorded as Same as 2971	Super Alignment	R10/1548
2970	Fill		Moderately compacted mid to dark brown mottled with yellow brown silt. Fill of 2969.	0.55	0.41		recorded as Same as 2982		R10/1548
2971	Cut		Rectangular in plan, unexcavated. Posthole.	0.41	0.41		part of Super Alignment	Super Alignment	R10/1548
2972	Fill		Moderately compacted mid to dark brown mottled with yellow brown silt. Fill of 2971.	0.41	0.41		recorded as Same as 2982		R10/1548
2973	Cut		Rectangular in plan, unexcavated. Posthole.					Super Alignment	R10/1548
2974	Fill		Moderately compacted mid to dark brown mottled with yellow brown silt. Fill of 2973.				recorded as Same as 2982		R10/1548
2975	Cut		Rectangular in plan, unexcavated. Posthole.	0.57	0.44			Super Alignment	R10/1548
2976	Fill		Moderately compacted mid to dark brown mottled with yellow brown silt. Fill of 2975.	0.57	0.44		recorded as Same as 2982		R10/1548
2977	Cut		Pentagonal in plan, unexcavated. Posthole.	0.45	0.37			Super Alignment	R10/1548
2978	Fill		Moderately compacted mid to dark brown mottled with yellow brown silt. Fill of 2977.	0.45	0.37		recorded as Same as 2982		R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2979	Cut		Rectangular in plan, unexcavated. Posthole.	0.42	0.38			Super Alignment	R10/1548
2980	Fill		Moderately compacted mid to dark brown mottled with yellow brown silt; 1 earthenware sherd on surface. Fill of 2979.	0.42	0.38		recorded as Same as 2982		R10/1548
2981	Cut		Rectangular in plan, unexcavated. Posthole.	0.51	0.49			Super Alignment	R10/1548
2982	Fill		Moderately compacted mid to dark brown mottled with yellow brown silt. Fill of 2981.	0.51	0.49		recorded as Same as 2982		R10/1548
2983	Cut		Rectangular in plan, unexcavated. Posthole.	0.41	0.40			Super Alignment	R10/1548
2984	Fill		Moderately compacted mid to dark brown mottled with yellow brown silt. Fill of 2983.	0.41	0.40		recorded as Same as 2982		R10/1548
2985	Cut		Rectangular in plan, unexcavated. Posthole.	0.55	0.44			Super Alignment	R10/1548
2986	Fill		Firm brown mottled with white and dark brown silty clay. Fill of 2985.	0.55	0.44				R10/1548
2987	Cut		Rectangular in plan, unexcavated. Posthole.	0.51	0.49			Super Alignment	R10/1548
2988	Fill		Firm mid brown mottled with yellow brown and dark brown silty clay. Fill of 2987.	0.51	0.49				R10/1548
2989	Cut		Irregular oval in plan, concave sides, concave base. Historic posthole.	0.47	0.24	0.03	shallow posthole -- vertically truncated?	Deacon's Residence	R10/1547
2990	Fill		Moderately compacted mid brown silt mottled with yellowish and white clay; occasional rootlets and small piece of glass inclusions. Fill of 2989.	0.47	0.24	0.03			R10/1547
2991	Cut		Square posthole. No context records.					Deacon's Residence	R10/1547
2992	Fill		Fill of 2991.						
2993	Cut		Square in plan, gentle sloping inwards with step 0.33m down on W side, flat base. Historic posthole with postpipe.	0.50	0.40	0.52	[sketch plan on context sheet]	postpipe 4233, Deacon's Residence	R10/1547
2994	Fill		Moderately compacted mottled mid brown, white, and yellowish silt and clay; occasional rootlets and black bottle glass. Fill of 2993.	0.50	0.40	0.52			R10/1547
2995	Cut		Sub rectangular in plan, near vertical sides, concave base. Posthole.	0.25	0.24			Deacon's Residence	R10/1547

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
2996	Fill		Moderately compacted mid greyish brown silt; 1 bottle glass shard inclusion. Fill of 2995.	0.25	0.24				R10/1547
2997	Cut		Circular in plan, very steeply sloping sides, concave base. Posthole.	0.24 dia		0.11	Māori posthole		R10/1409
2998	Fill		Firm light brown silt; frequent pebbles, all within top 4cm. Fill of 2997.	0.24 dia		0.11	Māori posthole		R10/1409
2999	Cut		Rounded rectangular in plan, near vertical sides on E & W and steeply sloping on N, concave base. Posthole.	0.25	0.24		Māori posthole		R10/1409

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
3000	Cut	posthole	Oval in plan, steep to near vertical edges with a concave base. Posthole	0.7m NW-SE	0.33m NE-SW	0.43m	Posthole	(3001)	R10/1551
3001	Fill		Mid greyish brown slightly clayey silt, moderately compact; Frequent charcoal and partially burnt wood					[3000]	R10/1551
3002	Cut	posthole	Oval in plan, steep to near vertical and undercut edges with three concave pits in an irregular base. Posthole	0.45m NW-SE	0.56m NE-SW	Three pits: 0.37m, 0.45m, 0.64m	Posthole	(3003)	R10/1551
3003	Fill		Light greyish brown silt, firm; occasional charcoal.					[3002]	R10/1551
3004	Cut	posthole	Oval in plan, near vertical sides and a concave base, truncated by large root. Posthole	0.32m N-S	0.30m E-W	0.8m	Posthole with root involvement	(3005)	R10/1551
3005	Fill		Mid greyish brown Silt, moderately compact; occasional charcoal.				A giant root growing at a diagonal NW-SE from 0.05mbs to base of posthole.	[3004]	R10/1551
3006	Cut	pit	Sub oval in plan, short sloping to vertical sides and a concave base. Pit	0.65m N-S	0.63m E-W	unlisted but probably visible in drawing	bin pit?	(3007) (3130)	R10/1551
3007	Fill		Mid greyish brown Silt, moderately compact; occasional charcoal.					[3006]	R10/1551

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
3008	Cut	posthole	Circular in plan, sloping to vertical sides and a step, base is pointed, some damage by ploughing. Posthole	0.36m	0.36m	Step 0.38m	Good sized posthole near spur point, part of the post still in situ but too deep to remove, small stake subcut on west side. Slightly damaged from ploughing	(3009) (3129)	R10/1551
3009	Fill		Mid brownish grey Clayey Silt, Compact; occasional charcoal flecks, rootles, occasional 2-3cm charcoal pieces, part of wooded post still in place.					[3008]	R10/1551
3010		posthole							R10/1551
3011									R10/1551
3012		posthole							R10/1551
3013									R10/1551
3014	Cut	pit	Oval in plan, Steep to gentle sloped sides with a flattish to concave base. Small pit	1.1m E-W	0.53m N-S	0.22m	Small pit.	(3015)	R10/1551
3015	Fill		Mid yellowish greyish brown Clayey Silt, moderately to firmly compact; moderate mudstone.					[3014]	R10/1551
3016		posthole							R10/1551
3017									R10/1551
3018	Cut	pit	Sub rectangular in plan, West side gently slopes to base, South side is moderate to near vertical slopes, North side has moderate slopes but with a indent with vertical sides, then a step down to base with steep sides. The base is concave.	1.64m E-W	0.8m N-S	0.27m	Pit	(3019)	R10/1551
3019	Fill		Greyish brown Clayey Silt with light brown mottling, moderately to firmly compact; frequent charcoal, occasional mudstone and rootlets					[3018]	R10/1551
3020	Cut	pit	Squarish oval in plan, steep to slightly undercut sides and irregular and pointed base. Ploughing damage. Pit	0.67m E-W	0.63m N-S	0.4m-0.53m	Pit but likely post pit with post imprint in base, redeposited natural packing clay around post. Stepped side in E-extent	(3021)	R10/1551
3021	Fill		Grey clayey Silt, moderately compact; occasional charcoal, roots and rootlets.					[3020]	R10/1551

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
3022	Cut	posthole	Sub Oval in plan, near vertical to slightly undercut with an irregular base with a possible stake hole in SE corner. Posthole	0.32m E-W	0.27 N-S	0.1m	Posthole. Irregular may be roots related, adjacent to [3024]	(3023) (3133)	R10/1551
3023	Fill		Mid greyish brown Silt, soft to moderately compact; rare wood fragments, occasional shell and rootlets.					[3022]	R10/1551
3024	Cut	posthole	Sub circular in plan, vertical sides and a pointed base. Post/stakehole	0.14m	0.14m	0.17m	Post/stakehole adjacent to [3022]. Plough damage	(3025)	R10/1551
3025	Fill		Dark greyish black silty clay, loose to moderately compact; occasional charcoal flecks and roots/rootlets.				Same as (3037)	[3024]	R10/1551
3026	Cut	posthole	Circular in plan, steep to near vertical sides and a concave base. Posthole	0.35m	0.35m	0.53m	Posthole	(3027)	R10/1551
3027	Fill		Dark brownish grey clayey Silt, soft; occasional shell, charcoal, and rootlets.					[3026]	R10/1551
3028	Cut	posthole	Oval in plan, vertical sides and an unexcavated base. Post	0.25m E-W	0.22m N-S		Post still partially in situ, base not reached. Plough damage	(3029)	R10/1551
3029	Fill		Dark greyish black silty clay, loose to moderately compact; occasional charcoal flecks and rootlets.				Same as (3037)	[3028]	R10/1551
3030	Cut	stakehole	Oval in plan, vertical sides and a pointed base. Stakehole	0.08m E-W	0.06m N-S	0.1m	Small stakehole adjacent to posthole [3028]	(3031)	R10/1551
3031	Fill		Dark greyish black silty clay, loose to moderately compact; occasional charcoal flecks and rootlets.				Same as (3037)	[3030]	R10/1551
3032		posthole							R10/1551
3033									R10/1551
3034	Cut	posthole	Squarish rhombus in plan, vertical sides and a pointed base. Plough damaged. Posthole	0.24m N-S	0.17m E-W	0.44m	Posthole, quite deep. Post was pointed. Shape due to removal. Fill very dark. Charcoal sample collected. Small stake hole alongside to west - [3036]	(3035)	R10/1551

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
3035	Fill		Dark greyish black silty clay, loose to moderately compact; occasional charcoal flecks and rootlets.					[3034]	R10/1551
3036	Cut	stakehole	Squareish in plan, vertical sides and pointed base. Plough damaged. Stakehole	0.1m E-W	0.09m N-S	0.19m	Small stakehole adjacent to [3034] to the east, same fill as (3035), infilled at the same time	(3037)	R10/1551
3037	Fill		Dark greyish black silty clay, loose to moderately compact; occasional charcoal flecks and rootlets.				Same as (3035)	[3036]	R10/1551
3038	Cut	posthole	Sub oval in plan, unexcavated. Ploughing damage. Posthole/stakehole	0.18m NW-SE	0.17m NE-SW			(3039)	R10/1551
3039	Fill		Blackish grey silty clay, moderately compact; occasional rootlets.					[3038]	R10/1551
3040	Cut	bin pit	Sub circular in plan, short sloping sides to long sloping with a flattish base. Slightly vertically Truncated. Bin pit	0.6m N-S	0.44m E-W	0.12m	Truncated bin pit - very shallow	(3041)	R10/1551
3041	Fill		Black to mid brown clay, friable and loose; specks of charcoal and frequent fragmented cockle					[3040]	R10/1551
3042	Cut	posthole	Sub circular in plan, unexplored. Posthole	0.23m E-W	0.15m N-S		Posthole	(3043)	R10/1551
3043	Fill		Mid greyish brown Silt, firm; moderate shell				Midden filled probably irregular due to roots.	[3042]	R10/1551
3044	void	posthole							
3045	void								
3046	void	posthole							
3047	void								
3048	void	posthole							
3049	void								
3050	Cut	posthole	Sub rectangular in plan, steep to near vertical sides with undercutting on the NW corner and a concave base.	0.28m E-W	0.20m N-S	0.29m	Posthole	(3051)	R10/1551
3051	Fill		Mid brown clayey Silt, moderately compact?(totally excavated); moderate charcoal.					[3050]	R10/1551
3052	Cut	posthole	Circular in plan, unexcavated. Posthole	0.14m	0.14m		Posthole	(3053)	R10/1551
3053	Fill		Light greyish brown Silt, moderately compact.					[3052]	R10/1551
3054	Cut	posthole	Rounded triangle in plan, vertical sides and a concave base. Posthole	0.38m E-W	0.27m N-S	0.53m	Posthole	(3055)	R10/1551

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
3055	Fill		Mid greyish brown Clayey Silt, moderately compact; occasional charcoal and partially burnt wood.				sample 16	[3054]	R10/1551
3056	Cut	stakehole	Square in plan, unexcavated. Stakehole	0.06m	0.06m		Stakehole	(3057)	R10/1551
3057	Fill		Mid brown Silt, friable and loose.					[3056]	R10/1551
3058	Cut	posthole	Circular in plan, unexcavated. Posthole	0.37m N-S	0.33m E-W		Posthole	(3059)	R10/1551
3059	Fill		Dark greyish brown Silt, Firm; frequent charcoal and rootlets					[3058]	R10/1551
3060	Cut	posthole	Rectangular in plan, unexcavated. Posthole	0.14m E-W	0.12m N-S		Posthole	(3061)	R10/1551
3061	Fill		Mid brown slightly clayey Silt, moderately compact; rootlets.					[3060]	R10/1551
3062	Cut	posthole	Circular in plan, near vertical to vertical sides and concave base. Posthole	0.15m	0.15m	0.30m	Posthole	(3063)	R10/1551
3063	Fill		Mid greyish brown slightly clayey silt, soft.					[3062]	R10/1551
3064	Cut	stakehole	Circular in plan, near vertical to vertical sides and concave base. Posthole	0.07m	0.07m	0.04m	Stakehole	(3065)	R10/1551
3065	Fill		Mid brown slightly clayey silt mottled with yellow brown, Soft.					[3064]	R10/1551
3066	Cut	pit	Sub oval in plan, SE side is near vertical, NE corner is undercut (probably root intrusion), NW corner is steep sloping to a small step down then step out again to near vertical. West side is near vertical except for small undercut. Base is flat on the E side then slopes to point on W side. Pit	0.82m N-S	0.40m E-W	0.31m at posthole, 0.31m at flat part	Pit, Truncated by roots	(3067)	R10/1551
3067	Fill		Dark greyish brown Silt, moderately compact; occasional charcoal.					[3066]	R10/1551
3068	Cut	posthole	Rectangular in plan, very gentle slopes with a flattish base slightly sloping to west. Posthole	0.35m E-W	0.27m N-S	0.03m	Posthole	(3069)	R10/1551
3069	Fill		Slightly greyish dark brown slightly clayey Silt, moderately compact.					[3068]	R10/1551
3070	Cut	posthole	Oval in plan, sides are steep to near vertical with a concave base. Posthole	0.28m E-W	0.17m N-S	0.18m	Posthole	(3071)	R10/1551
3071	Fill		Mid yellowish brown clay, Firm.					[3070]	R10/1551
3072	Cut	posthole	Sub oval in plan, unexcavated. Posthole	0.26m E-W	0.25m N-S		Posthole but possibly tree	(3073)	R10/1551
3073	Fill	posthole	Mid greyish brown clayey Silt mottled with yellow, moderate to firmly compact.					[3072]	R10/1551
3074									R10/1551
3075									R10/1551

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
3076	Cut	posthole	Sub circular in plan, vertical to long sloping sides and a concave base. Slightly vertically truncated. Posthole cut?	0.9m NE-SW	0.7m NW-SE	0.21m	Posthole cut with several postholes and two braces.	(3077) (3120)	R10/1551
3077	Fill		Greyish brown Silt, moderately compact; specks of charcoal				sample 13, first fill	[3076]	R10/1551
3078	Cut	posthole	Circular in plan, unexcavated. Posthole	0.11m	0.11m		Posthole	(3079)	R10/1551
3079	Fill		Mid brown slightly clayey Silt, soft.					[3078]	R10/1551
3080	Cut	posthole	Sub circular in plan, vertical sides and concave base. Posthole	0.47m E-W	0.30m N-S	0.30m	Posthole cut truncated by [3087] - tree root or plough mark	(3081)	R10/1551
3081	Fill		Mid greyish brown Silt, moderately compact and friable; charcoal flecks					[3080]	R10/1551
3082	Cut	posthole	Circular in plan, vertical to long sloping sides and an undulating base with concave depressions. Two posthole	0.45m E-W	0.35m N-S	0.19m	Cut for who postholes, truncated by [3086]	(3083)	R10/1551
3083	Fill		Greyish brown silty clay, loose; specks of charcoal.					[3082]	R10/1551
3084		posthole							R10/1551
3085									R10/1551
3086	Cut	drain	Sub rectangular in plan, short sloping sides and a concave base. Possibly drain?	1m N-S	0.1m E-W	0.2m		(3087)	R10/1551
3087	Fill		Yellowish brown clay, ?; specks of charcoal and lumps of degraded rock.					[3086]	R10/1551
3088	Cut	posthole	Sub circular in plan, vertical sides and a concave base. Posthole	0.34m E-W	0.24m N-S	0.29m	Posthole	(3089)	R10/1551
3089	Fill		Greyish mid brown silty clay, moderately compact; specks of charcoal					[3088]	R10/1551
3090	Cut	bin pit	Sub circular in plan, short sloping to long sloping sides with and undulating to concave base. Slightly vertically truncated. Bin pit.	1.3m NE-SW	0.72m NW-SE	0.17m	Bin pit with a high point in the centre. Undulating base. Separate compartments?	(3091)	R10/1551
3091	Fill		Greyish brown silty clay, moderately compact; specks of charcoal					[3090]	R10/1551
3092	Cut	stakehole	Rectangular in plan, unexcavated. Slightly vertically truncated. Stakehole.	0.12m N-S	0.04m E-W		Stakehole at right angle with [3017] and [3096]	(3093)	R10/1551
3093	Fill		Mid brown Clay, friable and loose.					[3092]	R10/1551
3094	Cut	posthole	Sub circular in plan, long sloping, slightly undercut on the north FAC gives way to vertical sides. Concave base. Slightly vertically truncated. Posthole	0.3m	0.3m	0.47m	Posthole possibly associated with	(3095)	R10/1551

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
							Māori activity due to shape of cut.		
3095	Fill		Greyish brown Silty clay, friable to loose; specks of charcoal					[3094]	R10/1551
3096	Cut	stakehole	Square in plan, unexcavated. Stakehole	0.08m	0.08m		Stakehole in close proximity to [3094] possible stake for windbreak	(3097)	R10/1551
3097	Fill		Greyish brown silty clay, moderately compact; specks of charcoal					[3096]	R10/1551
3098	Cut	posthole	Sub circular in plan, vertical sides and concave undulating base. Slight vertical truncation. Multiple postholes	0.4m N-S	0.34m E-W	0.39m	Cuts of multiple postholes with a similar deposited fill. Possible digging stick hole or brace on SW side. Sample 11	(3099)	R10/1551
3099	Fill		Greyish brown clay with specks of orange clay, friable moderately compact; specks of charcoal and burnt wood.					[3098]	R10/1551
3100	Cut	posthole	Sub rectangular in plan, unexcavated. Slightly truncated on NE side. Posthole/Stakehole	0.09m	0.09m		Posthole, possibly a stakehole for a windbreak for the dominant SW wind on knoll.	(3101)	R10/1551
3101	Fill		Greyish mid brown Silt, soft compaction; specks of charcoal					[3100]	R10/1551
3102		posthole							R10/1551
3103									R10/1551
3104	Cut	pit	Sub oval in plan, E side near vertical, steep slopes on N to NE and Near vertical to steep on S side. Flat stepping into a concave posthole. Pit	0.92m E-W	0.71m N-S	0.44m in posthole, 0.31m on step.	Pit	(3105)	R10/1551
3105	Fill		Light greyish brown Silt with yellowish brown mottling, moderately compact; rare charcoal.					[3104]	R10/1551
3106	Cut	stakehole	Square in plan, unexcavated. Stakehole	0.14m	0.14m		Blown out stakehole in close proximity to [3104] aligned N-S, wind break/drying rack	(3107)	R10/1551
3107	Fill		Mid brown Silt, friable and loose; specks of charcoal and orange degraded rock(less than 2cm).					[3106]	R10/1551

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
3108	Cut	posthole	Circular in plan, unexcavated. Posthole	0.26m E-W	0.24m N-S		Posthole	(3109)	R10/1551
3109	Fill		Mid greyish brown Clayey Silt with yellowish mid brown mottling, soft; occasional charcoal.					[3108]	R10/1551
3110	Cut	bin pit	Sub circular in plan, vertical to long sloping sides and an undulating base. Bin pit	0.67m N-S	0.58m E-W	0.31m	Sub circular bin pit with a stakehole/posthole cut through the bottom.	(3111)	R10/1551
3111	Fill		Greyish brown silty colluvial, moderately compact; specks of charcoal.					[3110]	R10/1551
3112	Cut	posthole	Sub circular in plan, short sloping to vertical sides and a concave base. Slightly vertically truncated. Posthole	0.34m E-W	0.30m N-S	0.39m	Posthole aligned in a E-W direction with [3098], shape indicative of Māori associated activity.	(3113)	R10/1551
3113	Fill		Mottled greyish brown silty clay, moderately compact; specks of charcoal					[3112]	R10/1551
3114	Cut	posthole	Circular in plan, near vertical to vertical sides with a concave base in the North half and a convex base in the South.	0.33m N-S	0.25m E-W	0.08m - 0.16m	Posthole, [3114] truncates [3116]. Sample 12	(3115) (3131)	R10/1551
3115	Fill		Mid greyish brown Silt mottled with white and yellowish brown, Firm.				Main fill, Sample 12	(3114)	R10/1551
3116	Cut	posthole	Sub circular in plan, short sloping to vertical sides and a concave base. Slightly vertically truncated. Posthole	0.41m N-S	0.40m E-W	0.37m	Two intercutting postholes. Northern one is shallower. [3116] is truncated/cut by [3114]	(3117) (3132)	R10/1551
3117	Fill		Greyish light brown Silty Clay, Firm; mottled clumps of clay, and charcoal specks.					[3116]	R10/1551
3118	Layer	Topsoil	Mid brown Silt, moderately compact; roots. Topsoil			~0.15m variable	Topsoil		R10/1551
3119	Layer	Subsoil	Light brownish yellow clay mottled with mid grey siltier clay, Firm				Subsoil, looks like the grey siltier material has been brought down into the yellow clay by rootlets		R10/1551
3120	Fill		Grey orangey Clay, moderately compact; degraded rock	0.4m NE-SW	0.30m NW-SE	0.5m	Sample 13. second fill	[3076]	R10/1551

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
3121	Cut	stakehole	Circular in plan, unexcavated. Slightly vertically truncated. Stakehole	0.06m	0.06m		Stakehole in close proximity to [3076]	(3122)	R10/1551
3122	Fill		Mid brown silt, moderately compact.					[3121]	R10/1551
3123	Cut	posthole	Pear shaped in plan, steep sides except near vertical on West side. Base is irregular and concave in parts. Posthole pit	0.9m E-W	0.63m N-S	From E-W: 0.31m, 0.35m, 0.18m, min 0.4m	Posthole pit	(3124)	R10/1551
3124	Fill		Dark grey slightly clayey silt, moderately compact; moderate charcoal, occasional roots					[3123]	R10/1551
3125	Cut	pit	Pear shaped in plan, moderate slope on NE, near vertical on N, undercut on NW, near vertical to vertical on S and SW, and undercut on SW corner. Base is sloping to SW (when undercut which flattish). Pit	0.76m NW-SE	0.58m NE-SW	0.26m	Pit, (or large posthole) looks like it was originally circular, but root has intruded on NW to make it Pear shaped.	(3126)	R10/1551
3126	Fill		listed in top right corner of context sheet as fill for [3125] but not on the body of the context sheet.						R10/1551
3127	Cut	posthole	Sub oval in plan, steep to vertical sides and a concave base. Posthole + stakehole	0.31m E-W	0.27m N-S	0.4m at posthole, 0.16m at stakehole	Posthole + stakehole, sample 15	(3128)	R10/1551
3128	Fill		Dark greyish brown Silt, Firm.					[3127]	R10/1551
3129	Fill		Mix of subsoil and (3009).					[3008]	R10/1551
3130	Fill		Mid brownish grey mix of subsoil, ??? Compaction; occasional charcoal flecks and rootlets					[3006]	R10/1551
3131	Fill		Light yellowish brown clay, moderately compact; rootlets				post pipe fill? Sample 12	[3114]	R10/1551
3132	Fill		Light yellowish brown clay, moderately compact; rootlets				post pipe fill?	[3116]	R10/1551
3133	Fill		Redeposited natural with occasional charcoal flecks					[3022]	R10/1551
3134	Cut	posthole	Sub-circular in plan, steep to vertical sides, pointed base. Posthole. Unclear function. Possibly excavated using digging stick. Iron nail/handle suggests 19th century.	0.43	0.39	0.5			R10/1551
3135	Fill		Moderately compact dark greyish brown silt; frequent charcoal, frequent rootlets, occasional mudstone fragments, and occasional root fragments. Fill of 3134.	0.43	0.39	0.5			R10/1551

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
3136	Cut	posthole	Circle and elongated rectangle in plan, sloping sides, concave base. Posthole and board slot.	0.59 (entire context)	slot 0.10m wide; posthole 0.15 dia	posthole 0.12m; slot 0.05m			R10/1551
3137	Fill		Moderately compact mid-greyish brown sandy clay silt; occasional rootlets and moderate natural inclusions. Fill of 3136.	0.59 (entire context)	slot 0.10m wide; posthole 0.15 dia	posthole 0.12m; slot 0.05m			R10/1551
3138	Cut	posthole	Circular in plan, graduate slope sides, concave base. Pit (or possibly posthole).	0.39 dia		0.15	possible small pit or posthole		R10/1551
3139	Fill		Compact light greyish brown silt; occasional rootlets and occasional natural mudstone fragments. Fill of 3138.	0.39 dia		0.15			R10/1551
3140	Cut	posthole	Circular in plan. Unexcavated. Posthole. Isolated. Possibly Māori.	0.2 dia			some burnt charcoal. Isolated posthole -- possibly Māori		R10/1551
3141	Fill		Moderately compact mid-greyish brown silt; small charcoal fragments and small rootlets. Fill of 3140.	0.2 dia					R10/1551
3142	Cut	posthole	Square in plan. Unexcavated. Likely European.	0.17	0.17		likely European		R10/1551
3143	Fill		Same as 3141. Fill of 3142.	0.17	0.17				R10/1551
3144	Cut	posthole	Square in plan, vertical sides, concave base. Posthole. European?	0.25	0.17	0.2	European?		R10/1551
3145	Fill		Moderately compact mid-greyish brown silt. Fill of 3144.	0.25	0.17	0.2			R10/1551
3146	Cut	posthole	Sub-rectangular in plan, short sloping to vertical sides, concave. Posthole.	0.3	0.25	0.2			R10/1551
3147	Fill		Moderately compact mid-greyish brown silt; rare lumps of yellow clay. Fill of 3146.	0.3	0.25	0.2			R10/1551
3148	Cut	posthole	Sub-circular in plan, vertical sides, concave base. Posthole. Māori.	0.22	0.18	0.2	Māori		R10/1551
3149	Fill		Loose mid-brownish grey silt; charcoal speck inclusions. Fill of 3148.	0.22	0.18	0.2			R10/1551
3150	Cut	posthole	Rectangular in plan, vertical giving way to long sloping sides, flat base. Posthole.	0.48	0.35	0.5			R10/1551
3151	Fill		Moderately compact mid-brown mixed with yellow silty clay; infrequent black mottling. Fill of 3150.	0.48	0.35	0.5			R10/1551
3152	Fill		Loose mid-brown silt mottled with yellow clay. Fill of 3150.	0.2	0.2	0.5			R10/1551
3153	Cut	stakehole	Sub-circular in plan. Uexcavated. Stake hole. Māori.	0.12 dia			Māori?		R10/1551

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
3154	Fill		Moderately compact mid-brownish grey silt; rare spots of charcoal. Fill of 3153.	0.12 dia					R10/1551
3155	Cut	posthole	Circular in plan. Unexcavated. Posthole. Probably old fenceline.	0.25 dia			probably old fenceline	3146	R10/1551
3156	Fill		Moderately compact mid-greyish brown silt; infrequent degraded rock inclusions. Fill of 3155.	0.25 dia					R10/1551
3157	Cut	posthole	Sub-rectangular in plan. Unexcavated. Posthole.	0.24	0.14			3144	R10/1551
3158	Fill		Moderately compact mid-greyish brown silt; occasional degraded rock inclusions. Fill of 3157.	0.24	0.14				R10/1551
3159	Cut	posthole	Sub-square in plan. Unexcavated. Posthole.	0.24	0.21			3135 possibly	R10/1551
3160	Fill		Moderately compact mid-grey silt; occasional rootlets and occasional small charcoal flecks. Fill of 3159.	0.24	0.21				R10/1551
3161	Cut	posthole	Circular in plan. Unexcavated. Posthole.	0.2 dia				3148	R10/1551
3162	fill of 3161		Moderately compact mid-grey silt; occasional rootlets and occasional small charcoal flecks. Fill of 3161.	0.2 dia					R10/1551
3163	Cut	posthole	Circular in plan. Unexcavated. Posthole.	0.15 dia					R10/1551
3164	Fill		Moderately compact mid-greyish brown silt; occasional rootlets and occasional charcoal flecks. Fill of 3163.	0.15					R10/1551
3165	Cut	posthole	Square in plan, steep to vertical sides, slightly pointed base. Posthole	0.26	0.26	0.26		3168	R10/1551
3166	Fill		Moderately compact dark greyish brown sandy silt; occasional charcoal and occasional rootlets. Postpipe in 3165.	0.19	0.11	0.19			R10/1551
3167	Fill		Moderately compact mottled grey and yellow clay and grey silt; occasional rootlets and occasional small fractured rounded pebbles (6ct). Primary fill of 3165.	0.26	0.26	0.26	finds: 2 x small copper wire; 1 x small corroded nail		R10/1551
3168	Cut	posthole	Square in plan. Unexcavated. Posthole. Same as 3165.	0.26	0.26	0.26	same as 3165		R10/1551
3169	Fill		Same as 3167. Primary fill of 3168.	0.26	0.26	0.26			R10/1551
3170	Fill		Same as 3166. Postpipe in 3168.	0.25	0.15				R10/1551
3171	Cut	posthole	Same as 3168 and 3165. Unexcavated. Posthole.	0.27	0.25			3165, 3168	R10/1551
3172	Fill		Same as 3170. Postpipe in 3171.	0.24	0.13				R10/1551
3173	Fill		Same as 3164. Primary fill of 3171.	0.27	0.25				R10/1551
3174	Cut	posthole	Same as 3171. Unexcavated. Posthole.	0.28	0.27			3171, 3165, 3168	R10/1551

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
3175	Fill		Same as 3173. Primary fill of 3174.	0.28	0.27				R10/1551
3176	Fill		Same as 3172. Postpipe in 3174.	0.2 dia					R10/1551
3177	Cut	pit	Elongated in plan, steep to stepped sides, concave base. Unusual ditch/pit feature. Straight E sides but stepped and concave in places.	3.5	0.88-1.21	0.29			R10/1551
3178	Fill		Moderately loose -- friable mid-grey ashy silt; occasional mudstone, occasional rootlets, and moderately frequent charcoal pieces. Secondary fill of 3177.	3.5	0.88-1.21	0.22			R10/1551
3179	Fill		Moderately compact mottled light grey-brown silt; occasional rootlets and occasional charcoal flecks. Primary fill of 3177.	3.5	0.88-1.21	0.29			R10/1551
3180	Cut	posthole	Triangular in plan, vertical sides, flat to concave base. Posthole. Māori or European. Truncated by ploughing, which is dense in this area.	0.25	0.21	0.15	Māori or European; truncated by ploughing which is dense in this area		R10/1551
3181	Fill		Compact mid-grey clay silt; occasional rootlets and occasional charcoal flecks. Fill of 3180.	0.25	0.21	0.15			R10/1551
3182	Cut	posthole	Square in plan. Unexcavated. Posthole. European.	0.29	0.27		European		R10/1551
3183	Fill		Compact mottled grey and yellow silt and clay; occasional rootlets and occasional charcoal flecks. Fill of 3182.	0.29	0.27				R10/1551
3184	Layer	layer	Mottled grey silt dump w/ 20th century ceramic and glass. Modern 20th century dump.						R10/1551
3185	Cut	posthole	Square in plan. Unexcavated. Posthole. European.	0.17	0.16				R10/1551
3186	Fill		Compact dark grey and yellow nodes silt and clay; charcoal flakes and rootlets. Fill of 3185.	0.17	0.16				R10/1551
3187		posthole	Rectangular in plan. Posthole. Related to 3184.					3184	R10/1551
3188	Cut		Rectangular in plan. Posthole. Related to 3184.					3184	R10/1551
3189		posthole	Square in plan. Unexcavated. Posthole.	0.22	0.15			3186, 3191	R10/1551
3190	Fill		Same as 3186. Fill of 3189.	0.22	0.15				R10/1551
3191	Cut	posthole	Same as 3189. Posthole.	0.24	0.22			3184, 3190, 3185, 3186	R10/1551
3192	Fill		Same as 3190. Fill of 3191.	0.24	0.22				R10/1551
3193	Cut	oven	Sub-oval in plan, gradual sides, concave base. Small Māori oven. Situated high on interface between the substrate and topsoil.	0.61	0.59	0.09			R10/1425

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
3194	Fill		Friable greyish black ashy silt; occasional pebble-sized FCR and occasional charcoal lumps. Fill of 3193.	0.61	0.59	0.09			R10/1425
3195	Cut	oven	Sub-rectangular in plan, gradual sides, concave base. Large Māori oven.	0.82	0.75	0.16			R10/1425
3196	Fill		Friable dark greyish black silt; one black cobble, frequent pebble-sized FCR and frequent charcoal lumps. Fill of 3195.	0.82	0.75	0.16			R10/1425
3197	Cut	oven	Sub-circular in plan, gradual sides, undulating base. Oven positioned between interface of topsoil and substrate. Possibly quite late in sequence.	0.7	0.5	0.1			R10/1425
3198	Fill		Loose-friable greyish black ashy silt; frequent FCR and frequent charcoal. Fill of 3197.	0.7	0.5	0.1			R10/1425
3199	Cut	oven	Sub-circular in plan, gradual sides, concave base. Oven. Similar to 3193.	0.5	0.5	0.06			R10/1425
3200	Fill		Friable dark grey ashy silt; frequent FCR and frequent charcoal flecking. Fill of 3199.	0.5	0.5	0.06			R10/1425
3201	Cut	bin pit	Circular in plan, vertical to gradual sides, concave base. Māori bin pit. Vertically truncated. Shape, fill, and base combine to indicate a shallow slightly vertically truncated bin pit.	0.4	0.35	0.15		3205?	R10/1425
3202	Fill		Moderately compact greyish black ashy silt; frequent charcoal specks. Fill of 3201.	0.4	0.35	0.15			R10/1425
3203	Cut	oven	Oval in plan, gradual sides, undulating base. Oven. Truncated by roots.	0.9	0.55	0.08			R10/1425
3204	Fill		Friable black ashy silt; frequent charcoal and occasional FCR. Fill of 3203.	0.9	0.55	0.08			R10/1425
3205	Cut	bin pit	Sub-circular in plan, vertical except undercut on W, flat base. Possibly Māori bin pit.	0.73	0.68	0.35			R10/1425
3206	Fill		Friable greyish brownish black ashy silt; frequent charcoal flecks, occasional roots and occasional degraded rocks. Fill of 3205.	0.73	0.68	0.35			R10/1425
3207	Cut	oven	Sub-rectangular in plan, gradual tapering sides, concave base. Pre-contact Māori oven. Damaged by root action.	0.55	0.54	0.11			R10/1425
3208	Fill		Loose and friable towards surface, firm towards base mid-grey silt with charcoal staining towards base; frequent FCR, frequent charcoal pieces, and frequent roots. Fill of 3207.	0.55	0.54	0.11			R10/1425

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
3209	Cut	oven	Sub-oval in plan, gradual sides, flattish slightly concave base. Pre-contact Māori oven. Base of topsoil sits within.	0.8	0.72	0.13			R10/1425
3210	Fill		Dark grey silt; frequent FCR and frequent charcoal. Fill of 3209.	0.8	0.72	0.13			R10/1425
3211	Cut	oven	Sub-circular in plan, gradual sides, concave base. Pre-contact Māori oven.	0.6	0.54	0.11			R10/1425
3212	Fill		Friable mid-greyish brownish black ashy silt; frequent FCR, frequent small charcoal fragments. Rock concentration in centre of fill. Charcoal well mixed. Fill of 3211.	0.6	0.54	0.11			R10/1425
3213	Cut	oven	Sub-rectangular in plan, vertical to gradual sides, flattish base. Historic Māori oven. Very similar to 3215.	0.56	0.5	0.06			R10/1425
3214	Fill		Friable blackish grey ashy silt; frequent fragmented charcoal, frequent FCR, and a small copper nail. Fill of 3213.	0.56	0.5	0.06			R10/1425
3215	Cut	oven	Sub-rectangular in plan, vertical, flattish base. Historic Māori oven. Very similar to 3213.	0.55	0.36	0.1			R10/1425
3216	Fill		Friable blackish grey silt; frequent charcoal lumps (pinecone?). Fill of 3215.	0.55	0.36	0.1			R10/1425
3217	Cut	oven	Sub-rectangular in plan, vertical to short sloping/undercut sides, concave base.	0.9	0.86	0.35			R10/1425
3218	Fill		Moderately compact mid-grey silt ash; pebble and cobble ovenstones, FCR, glass, frequent charcoal lumps, and one flattened tin can. Fill of 3217.	0.9	0.86	0.35			R10/1425
3219	Cut	oven	Sub-square in plan, gradual sides, flattish base. Small Māori oven situated on the interface between the topsoil and the substrate.	0.53	0.5	0.06			R10/1425
3220	Fill		Moderately compact greyish black ashy silt; frequent pebble-sized FCR and frequent charcoal lumps. Fill of 3219.	0.53	0.5	0.06			R10/1425
3221	Oven	oven	Sub-rectangular in plan, gradual sides, concave base. Small shallow Māori oven.	0.55	0.45	0.07			R10/1425
3222	Fill		Loose greyish black silt; charcoal lumps. Fill of 3221.	0.55	0.45	0.07			R10/1425
3223	void								
3224	Layer		Moderately compact blackish dark brown sticky silty loam; frequent charcoal, frequent cockle, occasional pipi, occasional mudsnail, occasional FCR. Midden scatter.	0.6	0.5	0.08			R10/1425
3225	void								R10/1425

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
3226	Layer		Firm blackish dark brown loamy silt; frequent cockle, occasional mudsnail, occasional oyster, occasional FCR, and occasional charcoal pieces. Midden scatter.	0.94	0.45	0.1			R10/1425
3227	Cut	posthole	Square in plan. Unexcavated. Historic or modern posthole.	0.2	0.2				R10/1425
3228	Fill		Firm mid-brown silt; occasioanl metal (in the centre). Fill of 3227.	0.2	0.2				R10/1425
3229	Cut	oven	Oval in plan, tapering to steeply sloping sides, concave base. Māori oven.	0.62	0.48	0.19			R10/1425
3230	Fill		Firm slightly brownish mid-grey silt; frequent pebble-sized FCR and frequent charcoal. Fill of 3229.	0.62	0.48	0.19			R10/1425
3231	Cut	oven	Sub-rectangular in plan, gradual sloping sides, concave base. Small, shallow Māori oven truncated by roots on the south side.	0.6	0.52	0.09			R10/1425
3232	Fill		Friable loose black silt ash; frequent cobble-sized FCR and frequent charcoal. Fill of 3231.	0.6	0.52	0.09			R10/1425
3233	Cut	oven	Rectangular in plan, vertical sides, concave base. Oven disturbed by root hole on south side.	0.36	0.3	0.1			R10/1425
3234	Fill		Friable dark grey silt with brown mottling in lower portion; frequent FCR and frequent charcoal lumps. Fill of 3234.	0.36	0.3	0.1			R10/1425
3235	Cut	oven	Sub-rectangular in plan, short sloping to gradual sides, pock marked undulating base. Root affected Māori oven.	0.75	0.64	0.16			R10/1425
3236	Fill		Firm greyish black silt; frequent pebble-sized FCR and frequent charcoal lumps. Fill of 3235.	0.75	0.64	0.16			R10/1425
3237	Layer		Moderately compact mid-brownish black silty loam; frequent cockle, frequent oyster, and frequent mudsnail. Remnant of midden situated on point under a tree stump.	1.5		0.2			R10/1425
3238	Cut	oven	Sub-rectangular in plan, gradual to long sloping sides, undulating concave base. Māori oven situated high between interface of the substrate and the topsoil.	0.75	0.67	0.17			R10/1425
3239	Fill		Moderately compact blackish mid-grey ashy silt; frequent pebble-sized FCR and frequent charcoal lumps. Fill of 3239.	0.75	0.67	0.17			R10/1425

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
4000	Fill		Moderate to firm mid greyish brown silt. Fill of 2999.	0.25	0.24				R10/1409
4001	Cut		Oval in plan, concave sides, concave base. Posthole.	0.26	0.23	0.11	vertically truncated Māori posthole		R10/1409
4002	Fill		Moderately compacted mid brown silt. Fill of 4001.	0.26	0.23	0.11	Māori posthole		R10/1409
4003	Cut		Cut of sub-circular posthole with steep sides and a concave base. Filled by 4004.	0.25	0.22		Māori posthole		R10/1409
4004	Fill		Moderately compacted greyish-brown silt. Fill of 4003.				Māori posthole		R10/1409
4005	Cut		Subcircular in plan, concave sides, concave base. Māori? posthole.	0.36	0.34	0.17			R10/1409
4006	Fill		Moderately compacted greyish-brown silt. Fill of 4005.	0.36	0.34	0.17			R10/1409
4007	Void	void	burnt root						
4008	Void	void	burnt root						
4009	Cut		Cut of rectangular posthole with rounded corners, steeply sloping sides and a concave base. Fence posthole.	0.30	0.30	0.19	store fence posthole		R10/1547
4010	Fill		Moderately compacted mid greyish brown silt. Fill of 4009.	0.30	0.30	0.19	store fence posthole		R10/1547
4011	Cut		Oval in plan, concave sides, concave base. Posthole.	0.35	0.32	0.18	store fence posthole		R10/1547
4012	Fill		Moderately compacted mid brown and yellowish silt; occasional rootlet inclusions. Fill of 4001.	0.35	0.32	0.18	store fence posthole		R10/1547
4013	Cut		Square in plan, vertical sides, concave base. Historic posthole with postpipe.	0.46	0.43	0.34	Square posthole part of long alignment		R10/1548
4014	Fill		Moderately compacted mid brown grading downwards to orange silt; 1 large brick and 2 ceramic sherd inclusions. Fill of 4013.	0.46	0.43	0.34			R10/1548
4015	Cut		Square in plan, vertical sides, flat base. Historic posthole.	0.36	0.30	0.32			R10/1547
4016	Fill		Moderately compacted mid brown silt mottled with yellow and white; rootlets, glass, ceramic, brick, and kauri gum inclusions. Fill of 4015.	0.36	0.30	0.32			R10/1547
4017	Cut		Rectangular in plan, near vertical sides on E & W and moderately sloping on S side, flattish base. Posthole.	0.26	0.20	0.04	possibly associated with posthole 4019		R10/1547
4018	Fill		Moderately compacted mid greyish brown silt; rare rock and occasional charcoal inclusions. Fill of 4017.	0.26	0.20	0.04			R10/1547
4019	Cut		Square in plan, near vertical to vertical sides, slightly concave base. Posthole	0.20	0.20	0.12			R10/1547

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
4020	Fill		Moderately compacted mid greyish brown silt; rare charcoal inclusions. Fill of 4019.	0.20	0.20	0.12			R10/1547
4021	Cut		Square in plan, vertical sides, flat side sloping W. Posthole.	0.26	0.24	0.12			R10/1547
4022	Fill		Moderately compacted mid brown (top 9cm) silt above yellowish silt below; occasional rootlet inclusions. Fill of 4021.	0.26	0.24	0.12			R10/1547
4023	Cut		Oval in plan, slightly concave sides, irregular base sloping E. Historic posthole.	0.34	0.30	0.16	0.12 m deep at W side, 0.16 m deep at E side		R10/1547
4024	Fill		Moderately compacted mid brown silt with occasional yellowish patches; 1 glass shard inclusion. Fill of 4023.	0.34	0.30	0.16			R10/1547
4025	Cut		Square in plan, gently concave sides, concave base. Posthole.	0.30	0.29	0.16			R10/1547
4026	Fill		Moderately compacted brown silt in the top 0-0.07mbs and yellowish silt 0.07-BOE; occasional rootlet inclusions. Fill of 4025.	0.30	0.29	0.16			R10/1547
4027	Cut		Square in plan, vertical sides, flat base. Historic posthole.	0.32	0.29	0.15			R10/1547
4028	Fill		Moderately compacted mid brown silt; rootlets and glass inclusions. Fill of 4027.	0.32	0.29	0.15			R10/1547
4029	Cut		Square in plan, vertical sides, slightly concave base. Posthole.	0.37	0.32	0.16			R10/1547
4030	Fill		Moderately compacted mid brown silt 0-0.04m and yellowish silt 0.04-BOE; occasional rootlet inclusions. Fill of 4029.	0.37	0.32	0.16			R10/1547
4031	Cut		Square in plan, concave on S & W sides and concave with a step halfway down on E side, concave base. Posthole.	0.36	0.26	0.09			R10/1547
4032	Fill		Moderately compacted mid brown silt; occasional rootlet inclusions. Fill of 4031.	0.36	0.26	0.09			R10/1547
4033	Cut		Square in plan, vertical sides, flat base. Posthole.	0.32	0.30	0.12	Store posthole		R10/1547
4034	Fill		Moderately compacted mid brown silt; occasional rootlet inclusions. Fill of 4033.	0.32	0.30	0.12	Store posthole		R10/1547
4035	Cut		Circular in plan, concave sides, concave base. Posthole.	0.25 dia		0.08	Store posthole		R10/1547
4036	Fill		Moderately compacted mid brown silt; occasional rootlet inclusions. Fill of 4035.	0.25 dia		0.08	Store posthole		R10/1547
4037	Cut		Circular in plan, concave sides, flat base. Posthole.	0.26 dia		0.11	Store posthole		R10/1547

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
4038	Fill		Moderately compacted mid brown silt; occasional small rock and rootlet inclusions. Fill of 4037.	0.26 dia		0.11	Store posthole		R10/1547
4039	Cut		Oval in plan, moderately sloping sides, concave base. European posthole.	0.55	0.43	0.05	Store posthole		R10/1547
4040	Fill		Moderate to loose mid greyish brown silt; frequent brick inclusions. Fill of 4039.	0.55	0.43	0.05	Store posthole		R10/1547
4041	Cut		Rectangular in plan, near vertical sides, flat base. Posthole.	0.24	0.23				R10/1547
4042	Fill		Moderately compacted mid brownish grey silt. Fill of 4041.	0.24	0.23				R10/1547
4043	Cut		Circular in plan, unexcavated. European posthole.	0.40	0.30		similar to 4063		R10/1547
4044	Fill		Compacted mid brownish grey silt; infrequent yellow clumps of clay and degraded rock inclusions. Fill of 4043.	0.40	0.30				R10/1547
4045	Cut		Rectangular in plan, unexcavated. Posthole with in situ post.	0.57	0.30				R10/1547
4046	Fill		Firm mid brownish grey silty clay mottled with white clay; in situ post. Fill of 4045.	0.57	0.30				R10/1547
4047	Void	void	Root						
4048	Void	void	Root						
4049	Cut		Rectangular in plan, unexcavated. Posthole.	0.25	0.22				R10/1548
4050	Fill		Moderately compacted mid greyish brown silt. Fill of 4049.	0.25	0.22				R10/1548
4051	Cut		Rectangular in plan, short sloping to vertical sides, flat base. Posthole.	0.50	0.35	0.20	[on context sheet for 2629]; truncates 2629	2629	R10/1548
4052	Fill		Moderately compacted mid brown mottled with yellow silt; degraded rock inclusions. Fill of 4052.	0.50	0.35	0.20			R10/1548
4053	Cut	posthole	Rounded rectangular in plan, unexcavated. Posthole.	0.24	0.22				R10/1410
4054	Fill		Moderately compacted mid greyish brown silt; occasional charcoal inclusions. Fill of 4053.	0.24	0.22				R10/1410
4055	Cut	posthole	Oval in plan, moderately sloping sides except near vertical on SW, concave base. Posthole.	0.24	0.20	0.07			R10/1410
4056	Fill		Moderately compacted mid greyish brown silt. Fill of 4055	0.24	0.20	0.07			R10/1410

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
4057	Cut		Rectangular in plan, unexcavated. Posthole with root damage.	0.22	0.22		Posthole with root truncation on SW and NE corners.		R10/1548
4058	Fill		Moderately compacted mid greyish brown silt; occasional charcoal flecking. Fill of 4057.	0.22	0.22				R10/1548
4059	cut		Rectangular in plan, unexcavated. Posthole with root damage.						R10/1548
4060	fill		Moderately compacted mid greyish brown silt; occasional charcoal flecking. Fill of 4059.						R10/1548
4061	Cut		Rectangular in plan, unexcavated. Posthole with root damage.						R10/1548
4062	Fill		Moderately compacted mid greyish brown silt; occasional charcoal flecking. Fill of 4061.						R10/1548
4063	Cut		Rectangular in plan, vertical sides, concave base. Post-European posthole with a step on the NE side giving way to a vertical circular slot.	0.39	0.30	0.35		store	R10/1547
4064	Fill		Moderate to firm mid brown grey silt; frequent yellow clay lumps and degraded rock. Fill of 4063.	0.39	0.30	0.35			R10/1547
4065	Cut	posthole	Sub oval posthole. Not excavated.						R10/1410
4066	Fill		Fill of 4065.						R10/1410
4067	Cut	posthole	Circular in plan, steeply sloping sides, concave base. Posthole.	0.37 dia		0.15		4069?	R10/1410
4068	Fill		Moderately compacted mid greyish brown silt. Fill of 4067.	0.37 dia		0.15			R10/1410
4069	Cut	firescoop	Oval in plan, gently sloping on E & S sides and moderately sloping on W side, flattish base. Oven/firescoop filled with mostly rocks.	0.90	0.75	0.12			R10/1410
4070	Fill		Oven stones within a matrix of mid grey silt and frequent charcoal. Fill of 4069.	0.90	0.75	0.12			R10/1410
4071	Cut		Circular in plan, unexcavated. Posthole.	0.3 dia					R10/1548
4072	Fill		Moderately compacted mid greyish brown silt; occasional charcoal flecking. Fill of 4071.	0.3 dia					R10/1548
4073	Cut	firescoop	Circular in plan, unexcavated. Posthole.	0.34 dia					R10/1410
4074	Fill		Moderately compacted mid greyish brown silt. Fill of 4073.	0.34 dia					R10/1410
4075	Cut	firescoop	Circular in plan, gradually sloping sides, flattish base. Oven/firescoop.	0.45 dia		0.04			R10/1410

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
4076	Fill		Loose mid grey silt; frequent oven stones and frequent charcoal. Fill of 4075.	0.45 dia		0.04			R10/1410
4077	Void	void	rabbit hole						
4078	Void	void	rabbit hole						
4079	Cut	posthole	Key shaped in plan, steep to moderately sloping sides, concave base. Posthole and board slot.	0.52	0.19	0.07	Posthole and board slot part of succession of posthole and board slots: 4079 (PH & BS), 4081 (PH & BS), 4083 (PH). It's not clear if they truncate one another.	4081, 4083	R10/1410
4080	Fill		Moderately compacted mid greyish brown silt; moderate amounts of yellow brown clayey silt clumps. Fill of 4079.	0.52	0.19	0.07	recorded as Same as 4086		R10/1410
4081	Cut	posthole	Key shaped in plan, steep to moderately sloping sides, concave base. Posthole and board slot.	0.58	0.18	0.08		4079, 4083	R10/1410
4082	Fill		Moderately compacted mid greyish brown silt; moderate amounts of yellow brown clayey silt clumps. Fill of 4081.	0.58	0.18	0.08	recorded as Same as 4086		R10/1410
4083	Cut	posthole	Circular in plan, near vertical sides, concave base. Posthole.	0.10 dia		0.13	Posthole at NW end of post & board succession.	4079, 4081	R10/1410
4084	Fill		Moderately compacted mid greyish brown silt; moderate amounts of yellow brown clayey silt clumps. Fill of 4083.	0.10 dia		0.13	recorded as Same as 4086		R10/1410
4085	Cut	posthole	Oval in plan, near vertical sides, concave base. Posthole.	0.23	0.23	0.17			R10/1410
4086	Fill		Moderately compacted mid greyish brown silt; moderate amounts of yellow brown clayey silt clumps. Fill of 4085.						R10/1410
4087	Cut	bin pit	Rounded rectangular/oval in plan, slightly concave sides, flat base. Small bin pit.	0.54	0.35	0.10			R10/1410
4088	Fill		Upper part is soft black or dark greyish brown silt; frequent burnt shell and charcoal. Lower part is firm mid yellowish brown silt; shell inclusions. Fill of 4087.	0.54	0.35	0.10			R10/1410
4089	Cut		Rounded rectangular in plan, near vertical sides, concave base. Historical posthole.	0.27	0.26	0.28			R10/1548
4090	Fill		Moderate to soft mid greyish brown silt; frequent metal. Fill of 4089.	0.27	0.26	0.28			R10/1548
4091	Cut		Rounded rectangular near vertical sides on E & S and vertical to undercut on W side, concave base. Posthole.	0.37	0.20	0.46			R10/1548
4092	Fill		Moderate to firm mid brown silt. Fill of 4091.	0.37	0.20	0.46			R10/1548
4093	Fill		Soft dark brown silt; abundant rootlets. Postpipe in 2961.					2961	R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
4094	Cut		Rectangular in plan, near vertical to vertical sides, concave base. Posthole.	0.35	0.30	0.13	approx. 20cm W of 4096 - possibly associated	4096?	R10/1548
4095	Fill		Moderately compacted mid greyish brown silt. Fill of 4094.	0.35	0.30	0.13			R10/1548
4096	Cut		Rounded square in plan, gradually sloping sides, concave base. Posthole.	0.30	0.30	0.04	approx. 20cm E of 4094 - possibly associated, but different fills	4094?	R10/1548
4097	Fill		Moderate to soft mid brownish grey mottled with yellow silt. Fill of 4096.	0.30	0.30	0.04			R10/1548
4098	Cut		Circular in plan, unexcavated. Posthole.	0.17 dia					Modern field post
4099	Fill		Moderate to loose mid brown silt. Fill of 4098.	0.17 dia					Modern field post
4100	Cut		Triangular in plan, unexcavated. Posthole.	0.27	0.25		Three sides' dimensions: 0.27 x 0.27 x 0.25.		Modern field post
4101	Fill		Loose, with patches of moderate compaction, mid brown silt; occasional rootlets. Fill of 4100.	0.27	0.25				Modern field post
4102	Cut		Rectangular in plan, unexcavated. Posthole.	0.48	0.35				R10/1548
4103	Fill		Loose in centre and moderately compacted around edges mid brown silt; occasional rootlets. Fill of 4102.	0.48	0.35				R10/1548
4104	Cut		Rectangular in plan, unexcavated. Posthole.	0.63	0.54				R10/1548
4105	Fill		Moderately compacted mid brown silt, occasional rootlets. Fill of 4104.	0.63	0.54				R10/1548
4106	Cut		Square in plan, unexcavated. Historic posthole.	0.32	0.31				R10/1548
4107	Fill		Moderately compacted mid brown silt. Fill of 4106.	0.32	0.31				R10/1548
4108	Cut		Rectangular in plan, vertical sides, flattish base. Posthole truncating another rectangular posthole 4165.	0.32	0.27	0.32	Rectangular posthole truncating another rectangular posthole 4165.	4165	R10/1547
4109	Fill		Moderately compacted mid brownish grey mottled with yellowish brown and mid grey silt. Fill of 4108.	0.32	0.27	0.32			R10/1547
4110	Fill		Moderately compacted mid brown silt with yellow brown patches; rootlet inclusions. Postpipe in 2945.	min 0.3	0.30			2945	R10/1548
4111	Cut		Circular in plan, concave sides, concave base. Posthole.	0.2 dia		0.07	R10/1409		R10/1548
4112	Fill		Moderately compacted mid brown silt; occasional rootlets. Fill of 4111.	0.2 dia		0.07	R10/1409		R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
4113	Cut		Circular in plan, unexcavated. Oven.	0.35 dia			Concentration of FCR - poor lithic material - river cobbles - some fragmented. Situated within a burnt tree throw.		R10/1546
4114	Fill		Dark brown black ashy silt; frequent FCR and charcoal. Fill of 4113.	0.35 dia					R10/1546
4115	Cut		Circular in plan, near vertical sides, concave base. Fire pit.	0.84 dia					R10/1546
4116	Fill		Moderate to soft mid greyish silt and grey clayey silt; abundant charcoal, abundant oven stones/rocks on surface. Fill of 4115.	0.84 dia			Fire pit - big pebbles to large fragmented cobbles. Non local - river cobbles? Lots of rocks.		R10/1546
4117	Cut		Sub-circular in plan, gradually sloping sides, flat base. Small midden deposit.	0.70	0.52	0.03			R10/1546
4118	Fill		Moderately compacted brown loam; frequent cockle and oyster and occasional charcoal. Fill of 4117.	0.70	0.52	0.03			R10/1546
4119	Void	Void	tree throw						
4120	Void	Void	tree throw						
4121	Void	Void	tree throw						
4122	Void	Void	tree throw						
4123	Void	Void	tree throw						
4124	Void	Void	tree throw						
4125	Cut		Square in plan, unexcavated. Posthole with in situ post.	0.34	0.30				modern
4126	Fill		Moderately compacted light greyish brown clayey silt; rare charcoal flecks. Fill of 4125.	0.34	0.30				modern
4127	Cut		Sub rectangular in plan, undercut on W side and vertical to gradually sloping on E side, concave to flat base. Post-European posthole with in situ post.	0.70	0.60	0.30	Post-European posthole with a small step on the E side		modern
4128	Fill		Friable mid brown grey silt; occasional specs of charcoal, degraded rock, and in situ post. Fill of 4127.	0.70	0.60	0.30			modern

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
4129	Cut		Sub oval in plan, gradually sloping sides, concave base. Posthole.	0.72	0.62	0.15	Posthole truncated on NW side, has small gradual step, and slot in middle for post. Probably post-European.		modern
4130	Fill		Firm yellowish brown silty clay; occasional charcoal flecks, rare mudstone inclusions. Fill of 4129.	0.72	0.62	0.15			modern
4131	Cut		Square in plan, unexcavated. Post-European posthole.	0.25	0.25		recorded as Same as 4139	4139, 4141	Modern post
4132	Fill		Firm mid greyish brown silt; degraded rock inclusions. Fill of 4131.	0.25	0.25		recorded as Same as 4140		Modern
4133	Cut	posthole	Cut of oval posthole - unexcavated. Filled by 4134.						R10/1410
4134	Fill		Moderately compacted greyish light brown silt with occasional charcoal inclusions. Fill of posthole 4133.						R10/1410
4135	Cut	historic hangi	Sub-circular cut of hangi with smooth sloping sides and a flattish base. Historic period hangi utilising bricks as oven stones. Filled by 4136.	0.60	0.57		Brick hangi		R10/1410
4136	Fill		Firmly compacted orange brown silt; frequent pebble & cobble sized broken brick fragments. Fill of oven 4135.	0.60	0.57				R10/1410
4137	Cut	historic hangi	Sub-circular cut of hangi with smooth sloping sides and a flattish base. Historic period hangi utilising bricks as oven stones. Filled by 4138.	0.89	0.87	0.10	Brick hangi exp with European material. Cuts firescoop 4221.	4221	R10/1410
4138	Fill		Firmly compacted orange brown silt; frequent pebble & cobble sized broken brick fragments. Fill of oven 4137.	0.89	0.87	0.10			R10/1410
4139	Cut		Square in plan, unexcavated. Post-European posthole.	0.25	0.25		Post-European posthole in an NE-SW alignment with 4141 & 4131.	4141, 4131	Modern post
4140	Fill		Firm mid greyish brown silt; degraded rock inclusions. Fill of 4139.	0.25	0.25				Modern
4141	Cut	posthole	Circular in plan, unexcavated. Posthole.	0.23 dia					R10/1410
4142	Fill		Moderately compacted mid greyish brown silt. Fill of 4141.	0.23 dia					R10/1410
4143	Cut		Rectangular in plan, moderately sloping sides, flattish base. Posthole.	0.57	0.56				R10/1547
4144	Fill		Moderately compacted mid greyish brown silt. Fill of 4143.	0.57	0.56				R10/1547
4145	Cut		Sub rectangular in plan, unexcavated. Posthole.	0.29	0.23		Difficult to see edges.		R10/1548
4146	Fill		Moderately compacted mid greyish brown mottled with yellow brown silt. Fill of 4145.	0.29	0.23				R10/1548
4147	Cut		Circular in plan, concave sides, concave base. Base of a posthole?	0.2 dia		0.04	Possibly the remains of the base of a posthole?		R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
4148	Fill		Moderately loose mid brown silt; rootlet inclusions. Fill of 4147.	0.2 dia		0.04			R10/1548
4149	Cut		Posthole.						R10/1548
4150	Fill		Fill of 4149.						R10/1548
4151	Cut		Square in plan, vertical sides, irregular base. Posthole.	0.27	0.27	0.08			R10/1548
4152	Fill		Moderately loose mid brown silt; frequent small rocks and rootlet inclusions.	0.27	0.27	0.08			R10/1548
4153	Cut		Long oval in plan, concave sides, concave base with slope to W. Possible posthole.	0.49	0.28	0.12	store verandah		R10/1547
4154	Fill		Moderately compacted mid brown silt; occasional rootlets and small rock inclusions. Fill of 4154.	0.49	0.28	0.12	store verandah		R10/1547
4155	Cut		Subcircular in plan, concave sides, concave base. Historic posthole.	0.32 dia		0.13			R10/1548
4156	Fill		Moderately loose dark brown/black silt; nails, glass, kauri gum, charcoal, and rootlet inclusions. Fill of 4156.	0.32 dia		0.13			R10/1548
4157	Cut		Irregular oval in plan, vertical sides, irregular base. Posthole.	0.31	0.29	0.16			R10/1548
4158	Fill		Moderately loose mid brown silt; rootlet inclusions. Fill of 4157.	0.31	0.29	0.16			R10/1548
4159	Cut		Oval in plan, concave sides, concave base. Posthole.	0.29	0.21	0.11			R10/1548
4160	Fill		Moderately loose mid brown silt; rootlet inclusions. Fill of 4159.	0.29	0.21	0.11			R10/1548
4161	Cut		Square in plan, slightly concave sides, flat base. Historic posthole.	0.36	0.31	0.08			R10/1548
4162	Fill		Moderately compacted mid brown silt; small rocks, occasional rootlets, and 1 nail inclusion. Fill of 4161.	0.36	0.31	0.08			R10/1548
4163	Cut		Sub rectangular in plan, steeply sloping sides, concave base. Posthole heavily truncated by tree roots.	0.30	0.29	0.14			R10/1548
4164	Fill		Moderate to loose mid greyish brown silt. Fill of 4163.	0.30	0.29	0.14			R10/1548
4165	Cut		Rectangular in plan, near vertical sides, flattish base. Posthole truncated on E side by another rectangular posthole 4108.	0.32	min 0.27	0.11	Rectangular posthole truncated on E side by another rectangular posthole 4108	4108	R10/1547
4166	Fill		Moderate to soft mid brownish grey silt; root inclusions. Fill of 4165.	0.32	min 0.27	0.11			R10/1547
4167	Cut		Rectangular in plan, vertical sides, flat base. Historic posthole.	0.58	0.48		Possible postpipe in collapse in E (unexcavated) half.		R10/1548
4168	Fill		Moderately compacted mid greyish brown mottled with yellow brown silt; occasional historic artefacts. Fill of 4167.	0.58	0.48				R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
4169	Cut		Sub rectangular in plan, near vertical to vertical sides, concave base. Posthole.	0.32	0.31	0.16			R10/1547
4170	Fill		Moderate to firm mid brownish grey silt; rare charcoal flecking. Fill of 4169.	0.32	0.31	0.16			R10/1547
4171	Cut		Subcircular in plan, concave sides, concave base. Posthole truncated by rectangular posthole 4173.	0.22	0.18	0.03	Shallow round hole truncated by historic posthole 4173. [sketch plan on context sheet]	4173	R10/1547
4172	Fill		Moderately compacted mid brown silt; occasional rootlets. Fill of 4171.	0.22	0.18	0.03			R10/1547
4173	Cut		Rectangular in plan, near vertical sides, flat base. Historic posthole truncating oval posthole 4171.	0.20	0.19	0.07	Historic square posthole truncating Māori oval posthole 4171. They're both very shallow so not certain.	4171	R10/1547
4174	Fill		Moderately compacted mid greyish brown silt; cockle shell, burnt stone, and glass inclusions. Fill of 4174.	0.20	0.19	0.07			R10/1547
4175	Cut		Irregular shape in plan, unexcavated.	0.85	0.30		Probably a rabbit hole, because of shape, but does have cultural material in it.		R10/1547
4176	Fill		Moderately compacted mid brown mottled with yellowish brown silt; rare cockle shell, rare charcoal, and rare brick inclusions. Fill of 4175.	0.85	0.30				R10/1547
4177	Cut		Teardrop shaped in plan, concave sides, irregular concave base. Possible posthole with post depositional damage.	0.75	0.28	0.15	Possible posthole with post depositional animal/tree root/demolition damage. [sketch plan and section on context sheet]		R10/1547
4178	Fill		Moderately compacted mid brown with yellowish silt; brick, occasional charcoal, and rootlet inclusions. Fill of 4177.	0.75	0.28	0.15			R10/1547
4179	Cut		Rectangular in plan, unknown sides, flattish base. Posthole with severe root damage.	0.21	min 0.11	0.07	4181 & 4179 are very close together and possibly one truncates the other but it's not possible to tell.	4181	R10/1547
4180	Fill		Moderately compacted mid greyish brown silt; historic artefact inclusions. Fill of 4179.	0.21	min 0.11	0.07			R10/1547

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
4181	Cut		Rectangular in plan, near vertical sides, unknown base. Posthole with root damage.	0.29	0.25	0.34?	4181 & 4179 are very close together and possibly one truncates the other but it's not possible to tell.	4179	R10/1547
4182	Fill		Moderately compacted mid greyish brown silt; historic artefact inclusions. Fill of 4181.	0.29	0.25	0.34?			R10/1547
4183	Cut		Sub rectangular in plan, steeply sloping sides, flattish base. Posthole.	0.30	0.25	0.11	Probably associated with 4181 & 4179. Can't tell relationship between them. In same area as 4181 & 4179. A lot of root damage.	4179? 4181?	R10/1548
4184	Fill		Moderately compacted mid greyish brown silt; historic artefact inclusions. Fill of 4184.	0.30	0.25	0.11			R10/1547
4185	Cut		Rectangular in plan, vertical sides, irregular base. Historic posthole.	0.47	0.36	0.19			R10/1547
4186	Fill		Moderately compacted mid brown mottled with yellowish silt; brick and possible bone visible in section. Fill of 4185.	0.47	0.36	0.19			R10/1547
4187	Cut		Square in plan, unexcavated. Posthole.	0.35	0.30				R10/1547
4188	Fill		Moderately compacted, except where loose in centre, mid brown mottled with white and yellow silt. Fill of 4187.	0.35	0.30				R10/1547
4189	Cut	posthole	Rectangular in plan, unexcavated. Posthole.	0.18	0.15		Small circular stakehole with a half crescent outer ring of charcoal.		R10/1410
4190	Fill		Loose mid brown grey silt; charcoal flecks and degraded rock inclusions. Fill of 4189.	0.18	0.15				R10/1410
4191	Cut	hangi	Circular in plan, unexcavated. Oven.	0.60	0.50				R10/1410
4192	Fill		Loose black ashy silt; frequent charcoal, FCR cobbles & pebbles. Fill of 4191.	0.60	0.50				R10/1410
4193	Cut		Circular in plan, gradually sloping sides, concave base. Fire pit.	0.57 dia					R10/1410
4194	Fill		Moderately compacted greyish black silt; frequent charcoal and heat fractured rock inclusions. Fill of 4193.	0.57 dia					R10/1410
4195	Cut		Square in plan, vertical sides, slightly concave base. Historic posthole.	0.27	0.23	0.08	Store		R10/1547
4196	Fill		Moderately compacted mid brown silt; occasional rootlets and ceramic inclusions. Fill of 4195.	0.27	0.23	0.08	Store		R10/1547

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
4197	Cut		Square in plan, vertical sides, flat/irregular base. Posthole.	0.36	0.30	0.16	Store		R10/1547
4198	Fill		Moderately compacted mid brown silt; occasional rock and rootlet inclusions. Fill of 4197.	0.36	0.30	0.16	Store		R10/1547
4199	Cut		Square in plan, vertical sides, concave base. Historic posthole.	0.25	0.17	0.11			
4200	Fill		Moderately compacted mid brown mottled with yellowish silt; small ceramic sherd and rootlet inclusions. Fill of 4199.	0.25	0.17	0.11			R10/1548
4201	Cut		Rounded rectangular in plan, vertical to near vertical sides, concave base. Posthole with in situ post and 2 fills.	0.57	0.48	0.46	Posthole with in situ post and 2 fills 4202 & 4212.	primary fill 4212	R10/1548
4202	Fill		Loose to moderately compacted mid brownish grey silt; in situ post and occasional historic artefact inclusions. Secondary/upper fill of 4201.	0.57	0.48	0-0.07mbs			
4203	Void		tree throw						
4204	Void		tree throw						
4205	Cut		Sub oval in plan, vertical to near vertical sides with a small step on E side approx. 30cmbs, concave base. Posthole.	0.50	0.46	0.42	Posthole with 2 fills 4206 & 4211.	primary fill 4211	R10/1409
4206	Fill		Loose mid brownish grey silt. Secondary/upper fill of 4205.	0.50	0.46				R10/1409
4207	Void		tree throw						
4208	Void		tree throw						
4209	Cut		Posthole.						
4210	Fill		Fill of 4209.						
4211	Fill		Moderately compacted mid brown silt/re-deposited natural. Primary/lower fill of 4205.	0.50	0.46			4205	R10/1409
4212	Fill		Moderate to firm mid yellowish brown silt; in situ post. Primary/lower fill of 4201.	0.57	0.48	0.07-0.46mbs		4201	R10/1548
4213	Cut		Sub rectangular in plan, vertical sides, flat base. Post-European posthole.	0.35	0.32	0.17			modern
4214	Fill		Loose mid brownish grey silt; degraded rock inclusions. Fill of 4213.	0.35	0.32	0.17			modern
4215	Cut		Rectangular in plan, unexcavated. Posthole.	0.30	0.30				modern
4216	Fill		Moderately compacted mid brownish grey silt; degraded rock inclusions. Fill of 4215.	0.30	0.30				modern
4217	Cut		Rectangular in plan, unexcavated. Posthole.	0.26	0.16				modern
4218	Fill		Moderately compacted mid yellowish brown clayey silt. Fill of 4217.	0.26	0.16				modern
4219	Cut		Sub rectangular in plan, unexcavated. Posthole.	0.58	0.38				modern

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
4220	Fill		Firm mid brownish grey silt; frequent degraded rock inclusions. Fill of 4219.	0.58	0.38				modern
4221	Cut	firescoop	Oval cut of firescoop with smooth sloping and a flattish slightly concave base. Filled by 4222. Cut by hangi 4137.	0.69 (surviving)	0.49	0.03	cut by brick hangi 4137	4137	R10/1410
4222	Fill		Friable black ashy silt; frequent broken brick and charcoal inclusions. Fill of 4221.	0.69 (surviving)	0.49	0.03	cut by brick hangi 4137		R10/1410
4223	Fill		Loose mid brownish grey silt; frequent rootlets. Postpipe in 2641.						R10/1548
4224	Cut		Rectangular in plan, unexcavated. Posthole.	0.50	0.37				R10/1548
4225	Fill		Moderately compacted mid greyish brown mottled with orangish brown silt. Fill of 4224.	0.50	0.37				R10/1548
4226	Cut		Rectangular in plan, unexcavated. Posthole similar to 4216.	0.40	0.35			4217	R10/1548
4227	Fill		Moderately compacted mid yellowish brown clayey silt. Fill of 4226.	0.40	0.35		recorded as Same as 4217		R10/1548
4228	Cut		Rectangular in plan, unexcavated. Posthole.	0.50	0.50			4217	modern
4229	Fill		Moderately compacted mid yellowish brown clayey silt. Fill of 4228.	0.50	0.50		recorded as Same as 4217		modern
4230	Fill		Postpipe in 4023.						R10/1548
4231	Fill		Postpipe in 2811.						R10/1548
4232	Fill		Secondary fill in 4013.						R10/1548
4233	Fill		Secondary fill in 2993.					2993	R10/1548
4234	Fill		Postpipe in 4013.					4013	R10/1548
4235	Fill		Soft mottled mid greyish brown, white, and yellow brown silt. Postpipe in 2953.	min 0.05	0.10	0.26		2953	R10/1548
4236	Cut		Square in plan, vertical to short sloping sides, flattish base.	0.55	0.50	0.32	Large posthole truncated by 4238 under midden and forms a part of the alignment of 2779 & 2765. Same as 4242. [sketch plan on back of context sheet.]	postpipe 4244, 4238, 2779, 2765	R10/1548
4237	Fill		Moderately compacted mid brownish grey silt; yellow clay clump inclusions. Fill of 4236.	0.55	0.50	0.32			R10/1548
4238	Cut		Subcircular in plan, long sloping sides, flattish base. Posthole truncating 4236 under midden.	0.46	0.45	0.08	Shallow posthole that truncates 4236 under midden on the point.	4236	R10/1548
4239	Fill		Moderately compacted mid greyish brown silt; yellow clay lump inclusions. Fill of 4238.	0.46	0.45	0.08			R10/1548

Context No.	Type	Feature	Description	Length m	Width m	Depth m	Comments	Related Context	Site
4240	Cut		Subcircular in plan, vertical sides, concave base. Māori midden-filled posthole.	0.32	0.32	0.15	Māori posthole filled with midden material under midden on the point.		R10/1548
4241	Fill		Moderately compacted black mid brown silt; frequent fragmented cockle shell and frequent charcoal flecking. Fill of 4240.	0.32	0.32	0.15			R10/1548
4242	Cut		Square in plan, unexcavated. Post-European posthole.	0.40	0.40		Same as 4236 & 2779	4236, 2779	R10/1548
4243	Fill		Moderately compacted mid brownish grey silt; degraded rock and yellow clay lump inclusions. Fill of 4242.	0.40	0.40				R10/1548
4244	Fill		Wooden post in posthole 4236.	0.10	0.10	0.27			R10/1548
4245	Cut		Circular in plan, gradual sides, undulating base. Oven.	0.75	0.65	0.10			R10/1548
4246	Fill		Friable grey black ashy silt; frequent cobble and pebble sized rocks/FCR and charcoal. Fill of 4245.	0.75	0.65	0.10			R10/1548

APPENDIX 2 – AMP/EXCAVATION PROTOCOLS

ARCHAEOLOGICAL MANAGEMENT PLAN: 29 DINNING ROAD, RIVERHEAD

Report prepared for Cabra Developments Ltd

By

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November 2016
(updated from August 2016)

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INTRODUCTION

Purpose

Cabra Developments Ltd is proposing a residential subdivision on Part Allotment 15 Parish of Paremoremo located at 29 Dinning Road, Riverhead (Figure 1). The property covers some 8.0937 ha and is bounded by the Rangitopuni Creek to the north, west and south, and by Dinning Road and a rural residential property at 32 Dinning Road to the east. The proposed development will consist of 65 residential lots, an Esplanade Reserve with a footpath/walkway, a Recreation Reserve, new roads, and public amenity areas (Figure 1).

An archaeological assessment report has been completed:

R. Shakles, Z. Burnett and S. Phear. 2016. Proposed Residential Development, 29 Dinning Road, Riverhead, Auckland: Archaeological Assessment. Clough & Associates report prepared for Cabra Developments Ltd. November 2015; updated March & May, July, August 2016

The report assessed the proposed development area for any effects on archaeological values. One previously recorded archaeological site is located within the development area: the site of Deacon's Inn (R10/1377). Two early plans and a map dating to the 1850s and 1860s illustrate the presence of Deacon's Inn and two further ancillary structures on the proposed development property, as well as indicating the location of a landing place, stockyard, fence and likely stock tracks. Historic artefacts were observed along the top of the creek bank and on the mudflats within the mangrove, adjacent to the recorded location of the inn.

Field survey identified a further five archaeological sites on the property, all of which are shell middens (R10/1407; R10/1408; R10/1409; R10/1410; and R10/1411). Two are quite large deposits, with the remaining sites small and eroding down the coastal edge.

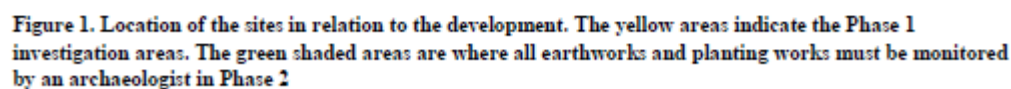
The proposed residential development will affect part of the shell midden site R10/1408 within Lot 54, so the site is to be investigated within the lot boundary with the remainder of the site to be avoided. An investigation is to take place of Deacon's Inn (site R10/1377) in order to identify the extent of the site and establish appropriate avoidance strategies to preserve any remains from adverse modification. The remaining midden sites (R10/1407, R10/1408, R10/1410, and R10/1411) will be avoided by earthworks, and a planting plan will be put in place which helps to stabilize and preserve the middens. It is also possible that additional unidentified subsurface remains relating to Maori settlement may be present in the northern half of the development property, and in particular, along the coastal zone.

Continued on next page

INTRODUCTION, CONTINUED

Purpose, continued	<p>An Authority application was sought from Heritage New Zealand Pouhere Taonga, and granted (no. 2017/207). The Authority will take place over two phases, with the first phase involving the investigation of sites R10/1377 and R10/1408, as discussed above. Phase 2 involves the monitoring work over the remainder of the property in the areas shown in Figure 1.</p> <p>Other mitigation measures are for the provision of interpretation signage detailing the property's Maori and early European settlement history.</p> <p>This archaeological management plan outlines the procedures to be followed during archaeological investigation, recording, monitoring of earthworks and the discovery of archaeological remains including koiwi tangata (human remains) or taonga (Maori artefacts). It has been updated following completion of the Deacon's Inn (R10/1377) investigation at the request of HNZPT.</p>
Project Archaeologist	<p>The 'Project Archaeologist' referred to in this plan is the archaeologist approved by Heritage NZ under section 45 of the HNZPTA.</p> <p>Some of the archaeological work may be undertaken by other qualified archaeologists under the direction of the Project Archaeologist. The general term 'Archaeologist' is used to denote either the Project Archaeologist or a qualified archaeologist working under their direction.</p>
Maori Cultural Values	<p>Archaeological sites of Maori origin have cultural value to tangata whenua in addition to the archaeological values provided for in this plan.</p> <p>Contact details for representatives of iwi that have an interest in the sites within the project area are provided in this document, as are protocols that must be adhered to if archaeological remains of Maori origin are exposed. In carrying out the requirements of the authority the archaeologists will be guided by the Iwi representatives in matters of tikanga.</p> <p>Cabra Developments Ltd or their designated representative should ensure that the iwi representatives are informed at least 48 hours before the start of the works requiring archaeological monitoring.</p>

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SITE MANAGEMENT

Site Management and Monitoring Procedures

Pre-Start Requirements:

1. Prior to the start of earthworks for both Phase 1 and 2, the Project Archaeologist will be called to meet the Contractor/Project Manager on site to brief them on the archaeological requirements, including the requirements of the Authority and Archaeological Management Plan.
2. The Project Archaeologist will ensure that the Contractor/Project Manager have a copy of the Authority and Archaeological Management Plan available on site, and will provide confirmation to Heritage NZ that they have been received and understood, either by providing copies of both documents signed by the Contractor/Project Manager, or by obtaining email confirmation from the Contractor/Project Manager, copied to Heritage NZ.
3. The Contractor/Project Manager must give the Project Archaeologist and Iwi representatives at least 2 weeks' notice that earthworks are about to begin, and in particular works in the shaded areas shown in Figure 1.
4. That midden sites R10/1407, 1409, 1410 and 1411, part R10/1408, and R10/1377 are marked out with pegs and temporarily taped off prior to and during earthworks to ensure that they are not accidentally damaged.
5. That any additional vegetation clearance within the vicinity of the archaeological sites is monitored by the archaeologist, although weed spraying can take place without archaeological monitoring.

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SITE MANAGEMENT, CONTINUED

Phase 1 Investigation Methodology

Deacon's Inn R10/1377:

6. The topsoil within the area of site R10/1377 and Lot 47 as shown in Figure 1 will be stripped using a mechanical excavator with a ditching bucket to expose any archaeological features.
7. Any features will be cleaned using a trowel in order to help establish their nature and relationship with the inn.
8. All features related to the inn will be left unexcavated.
9. A site meeting with Cabra, HNZPT, Auckland Council Heritage Unit, Parks, and the project archaeologist will take place to discuss the features exposed and establish an area of avoidance. The area of avoidance will be defined based on the significance of the features exposed and the contribution the features have toward understanding the site as a whole, noting the limitations that avoidance may have to enable sufficient residential development of Lot 47 or part thereof.
10. If the area of avoidance extends into Lot 47, the potential acquisition of the lot (or part of) by Auckland Council as a Historic Reserve will be discussed with Parks.
11. Any features that fall outside the area of avoidance will be excavated by hand and sampled following the methodology outlined in points 34-36 (below).
12. The final location and design of the boardwalk through the site will be established on completion of the investigation, in order to avoid archaeological features that relate to the site and appropriate amenity of the historic context.
13. The plants and plant species to be used within the area of R10/1377 are listed below (point 25). The exact location and extent of the planting, however, will be finalized in this area following completion of the investigation.

Midden R10/1408:

14. The area of the midden to be investigated within Lot 54 shall take place in the area shown in Figure 1.
15. The topsoil overburden will be excavated using a mechanical excavator with a ditching bucket, until the midden is exposed in plan.
16. The midden will then be excavated following accepted archaeological practice (*Guidelines for Midden Sampling & Analysis*, HNZPT 2014), including the collection of samples for analysis.
17. Any midden not collected for analysis will be stored on site until an appropriate area is identified by the project archaeologist, kaitiaki and applicant.

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SITE MANAGEMENT, CONTINUED

Phase 1 Investigation Methodology, *continued*

18. The relocation of the midden will be recorded on a site plan by the project archaeologist as a secondary cultural deposit.
19. Any other features exposed in the area of investigation (such as hangi, fire scoops, postholes etc) will be investigated and sampled following the methodology outlined in points 34-36 (below).
20. If human bone (koiwi tangata) or taonga (Maori artefacts) are encountered, the protocols set out below will be followed (p.10).

Results of the Phase 1 Investigation – Deacon's Inn R10/1377

21. Based on the results of the investigation of Deacon's Inn which exposed postholes related to the Inn only, agreement has been reached with Heritage NZ that the area of avoidance does not extend into Lot 47.
22. The postholes within Lot 47 (Figure 2) will be sampled following the methodology outlined in points 34-36 (below).
23. The postholes located within the esplanade reserve will be avoided, and points 12 and 13 (above) will be implemented.
24. Archaeological features (postholes, pits, firescoops) relating to Maori settlement were also exposed within the area of Deacon's Inn (Lot 47 and the esplanade reserve). These features will be sampled following the methodology outlined in points 34-36 (below).

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SITE MANAGEMENT, CONTINUED

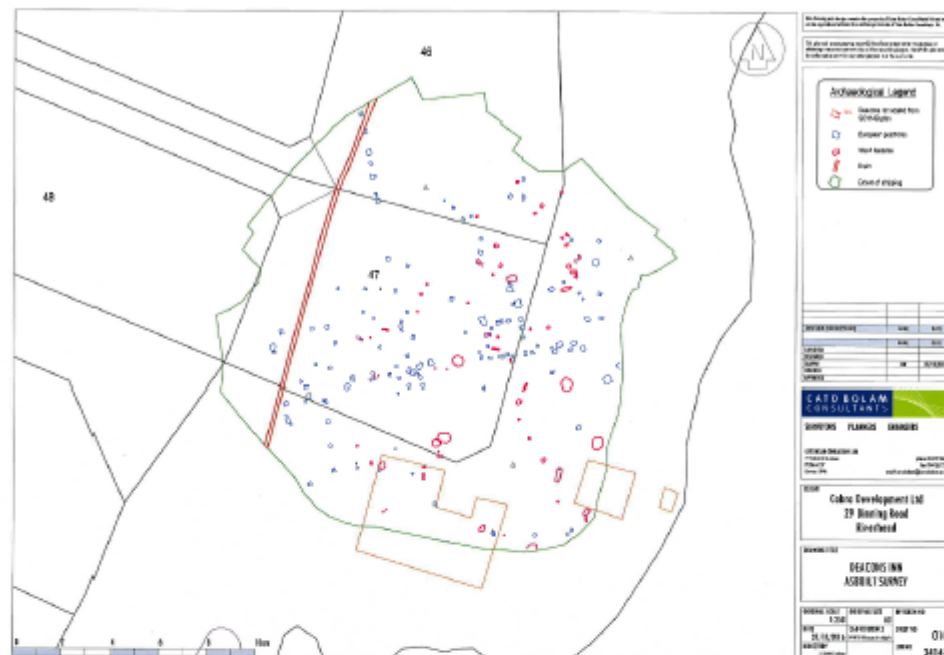


Figure 2. Survey of archaeological features exposed during the first stage of the Deacon's Inn (R10/1377) investigation within the Esplanade Reserve and Lot 47. Blue = European/Deacon's Inn postholes, red = Maori features

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SITE MANAGEMENT, CONTINUED

Planting and Erosion Control

Planting and landscaping in the location of the archaeological sites (R10/1407, 1408, 1409, 1410 and R10/1377) within the reserve areas need to be managed in order to create a more stable environment to help prevent erosion (particularly of midden) on the slopes of the Rangitipouni Creek.

25. The following or selection of the following native species will be used within the reserve areas only:

- Pohuehue - *Muehlenbeckia complexa*
- *Carex testacea* – native grass

26. In any areas where midden has been exposed on the surface, the midden shall be covered by geotextile cloth, covered with topsoil of a minimum of 10cm depth, and then planted. This will form a soil-root-geotextile composite layer which will act as a surface mat protecting the midden site underneath (Jones 2005:59).

27. The final positioning of the plants within the site areas will be defined in a Landscape and Planting Plan following completion of the Phase 1 investigation. Plant positioning will take into account the location of the site and include consideration of surface identification of the site through plant location.

28. Any weeds in the area will be sprayed prior to replanting. All planting works will be monitored by an archaeologist in the vicinity of the recorded sites.

Continued on next page

SITE MANAGEMENT, CONTINUED

Phase 2 – Monitoring Procedures

29. All topsoil stripping in the green shaded areas shown in Figure 1 shall be monitored by an archaeologist.
30. Monitoring of all subsurface excavations within the areas shown in Figure 1 will be carried out by a qualified Archaeologist, to determine whether pre-1900 archaeological remains are present.
31. All initial excavations by the Contractor within the areas requiring monitoring (Figure 1) will be undertaken using a digger and ditching (smooth edged) bucket. Motor scrapers shall not be used in these areas until any exposed archaeological features are recorded and/or natural deposits area reached.
32. All planting works and excavation for the footpaths within the reserve areas as shown in Figure 1 are to be monitored by an archaeologist.
33. Monitoring will continue until the natural deposits have been reached (where excavations are continued to this depth), or until it becomes clear that the area has been modified to the point where no archaeology would be expected.
34. If in situ archaeological features or deposits are identified during monitoring, the Archaeologist will stop works in the immediate vicinity by notifying the site foreman, and will investigate and record them.
35. Heritage NZ will be advised if any significant archaeological features or deposits are exposed that were not anticipated.
36. Any in situ archaeological deposits or features exposed during monitoring will be retained in situ if possible, and/or investigated, recorded and sampled by the Archaeologist consistent with accepted best archaeological practice and in accordance with the requirements of the Heritage NZ authority:
 - a) detailed notes of each feature and deposit will be made;
 - b) all subsurface features located will be recorded on the site plan;
 - c) stratigraphic drawings and photographs of features and deposits will be undertaken;
 - d) any artefacts will be recovered for analysis, preservation and if necessary conservation, and their positions marked on the site plan;
 - e) midden samples will be obtained if possible for faunal analysis and radiocarbon dating.

Continued on next page

SITE MANAGEMENT, CONTINUED

Phase 2 - Monitoring, Procedures continued

37. Additional Archaeologists will be brought to the site as required to assist in the monitoring, and for the subsequent archaeological recording and sampling
38. The Contractor/Project Manager will allow sufficient time and opportunity for the recording and sampling of any archaeological features or deposits encountered. The archaeologist(s) will record the archaeological feature(s) or deposit(s) as quickly as possible so that earthworks may resume without undue delay.
39. If archaeological remains (shell midden, artefacts) are exposed elsewhere, or when the Archaeologist is temporarily not present on site, the site foreman will halt work in the immediate vicinity (within 10m) and follow the procedure set out below.
40. If human bone (koiwi tangata) or taonga (Maori artefacts) are encountered, the protocols set out below will be followed (pp.11-12).
41. The site archive, including any artefacts recovered, will be stored off site throughout the duration of fieldwork in a secure location, except for the midden recovered during Phase 1 from site R10/1408 (see Point 17).

Procedures if Archaeological Sites are Discovered When the Archaeologist is not Present

42. If the Archaeologist is not present and remains are exposed that are potential archaeological features or deposits (as described to the Contractor/Project Manager at the pre-start meeting), the following procedure should be adopted:
43. The Contractor/ Project Manager will ensure that earthworks shall cease in the immediate vicinity (within 10m) while the Archaeologist is called in to establish whether the remains are part of an archaeological site as defined under the HNZPTA.
44. If the Archaeologist confirms that it is an archaeological site, the area of the site will be defined by the Archaeologist and excluded from earthworks.
45. If the archaeological site relates to Maori occupation the Iwi representatives will be informed (if not present).
46. Heritage NZ will be advised by the Archaeologist if any significant archaeological features or deposits are exposed that were not anticipated.
47. The archaeological site will be investigated and recorded in accordance with accepted archaeological practice (points 29-36) and the conditions of the authority.
48. If human bone (koiwi tangata) or taonga (Maori artefacts) are unearthed the protocols set out below (pp.11-12) will be followed.

Continued on next page

SITE MANAGEMENT, CONTINUED

**Protocols
Relating to
Koiwi
Tangata
(Human
Remains)**

If bone material is identified that could potentially be human, the following protocol will be adopted:

49. Earthworks/investigation should cease in the immediate vicinity while an archaeologist establishes whether the bone is human.
50. If it is not clear whether the bone is human, work shall cease in the immediate vicinity until the University's reference collection and/or a specialist can be consulted and a definite identification made.
51. If bone is confirmed as human (koiwi tangata), the archaeologist will immediately contact Iwi representatives, Heritage NZ and the NZ Police.
52. The site will be secured in a way that protects the koiwi as far as possible from further damage.
53. Consultation will be undertaken with all Iwi representatives as outlined in the authority, the Heritage NZ Regional Archaeologist and the authority holder to determine and advise the most appropriate course of action. No further action will be taken until responses have been received from all parties, and the koiwi will not be removed until advised by Heritage NZ.
54. The Iwi representatives will advise on appropriate tikanga and be given the opportunity to conduct any cultural ceremonies that are appropriate.
55. If the Iwi representatives are in agreement and so request, the bones may be further analysed by a skilled bio-anthropological specialist prior to reburial, in line with the *Koiwi Tangata Human Remains, HNZPT Guidelines* (2014).
56. Activity in that place can recommence as soon the bones have been reinterred or removed and authorisation has been obtained from Heritage NZ.

Continued on next page

SITE MANAGEMENT, CONTINUED

Protocols Relating to Taonga

Maori artefacts such as carvings, stone adzes, and greenstone objects are considered to be taonga (treasures). These are taonga tūturu within the meaning of the Protected Objects Act 1975. Taonga may be discovered in isolated contexts, but are generally found within archaeological sites. If taonga are discovered the following protocols will be adopted:

57. The area containing the taonga will be secured in a way that protects the taonga as far as possible from further damage, consistent with conditions of the Authority.
58. The archaeologist will then inform Heritage NZ and the nominated Iwi representative so that the appropriate actions (from cultural and archaeological perspectives) can be determined.
59. These actions will be carried out within the stand down period specified below, and work may resume at the end of this period or when advised by Heritage NZ or the archaeologist.
60. Taonga may be stored in a secure location on the property or at a designated secure location as agreed by Iwi representatives, Heritage NZ and the Project Archaeologist.
61. The archaeologist will notify the Ministry for Culture and Heritage of the find within 28 days as required under the Protected Objects Act 1975. This can be done through the Auckland War Memorial Museum.

The Ministry for Culture and Heritage, in consultation with the tangata whenua, will decide on custodianship of the taonga. If the taonga requires conservation treatment (stabilisation), this can be carried out by the Department of Anthropology, University of Auckland (09-373-7999) and would be paid for by the Ministry. It would then be returned to the custodian or museum.

Continued on next page

SITE MANAGEMENT, CONTINUED

**Post
Earthworks
Phase**

62. A Management Plan will be completed which details the management procedures to be followed for the ongoing maintenance and protection of the archeological sites R10/1407, 1408, 1409, 1410 and R10/1377 within the reserve areas. This plan will be provided to Auckland Council and HNZPT.
63. Analysis of any artefacts, midden and soil samples will be carried out by appropriate specialists under the direction of the Project Archaeologist.
64. Subject to approval from the landowner (Cabra Developments Ltd) any significant European artefacts would be offered to the Auckland War Memorial Museum.
65. The Archaeologist will notify the Ministry for Culture and Heritage of any artefacts meeting the definition of taonga tūturu under the Protected Objects Act 1975 (see p. 12).
66. The Project Archaeologist will provide a summary report to Heritage NZ and Iwi within 20 days of the completion of monitoring and archaeological work, confirming that all exposed archaeological deposits and features have been excavated and recorded in accordance with the conditions of the authority. This may be the final report if no or limited archaeological remains are found.
67. If more extensive remains requiring detailed analysis are found, the Project Archaeologist will complete full monitoring and investigation report within 12 months of the end of the monitoring work, and will provide it to Heritage NZ, Iwi and other parties identified in the Authority.

Continued on next page

SITE MANAGEMENT, CONTINUED

Archaeology Team

Rod Clough will have the overall direction of the project as the contracted archaeologist. Sarah Phear will manage the project as the Section 45 archaeologist. Fieldwork will be carried out by her or under her supervision.

The archaeological team will include some or all of the following:

Name	Role	Responsibility
Rod Clough, PhD	Director	Direct project
Sarah Phear, PhD	Project Manager	Manage project in field and prepare final report
Richard Shakles, BA (Hons), BSc	Field Supervisor	Supervise project in field and prepare final report
Charlotte Judge, MA (Hons)	Archaeologist	Monitoring, recording
Jen Low, MA	Archaeologist	Monitoring, recording
Ben Jones, MA	Archaeologist	Monitoring, recording
Bernie Larsen, MA	Archaeologist	Monitoring, recording
Carly Mailhot, MA (Hons)	Archaeologist	Monitoring, recording

Other Personnel

Other excavation crew or specialists may be brought in to the project if required. These may include specialists in particular categories of artefact or other remains.

Contact Details

Project Archaeologist	Sarah Phear: 0226420575 Rod Clough: (09) 814 1946 or 0274850059
Heritage NZ Regional Archaeologist	Bev Parslow: (09) 307 9923 or 021 060 3424 Greg Walter: (09) 307 9924
Iwi representatives	Georgina Parata Nga Maunga Whakahii o Kaipara Ph. 09 420 8416 Scott Lomas Heritage and Environment Officer Te Kawerau Iwi Tribal Authority Ph: 09 9730903 Cell: 021 509 098

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SITE MANAGEMENT, CONTINUED

Stand Down Periods

Depending on what is revealed by the earthworks, stand down periods may be required at various stages to allow for archaeological work to be carried out or for consultation with the appropriate parties may be required at various stages.

Stand down will require earthworks to cease only in the immediate vicinity of the feature or find, and work may proceed in other areas. The following maximum stand down periods will apply, but earthworks may be resumed earlier if the required work has been completed.

Timeframes need to be flexible enough to ensure that archaeological works are completed as necessary to ensure that the conditions of the authority are met.

Trigger	Stand Down Period	Requirements	Release
Archaeological feature, deposit or artefacts	Maximum 2 days in each area, but work may continue in areas where no remains are identified	Sufficient time must be allowed for the Archaeologist to investigate and record the remains.	Work resumes when the Archaeologist advises the Contractor that work is completed
Significant archaeological feature, deposit or artefacts ¹	Up to 3 days for a response from Heritage NZ, and up to 3 days for any detailed investigation required	The likely requirement is a mitigation investigation and/or recording by standard archaeological techniques, but this will be advised by Heritage NZ.	Work resumes when the Archaeologist advises the Contractor that work is completed
Human bone found	As agreed between the project manager, Heritage NZ and Iwi	Heritage NZ and NZ Police to be satisfied that kōiwi identification is correct. Iwi representative(s) to organise reinterment or removal of bones from site and appropriate cultural ceremonies.	Work resumes following reinterment or removal of bones from site and when authorisation from Heritage NZ has been received.
Taonga or archaeological remains of Māori origin found that were not anticipated	Up to 3 days	Heritage NZ and Iwi representative(s) to be consulted on appropriate action. Archaeological recording as required	Work resumes when the Archaeologist or Heritage NZ advises the site foreman that work is completed

Continued on next page

¹ i.e. with the potential to provide significant information through detailed investigation

SITE MANAGEMENT, CONTINUED

Authority Holder's Responsibilities	<p>Cabra Developments Ltd or their designated representative has the following responsibilities:</p> <ul style="list-style-type: none"> 68. To advise Heritage NZ of the start and finish dates of any required archaeological work. 69. To ensure that sufficient time is provided to carry out any archaeological investigations required. 70. To provide sufficient site security to ensure that archaeological material on site is protected from unlawful excavation or removal. 71. To ensure that a copy of the archaeological Authority is kept on site and its contents are made known to all contractors and subcontractors. 72. To ensure that a copy of this Archaeological Management Plan is kept on site and its contents are made known to all contractors and subcontractors. 73. To ensure that the conditions and protocols outlined in the authority and this document are observed by contractors and subcontractors. 74. To provide a safe environment for the archaeologists to carry out their work.
Contractor's Responsibilities	<p>The Contractor's responsibilities are as follows:</p> <ul style="list-style-type: none"> 75. To meet the Project Archaeologist on site prior to the start of works for a briefing on the archaeological requirements. 76. To confirm by sign-off that the requirements of the archaeological Authority and Archaeological Management Plan have been explained and are understood. 77. To provide the Project Archaeologist with 2 weeks' notification that project earthworks are about to begin, and to ensure that an Archaeologist is present when earthworks within the monitoring areas indicated in Figure 1 are being carried out. 78. To comply with the archaeological discovery protocols if archaeological sites, koiwi or taonga (p.10) are discovered. 79. To allow the Project Archaeologist sufficient time to investigate and record any archaeological remains before resuming works in the immediate vicinity. 80. To ensure a safe working environment for the Archaeologists.

Continued on next page

SITE MANAGEMENT, CONTINUED

Dispute Resolution

Disputes fall into a number of categories but are usually the result of poor communication between the developer, subcontractors, Iwi representatives and the project archaeologists. Most can be avoided if sufficient detail of the archaeological issues and responsibilities is outlined in the tender document or work management documentation.

Common examples of a dispute are: that the subcontractors consider that the archaeologists are causing unacceptable delays, or that the archaeologists feel they have insufficient time to fulfil the obligations of the authority. In the event of a dispute relating to the Authority investigation the following procedure for resolution should be followed:

1. If the dispute relates to archaeological issues, a meeting between the Authority holder (or designated representative), Contractor or subcontractor and Archaeologists should be convened as soon as possible to attempt to resolve the dispute.
2. If the dispute relates to cultural issues, a meeting between the Authority holder (or designated representative), Contractor or subcontractor, Iwi representatives, and Archaeologists should be convened as soon as possible to attempt to resolve the dispute.
3. If the dispute cannot be resolved a further meeting of all parties with representatives of Heritage NZ will be arranged within 1 working day to resolve the dispute. Heritage NZ has ultimate responsibility for resolving issues relating to the conditions of the Authorities it issues.

Taonga tūturu (Maori artefacts) recovered from archaeological investigations are often deposited in local or national museums following archaeological analysis, and with the agreement of iwi. On other occasions iwi may prefer to retain ownership of artefacts and disputes can arise between different iwi with an interest in the area. Any disputes relating to the long term ownership and custody of taonga tūturu should be dealt with through the statutory processes of the Protected Objects Act 1975. The provisions of the Act require that all taonga tūturu are notified to the Ministry for Culture and Heritage within 28 days of the completion of archaeological fieldwork. Under s.11 and s.12 of the Act the Ministry for Culture and Heritage must notify all parties that have an interest in the taonga, and if competing claims for ownership are made and cannot be resolved the matter may be referred to the Maori Land Court for resolution.

REFERENCES

- HNZPT. 2014. Guidelines for Midden Sampling and Analysis. HNZPT Archaeological Guidelines Series No. 9.
- HNZPT. 2014. Kōiwi Tangata Human Remains. HNZPT Archaeological Guidelines Series No. 8.
- Jones, K. 2007. Practical Guidelines for Protecting and Managing Archaeological Sites in New Zealand. Wellington: Department of Conservation.

APPENDIX 3 – CERAMIC PATTERN NAME

Pattern	Vessel	Marks/Notes	NISP	MNV	Contexts Present
<i>Abbey</i>	tureen	grey transfer print	9	1	2505
<i>Albion</i>	plate, serving dish	blue transfer print	40	3	2000, 2505, 4202
<i>Albion</i>	serving dish	grey transfer print	5	1	2505
<i>Alhambra</i>	saucer, teacup	purple transfer print	8	3	1000, 2000, 2505
<i>Asiatic Pheasants</i>	dinner plate, plate, serving dish, teacup	blue transfer print	46	6	1000, 2505, unprovenanced
<i>Asiatic Pheasants</i>	bowl, plate	grey transfer print	17	3	2505
<i>Banded</i>	plate, saucer, teacup	blue handpainted	16	6	1000, 1009, 2505
<i>Banded</i>	bowl, teacup	gilt handpainted	5	4	1041, 2505
<i>Banded</i>	bowl, saucer, teacup	red handpainted	9	4	2505
<i>Basket</i>	saucer	blue transfer print	2	1	1000
<i>Bouquet</i>	plate	black transfer print	10	1	2505
<i>Bouquet</i>	egg cup, plate, saucer, teacup	blue transfer print	34	3	2000, 2505
<i>Buccleuch</i>	saucer, teacup	blue transfer print	12	2	2000, 2505
<i>Buccleuch</i>	saucer, side plate, teacup	purple transfer print	29	4	2505
<i>Cable</i>	dish lid	purple transfer print	3	1	2505
<i>Chios</i>	saucer, teacup	green transfer print	5	2	2505
<i>Clyde</i>	saucer, teacup	purple transfer print	10	2	2505
<i>Coral</i>	saucer, teacup	blue transfer print//Davenport 1860	22	2	2505
<i>Cornishware</i>	mug, teacup	white/blue handpainted	3	2	2505
<i>Cornishware</i>	teacup	white/blue/brown handpainted	4	1	2505
<i>Dresden</i>	saucer	purple transfer print	4	1	2505
<i>Dulcamara</i>	saucer, teacup	black transfer print	2	2	2505
<i>Dulcamara</i>	saucer, teacup	purple transfer print	12	3	2505
<i>Fibre</i>	plate, saucer, teacup	blue transfer print	33	5	1000, 2505, 4168
<i>Fibre</i>	plate, saucer, teacup	green transfer print	9	3	1000, 2505
<i>Foliage</i>	plate	purple transfer print	10	1	2505
<i>Gem</i>	plate	blue transfer print	5	1	2505
<i>Holloway's Ointment</i>	ointment pot	black transfer print	3	2	2505
<i>Milanese</i>	plate	blue transfer print	30	2	2000, 2505
<i>Rhine</i>	plate	blue transfer print	2	2	2505
<i>Rhine</i>	plate, serving dish	grey transfer print	87	6	2505
<i>Rouen</i>	plate	blue transfer print	1	1	2505
<i>Rouen</i>	plate	purple transfer print	3	1	2505
<i>Shell-Edged</i>	plate	incised, blue handpainted	1	1	1000
<i>Teddesley</i>	plate	grey transfer print	2	1	2505
<i>Whampoa</i>	saucer, teacup	blue transfer print	5	3	1000
<i>Wild Rose</i>	plate	blue transfer print	6	1	1000, 1067
<i>Willow</i>	plate, serving dish, side plate	blue transfer print	50	7	1000, 1097, 2505

<i>Windsor</i>	plate, saucer	purple transfer print	10	2	2505
<i>DR001</i>	teacup	green transfer print	5	1	2505
<i>DR001</i>	teacup	purple transfer print	4	1	2505
<i>DR002</i>	plate	blue transfer print	3	1	2505
<i>DR003</i>	plate	blue transfer print	2	1	2505
<i>DR004</i>	plate	blue transfer print	4	1	2505
<i>DR004</i>	teacup	teal transfer print	4	1	1000, 1139
<i>DR005</i>	plate	blue transfer print	10	1	2505
<i>DR006</i>	plate	blue transfer print	8	2	1000, 2505
<i>DR007</i>	teacup	blue transfer print	1	1	2505
<i>DR008</i>	saucer	green transfer print	3	1	2505
<i>DR009</i>	saucer, teacup	green transfer print	41	4	1243, 2000, 2505, 2644, 2786
<i>DR010</i>	teacup	green transfer print	10	1	2505
<i>DR010</i>	plate, saucer	grey transfer print//PB & Co	3	2	1000, unprovenanced
<i>DR010</i>	saucer, teacup	red transfer print	5	2	1000, 2505
<i>DR011</i>	plate	blue transfer print	6	2	1000, 2505
<i>DR012</i>	egg cup	brown transfer print	3	1	2505
<i>DR013</i>	plate	purple transfer print	1	1	2505
<i>DR014</i>	plate	green transfer print	6	1	2505
<i>DR015</i>	bowl	blue transfer print	3	1	2505
<i>DR016</i>	washbowl	blue transfer print	3	1	2505
<i>DR017</i>	washbowl/chamber pot	green transfer print	4	1	2505
<i>DR018</i>	washbowl/chamber pot	green transfer print	2	1	2505
<i>DR019</i>	saucer, teacup	blue transfer print	9	3	1000, 2505
<i>DR020</i>	plate	blue transfer print	3	3	1049, 1097, 2505
<i>DR021</i>	teacup	black transfer print	6	1	2505
<i>DR022</i>	container	black transfer print	2	1	2505
<i>DR023</i>	teacup	red stamped	3	1	2505
<i>DR024</i>	teacup	brown transfer print	2	1	2505
<i>DR025</i>	teacup	black transfer print	16	1	2505
<i>DR026</i>	saucer	black transfer print	7	2	1049, 2505
<i>DR027</i>	chamber pot	blue transfer print	2	1	2505
<i>DR028</i>	plate	blue transfer print	10	2	1000, 2505
<i>DR029</i>	jug	black transfer, orange overpainted	7	1	2505
<i>DR030</i>	saucer	purple transfer print	3	1	2505
<i>DR031</i>	saucer	purple transfer print	1	1	2505
<i>DR032</i>	saucer	purple transfer print	1	1	2505
<i>DR033</i>	plate	blue/pink/yellow transfer print	1	1	2505
<i>DR034</i>	unidentified	green/gilt transfer print	1	1	2505
<i>DR035</i>	plate	relief	1	1	2505
<i>DR036</i>	saucer, teacup	flow blue transfer print	6	2	2505
<i>DR037</i>	saucer, teacup	flow blue transfer print	6	3	1000, 2505

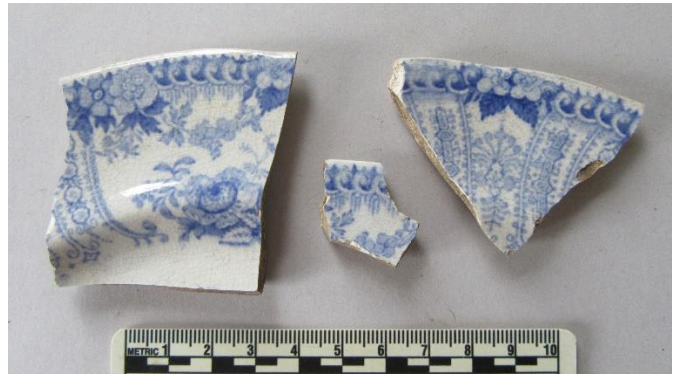
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DR039	plate	green transfer print	1	1	2505
DR040	plate	blue transfer print	1	1	2505
DR041	plate	blue transfer print	1	1	2505
DR042	teacup	blue transfer print	1	1	2505
DR043	plate	blue transfer print	1	1	2505
DR044	teacup	teal transfer print	2	1	2505
DR045	unidentified	blue transfer print	1	1	2505
DR046	unidentified	purple transfer print	3	1	2505
DR047	plate	blue transfer print	1	1	2505
DR048	plate	blue transfer print	1	1	2505
DR049	unidentified	blue transfer print	1	1	2505
DR050	platter	blue transfer print	1	1	2505
DR051	side plate	blue sprigged	2	1	2505
DR052	teacup	blue sprigged	1	1	2505
DR053	teacup	blue sprigged	1	1	2505
DR054	saucer	blue sprigged	2	1	2505
DR055	saucer, teacup	purple transfer print	17	3	1000, 2505, 2646
DR056	plate	purple transfer print	4	1	2505
DR057	saucer, teacup	flow blue transfer print	2	2	1000
DR058	plate	purple transfer print	1	1	2505
DR059	washbowl/chamber pot	purple transfer print	1	1	2505
DR060	plate	grey transfer print	2	2	1000, 2505
DR061	plate	grey transfer print	1	1	2505
DR062	unidentified	blue transfer print	1	1	2505
DR063	saucer	orange handpainted	2	1	2505
DR064	ornament/figurine	relief	1	1	2505
DR065	unidentified	blue transfer print	3	1	2505
DR066	serving dish	blue transfer print	1	1	2505
DR067	unidentified	blue transfer print	6	1	2505
DR068	unidentified	green transfer print	1	1	2505
DR069	unidentified	grey transfer print	5	1	2505
DR070	unidentified	grey transfer print	1	1	2505
DR071	handle	blue transfer print	1	0	2505
DR072	handle	blue transfer print	1	0	2505
DR073	plate	blue transfer print	1	1	2646
DR074	teacup	black transfer print	1	1	1241
DR075	teacup	teal transfer print	2	1	1107
DR076	teacup	grey transfer print	1	1	1107
DR077	saucer	blue transfer print	4	1	1000, 1049, unprovenanced
DR078	saucer, teacup	green/red/blue transfer print	5	2	1000
DR079	plate	blue transfer print	1	1	1000
DR080	teacup	blue transfer print	1	1	1000
DR081	washbowl	blue transfer print	2	1	1000

DR082	teacup	blue transfer print	3	1	1000
DR083	plate	blue transfer print	1	1	1000
DR084	saucer	blue transfer print	1	1	1000
DR085	saucer	teal transfer print	3	1	1000
DR086	wine jug	relief	1	1	1000
DR087	jug	green transfer print	1	1	1000
DR088	teacup	blue transfer print	1	1	1000
DR089	food pot	black transfer print	1	1	1000
DR090	ewer	purple transfer print	1	1	1000
DR091	teacup	flow black transfer print	1	1	1000
DR092	teacup	grey transfer print	1	1	1000
DR093	unidentified	relief	4	1	1000
DR094	bowl	green handpainted	1	1	1000
DR095	saucer	black transfer print	2	1	1000
DR096	teacup	black transfer print	1	1	1000
DR097	teacup	black transfer print	1	1	1000
DR098	teacup	black transfer print	3	1	1000
DR099	saucer	black transfer print	5	1	1000
DR100	plate	grey transfer print	1	1	unprovenanced
DR101	plate	grey transfer print	1	1	unprovenanced
DR102	plate	blue transfer print	1	1	unprovenanced
DR103	saucer	blue transfer print	2	1	unprovenanced
DR104	teacup	blue transfer print	1	1	unprovenanced
DR104	plate	grey transfer print	1	1	4202
DR105	plate	blue transfer print	1	1	4016
DR106	plate	blue transfer print	1	1	4016
DR107	jug	relief	3	1	2505

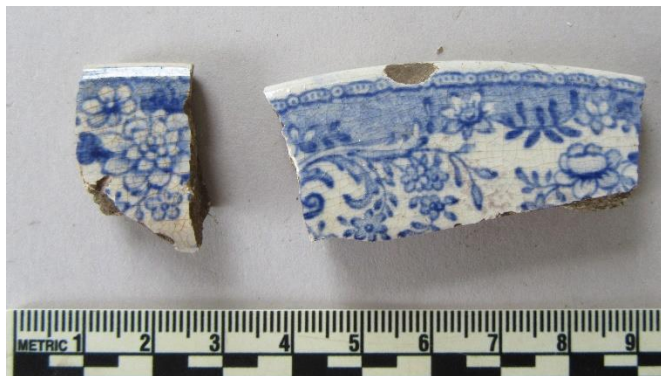
APPENDIX 4 – IMAGES OF UNIDENTIFIED CERAMIC PATTERNS



DR001



DR002



DR003



DR004



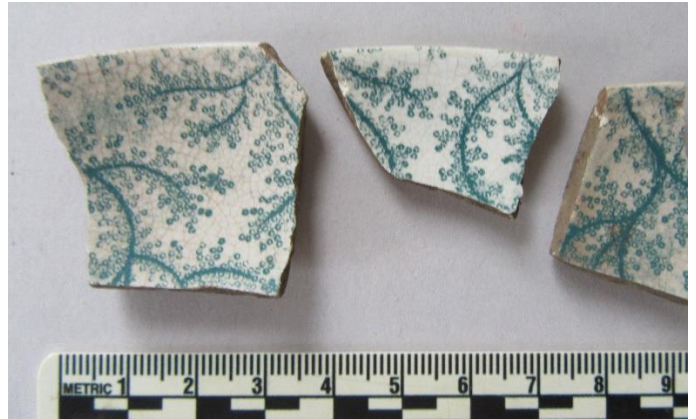
DR005



DR006



DR007



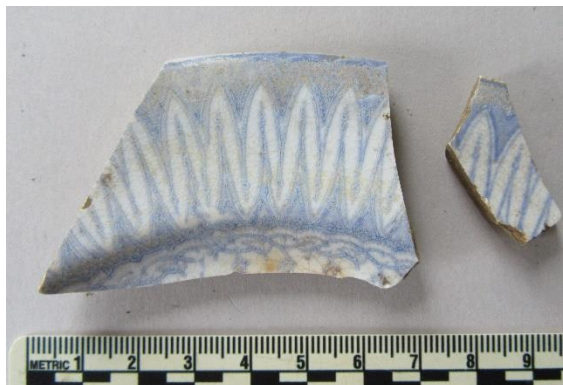
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DR009 (Forest)



DR010



DR011



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DR013



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DR018



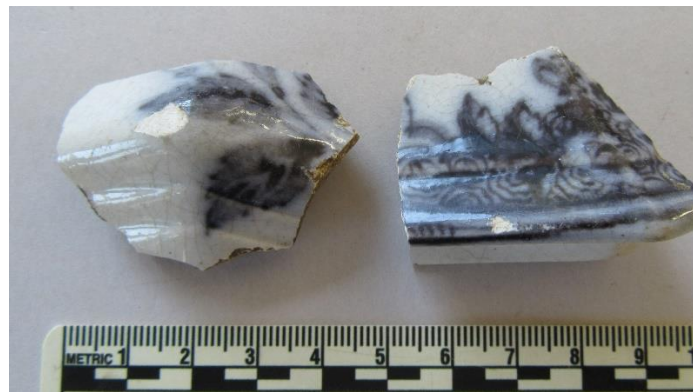
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DR023



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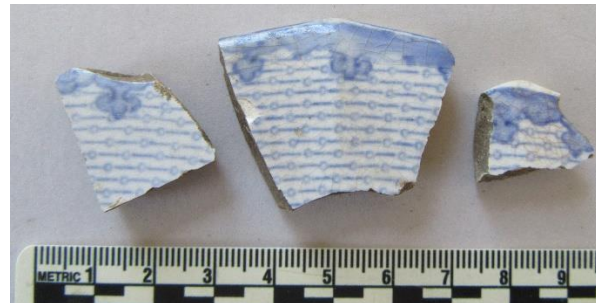
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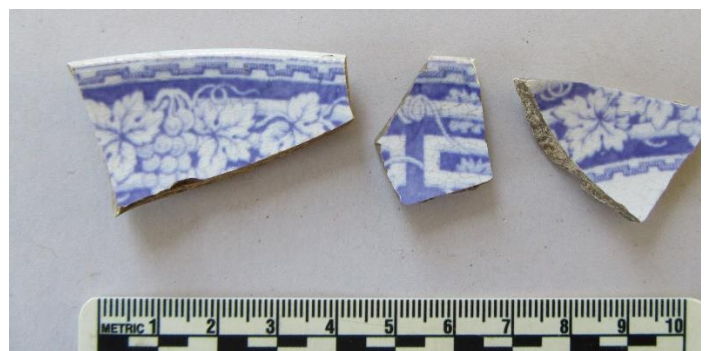
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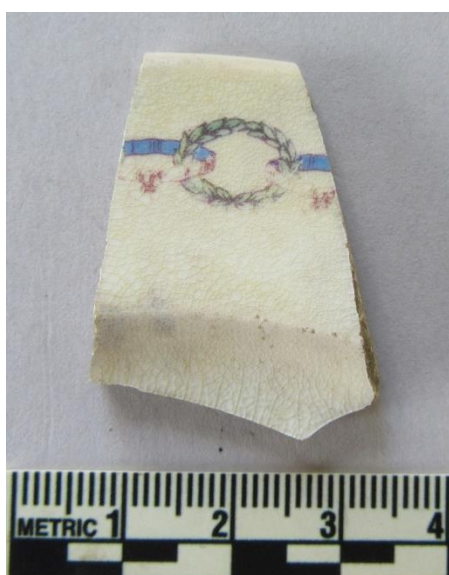
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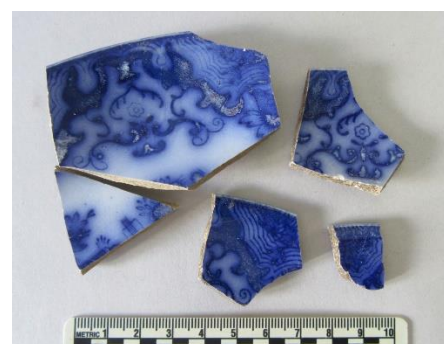
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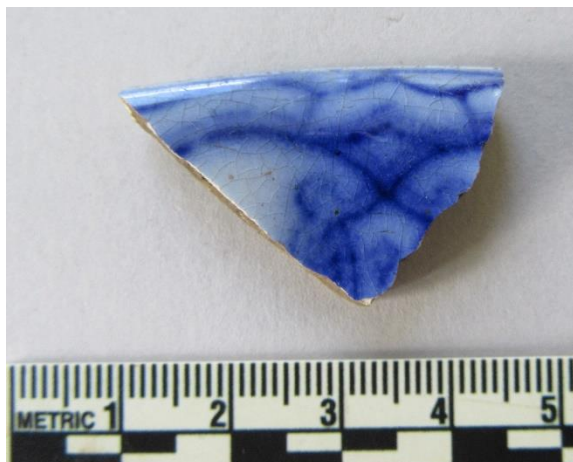
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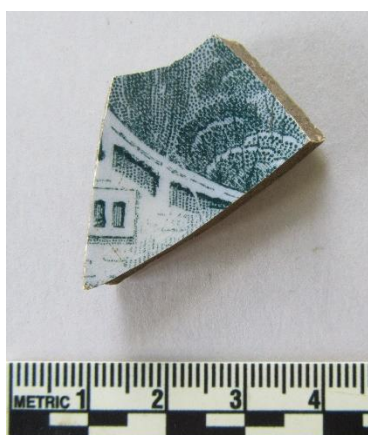
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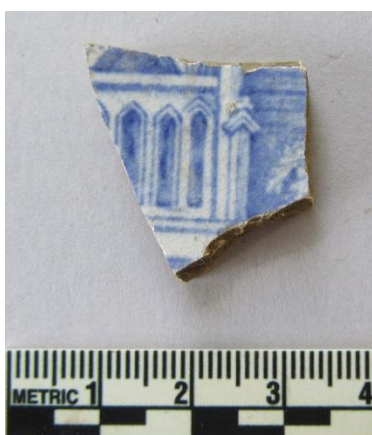
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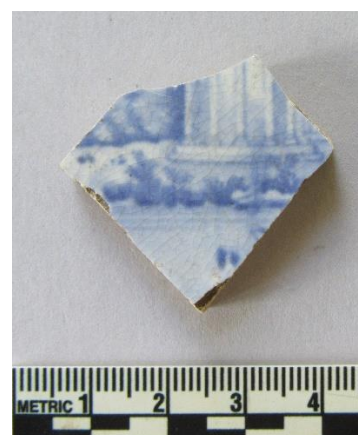
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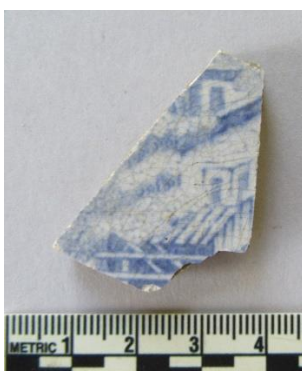
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DR044



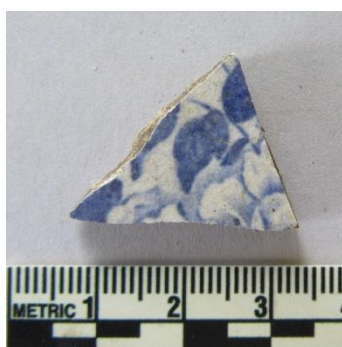
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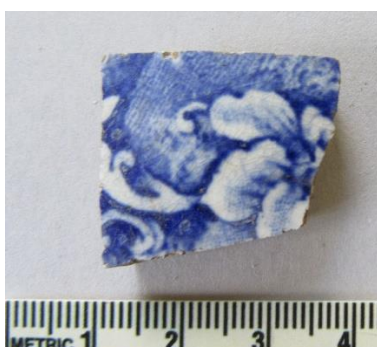
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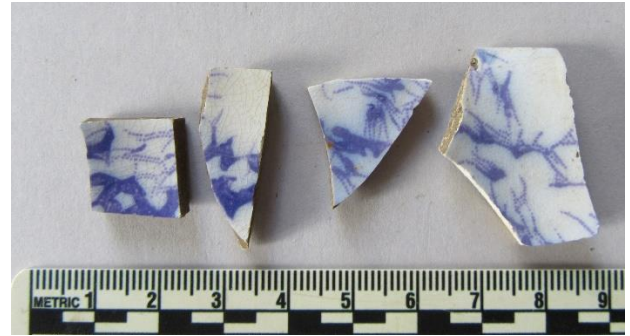
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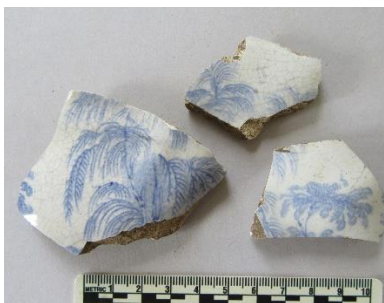
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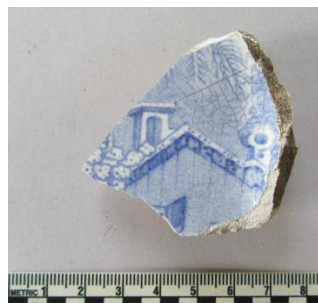
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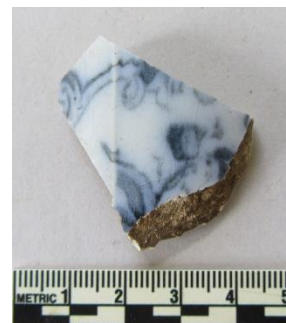
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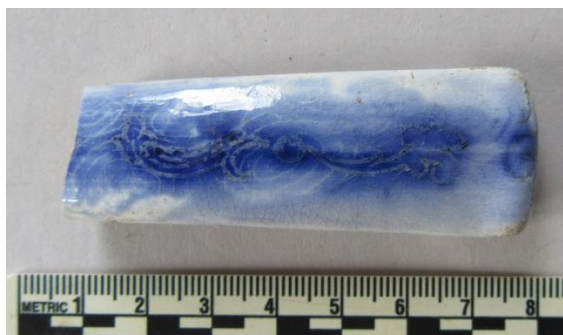
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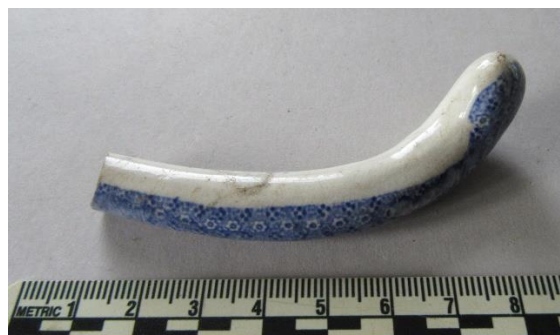
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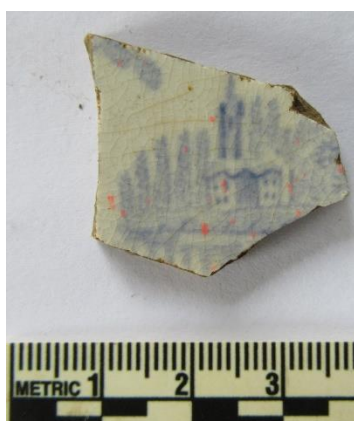
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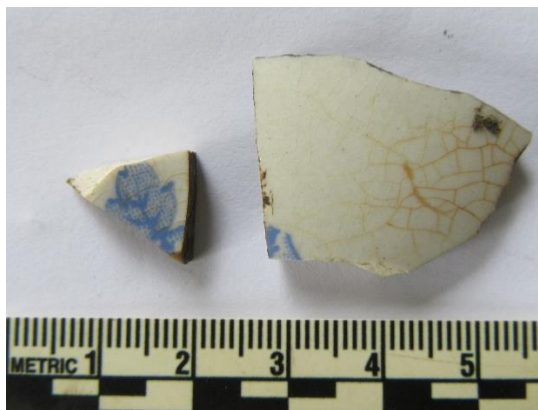
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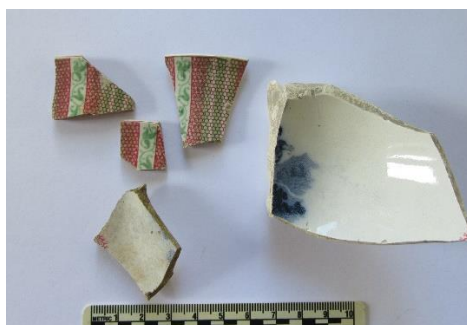
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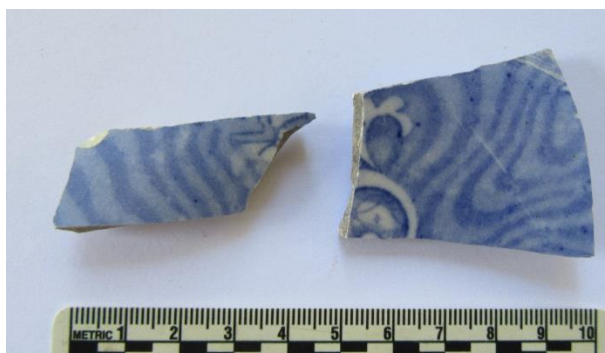
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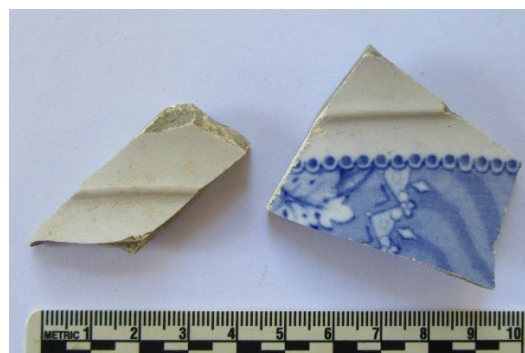
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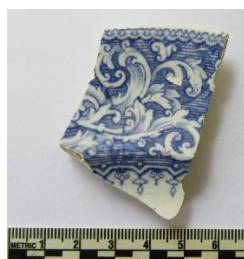
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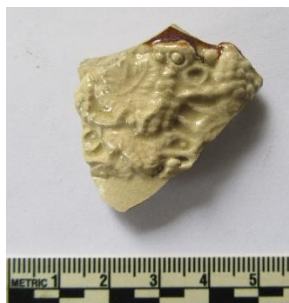
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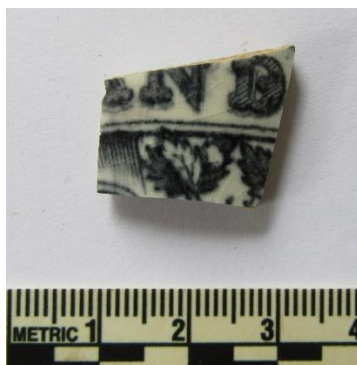
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DR089



DR090



DR091



DR092



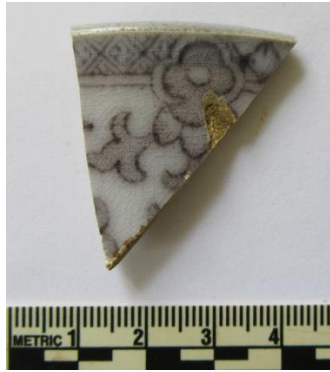
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DR094



DR095 and DR096



DR097



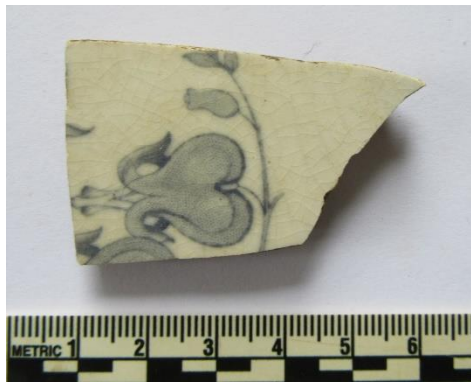
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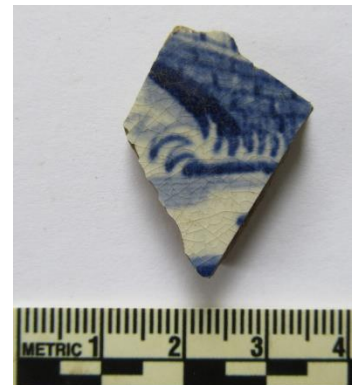
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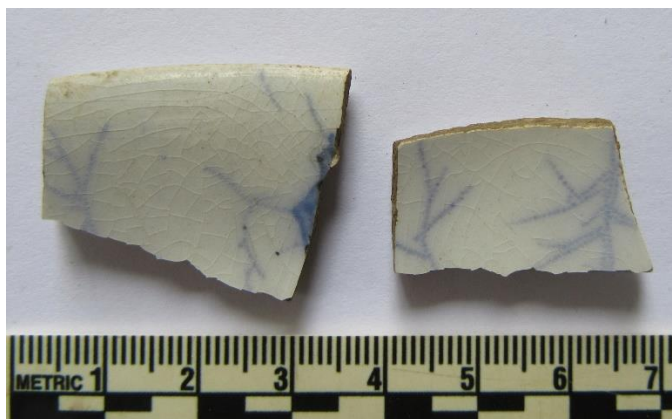
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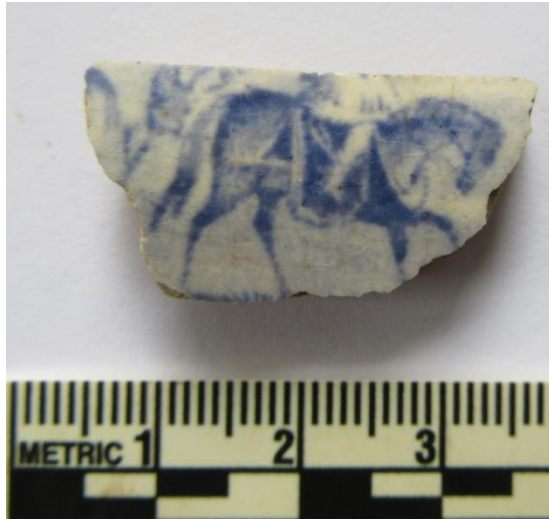
DR102



DR103



DR104



DR105



DR106



DR107

APPENDIX 5 – SPAR LITHICS REPORT

Riverhead Archaeological Assemblage

Lithic Analysis



Prepared for: Clough & Associates

By: Nick Sutton and Monica Tromp

June 2023

Southern Pacific Archaeological Research
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New Zealand

Laboratory analysis: Riverhead archaeological assemblage: Lithic analysis.

Commissioned by: Clough & Associates.

Sample number: 274 lithics

Prepared by: Southern Pacific Archaeological Research (SPAR).

Citation: Sutton, N. and Tromp, M. 2023. Riverhead archaeological assemblage: Lithic analysis. Unpublished report. Southern Pacific Archaeological Research, No. 350.

Front photo: Chert artefacts from site R10/1408, Riverhead.

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1. Introduction

Archaeological excavations undertaken by Clough & Associates at 29 Dinning Road, Riverhead included sampling of archaeological materials for further analysis from seven archaeological sites (R10/1408, R10/1409, R10/1410, R10/1411, R10/1545, R10/1546, and R10/1547). Clough & Associates engaged Southern Pacific Archaeological Research (SPAR) to carry out the analysis of the lithic (stone) material from these sites. This report documents the laboratory methods employed and the results of the laboratory analysis. Quantitative data is also provided digitally as an Excel Workbook.

2. Methods

2.1 Technological analysis

The technological analysis of the lithic material was carried out in the Otago Archaeological Laboratories (OAL) by SPAR archaeologist Nick Sutton. This analysis involved identification of raw material using the OAL's New Zealand Rock Reference Collection, the allocation of each individual lithic piece to a class, and the recording of attributes relevant to that class. Individual lithic pieces were only washed using warm water and a soft toothbrush when adhering sediments were considered to impede one of these three steps.

For the pieces relating to stone working (i.e. flaking events), five artefact classes were adopted (*core*, *flake*, *flake tool*, *tool (other)*, and *angular fragment*). Artefact classes were defined according to the criteria presented in Table 1. Where applicable, pieces were examined under an Olympus SZX7 stereo microscope for evidence of micro-scarring (use wear) or abrasion. Pieces that did not fit neatly into one of these five classes were allocated to a separate 'Other' class.

Table 1. Defining criteria for stone artefact classes associated with flaking events.

Variable	Attribute	Definition
Artefact class	Core	A nuclear piece used as a source of flakes, displaying 1+ negative flake scars as evidence of flake removal. It does not usually contain a ventral surface unless it was used as a producer core after the ventral surface was produced (a flake core).
	Flake	A detached piece at time of discard, generated as a result of a flaking event. A complete flake comprises a platform, termination, and lateral margins. A broken flake may only display some of these landmarks. At least one complete landmark or margin is present to classify as flake.
	Flake Tool	A flake (as defined above) that has been subsequently modified by intentional retouch flaking and/or by use wear.
	Tool (other)	A stone piece showing evidence of: a) manufacture or non-retouch shaping into a specific tool form (e.g. adze, drill point), or b) use to aid in the manufacture of artefacts or processing of materials (e.g. hammer stone, pounder, abrader, file).
	Angular fragment	Generally, waste or by-product generated during a flaking event that do not contain any landmarks to distinguish as one of the other classes.

The following primary dimensions were recorded for cores, flakes, and, when applicable, angular fragments¹: *maximum length* (mm), *percussion length* (mm), *maximum width* (mm), *maximum thickness* (mm) and *weight* (g). Table 2 describes the specific application of each of these measurements.

Table 2. Basic dimensions recorded for stone cores, flakes and angular fragments

Attribute	Definition
Maximum length	The longest measurement obtainable in any direction, from point to point using callipers. Recorded to 2 decimal places.
Percussion length	The length measured from point of percussion (on the platform's ventral edge) to the flake termination along the percussion axis. Using callipers to 2 decimal places. For flakes and cores only. For cores, this relates to the longest dorsal scar.
Maximum width	The longest measurement at right angles to the percussion length. Using callipers to 2 decimal places. For flakes only.
Maximum thickness	The longest measurement between the dorsal and ventral surfaces. Using callipers to 2 decimal places. For cores, this is measured between faces.
Weight	Recorded in grams using laboratory balance.

To gain a fuller understanding of the stone technology and reduction sequence, additional attributes were analysed for cores and flakes. While the ultimate goal of any stone tool technology is to produce stone tools for use, the strategies used to create and organise the technology go beyond reduction, involving broader processes affected by environment, economy and socio-cultural factors. For example, the availability and knowledge of suitable local raw material will affect the manufacture and organisation of stone tool technology, as well as the specific subsistence strategies pursued by a group, including their frequency of mobility. Consequently, the following attributes were analysed based on the information they could provide regarding: a) the manufacturing technology employed and b) the intensity of reduction for stone materials (Table 3).

¹ Dimensions were recorded when applicable. In certain cases, these dimensions could not be taken due to the nature of the material (e.g. angular fragments without landmarks, or when flakes were incomplete).

Table 3. Additional attributes recorded for stone flakes and cores

Variable	Attribute	Definition
Flake	Flaking fracture	The nature of the flaking fracture (e.g. conchoidal, bending wedging).
	Termination	The nature of termination at the distal end of a flake (feather, step, hinge).
	Shape	The general shape of the flake (e.g. regular, elongate, expanding, irregular).
	Dorsal scars	The number of flake scars present on the dorsal surface (counted up to 10).
	Platform type	The nature of flaking on the platform (cortical, plain, dihedral, faceted, crushed, linear, punctiform, polished, hammer dressed).
	Platform width	Maximum distance across the platform surface between two lateral margins, at right angles to percussion thickness. Using callipers to 2 decimal places.
	Platform thickness	Maximum distance along the platform between dorsal and ventral surface, measured from percussion point in line with percussion axis. Using callipers to 2 decimal places.
Core	Core scars	The number of flake scars present on the core (counted up to 10).
	Platform	Number of discrete platforms used for flaking (counted up to 10).
Flake and Core	Cortex type	The nature of the cortex present on dorsal surface (natural cortex, gibber, block, polished, hammer dressed).
	Cortex	Percentage of cortex on the dorsal surface of flake, or surface of core (0%, 1-25%, 25-50%, 50-75%, 75-99%, 100%).
	Overhang removal	Small flake scars present under the platform on the dorsal surface indicating platform preparation by overhang removal. Can be stacked-step fracture or scalar preparation. Recorded as present/absent.

The following dimensions were recorded for the remaining stone artefacts as appropriate (e.g. tools): *maximum length* (mm), *maximum width* (mm), *maximum thickness* (mm) and *weight* (g). Supplementary information was also recorded when applicable; this included a qualitative description, and quantitative analysis relating to: *cortex* (e.g. polish), *cortex percentage*, *retouch patches*, *retouch percentage*, *use wear patches* and *use wear percentage*.

2.1.2 Geochemical analysis

To better understand aspects of raw material procurement and distribution, a secondary analysis was conducted for a sample of the obsidian artefacts. This involved a geochemical XRF analysis (X-ray fluorescence). This form of analysis is a non-destructive X-ray technique used to determine the elemental composition of materials. It returns chemical spectra that are unique to specific raw material sources, enabling some interpretation of where the obsidian material was first procured, and subsequently transported to. A Bruker Tracer III-SD pXRF

was utilised in the OAL, with the machine optimised to identify mid-Z trace elements (Mn, Fe, Zn, Th, Rb, Sr, Y, Zr, Nb) with green filter settings (40kV per channel, filament ADC = 30 μ A, filter = 12milAl +1milTi +6milCu, runtime = 300 seconds).

3. Results

3.1 Overview of lithics

The analysed assemblage contains a total of 274 lithic pieces recovered from seven sites² (Table 4). These seven sites will be considered individually below following a brief overview of the whole Riverhead lithic assemblage.

Table 4. Breakdown of total Riverhead assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
Chert	7	14	1	-	236	-	258	2412.06
Obsidian	-	-	1		3		4	12.03
?Basalt	-	-	-	1	-	3	4	952.38
?Greywacke	-	-	1	-	-	-	1	90.39
Unidentified volcanic	-	-	-	1	-	5	6	1294.78
?Sandstone	-	-	-	-	-	1	1	51.40
Total	7	14	3	2	239	9	274	4813.04

The Riverhead lithic assemblage can best be described as an assemblage of informal tools and manufacturing debris. There is a noteworthy lack of convincing evidence for formal tools in the Riverhead assemblage, including an absence of evidence for the presence of adzes. Pieces included in the ‘Other’ category comprised of what are likely to be natural stones or fire-cracked oven stones.

Heat fractured stone, and in particular heat fractured chert, is abundant throughout the assemblage. Most pieces showed signs of having been heated (Figure 1). This observation is consistent with the general context of most of the material, which was recovered from oven or firescoop features. It is uncertain whether this is the result of the discard of knapping debris into these features or a process of deliberate heat treatment of some cherts with the intention to alter the properties of the stone and make it easier to knap, as is well documented overseas (e.g. Whittaker 1994: 72-73). ‘Pot lids’ are little round ‘flakes’ lacking striking platforms that can pop off the surface of chert and similar types of stone when heated or cooled too quickly, leaving a concave ‘flake scar’ on the surface of the stone (Figure 1; Whittaker 1994: 73).

² This total considers two clear refits (R10/1408, Bag 22 & R10/1545, Bag 3) as single pieces.



Figure 1. Pieces of chert in the Riverhead assemblage that show signs of the characteristic ways that this type of stone reacts when it has been heated or cooled too quickly. From left: ventral surface of 'pot lid' flake (note lack of platform etc), two examples of crazing (surface cracking caused by heating and cooling), piece of chert showing the characteristic concave 'pot lid' scars (All pieces from Site R10/1408, Bag 17-8, Context 2451).

In terms of raw materials, most of the assemblage is comprised of chert ($N = 258$; 94.16% of assemblage). Other raw materials present are obsidian ($N = 4$; 1.46%), as well as potential basalt ($N = 4$; 1.46%), greywacke ($N = 1$; 0.36%), and sandstone ($N = 1$; 0.36%). Six pieces in the assemblage (2.19% of assemblage) are likely to be volcanic in nature, but more specific identifications were not possible based on the available reference collection. The absence of these specific stone types in the OAL's New Zealand Rock Reference Collection suggests that they are locally sourced and not any of the types of stone that are known to have been transported over long distances by Māori.

Chert sources from the Auckland and Northland area are not well represented in the reference collection, but the observed variation in the colour and grain of the chert in the assemblage is suggestive of the exploitation of multiple sources. Overall, grey and/or red cherts are most abundant. Some of the chert may have come from the Whangarei Harbour area based on visual appearance. Of note here are six yellow and red pieces that are a tantalisingly close match to reference examples of chert from Onerahi (Figure 2), on the northern side of the Whangarei Harbour (Fredericksen 1990), but we are not able to say that it is Onerahi chert with absolute certainty without a more systematic comparison with sources in the wider region than was possible with the available reference collection.



Figure 2. Potential Whangarei Harbour chert artefacts in the Riverhead assemblage. Top: Flake (Site R10/1408, Bag 27, Context 2449); Bottom: Core (Site R10/1408, Bag 23, Context 2449).

The four obsidian pieces are likely to be the most exotic material present in the assemblage, in terms of distance between site and source. The results of the geochemical analysis of the obsidian pieces are presented below.

3.1.1 R10/1408: Shell midden site with associated ovens and firescoops

Two hundred and fifty-two of the 274 lithic pieces (91.97% of all lithics) were recovered from R10/1408 (Table 5).

Table 5. Breakdown of R10/1408 assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
Chert	3	11	-	-	228	-	242	1290.69
Obsidian	-	-	1		3		4	12.03
?Basalt	-	-	-	-	-	1	1	782.19
?Greywacke	-	-	1	-	-	-	1	90.39
Unidentified volcanic	-	-	-	-	-	3	3	755.13
?Sandstone	-	-	-	-	-	1	1	51.4
Total	3	11	2	0	231	5	252	2981.83

Two hundred and twenty-one of these pieces were recovered from the fill of a single firescoop feature (Context 2451). Consistent with this context, there is extensive evidence of heating visible on the lithics (Figure 1). Except for one probably heat fractured piece of potential sandstone that lacks clear signs of having been used as a grinding or abrading tool, the material recovered from Context 2451 is entirely chert. Many of the pieces have a blackened surface and were initially identified as possible argillite. However, alongside the contextual information provided, multiple lines of converging evidence support the parsimonious conclusion that the material from this context is (predominantly heat-fractured) local chert:

1. There are several instances of only partial blackening or where subsequent damage has occurred and the black colour can be clearly seen to be only ingrained on the surface. In these cases, the other colours were consistent with what had been observed for definite chert in the assemblage.
2. There is a complete absence of adze polish/hammer-dressing, which we would expect to see on argillite, as it was finished adzes rather than raw material that tended to be exported from the source regions (Walter *et al.* 2017: 358).
3. The sample contains hardly any flakes (N = 3) with clear flake platforms, impact points/bulbs of percussion which we would expect to see represented in much higher numbers if it wasn't predominately heat fractured.

All four of the pieces of obsidian and five of the six pieces of potential Whangarei Harbour chert present in the entire Riverhead assemblage were recovered from an associated shell midden deposit (Context 2449). One flake of obsidian and a potential greywacke flake recovered from the same context are probable flake tools, with signs of use wear (Figure 3). Three of the four pieces of potential basalt or other, unidentified, volcanic stone were from ovens (Contexts 2461, 2469, and 2491) and are most likely oven stones that show clear or probable signs of heat fracturing. The remaining piece was unstratified and is probably a natural stone of unidentified volcanic material.



Figure 3. Probable flake tools from site R10/1408. Top: Obsidian (Bag 18, Context 2449); Right: potentially greywacke (Bag 43, Context 2449).

3.1.2 R10/1409: Shell midden site with associated ovens, firescoops, and postholes

Five of the 274 lithic pieces (1.82%) were recovered from R10/1409 (Table 6). The lithics are two incomplete chert flakes, an incomplete chert core and two chert angular fragments.

Table 6. Breakdown of R10/1409 assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
Chert	1	2	-	-	2	-	5	30.76
Total	1	2	0	0	2	0	5	30.76

3.1.3 R10/1410: Shell midden deposit with associated ovens, firescoops, posthole, and stakeholes

Four of the 274 lithic pieces (1.46%) were recovered from R10/1410 (Table 7). All the lithics are chert angular fragments. One of these fragments is the sixth piece of potential Whangarei Harbour chert. All the lithics from this site were recovered from a firescoop (Context 4114) and all show signs of having been heated.

Table 7. Breakdown of R10/1410 assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
Chert	-	-	-	-	4	-	4	72.3
Total	0	0	0	0	4	0	4	72.3

3.1.4 R10/1411: Two large circular firescoops in isolation

Two of the 274 lithic pieces (0.73%) were recovered from R10/1411 (Table 8). The lithics are an incomplete chert flake and a chert angular fragment. Both the lithics from this site were from a firescoop (Context 2431) and show signs of having been heated.

Table 8. Breakdown of R10/1411 assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
Chert	-	1	-	-	1	-	2	8.55
Total	0	1	0	0	1	0	2	8.55

3.1.5 R10/1545: Oven and firescoop complex with shell midden in fills and associated postholes and stakeholes

Four of the 274 lithic pieces (1.46%) were recovered from R10/1545 (Table 9). The lithics are two chert cores, a probable chert flake tool and what is probably a natural stone of unidentified volcanic material. All artefacts were retrieved from the interface between the base of the topsoil and where features were observed cutting the subsoil.

Table 9. Breakdown of R10/1545 assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
Chert	2	-	1	-	-	-	3	946.22
Unidentified volcanic	-	-	-	-	-	1	1	57.76
Total	2	0	1	0	0	1	4	1003.98

3.1.6 R10/1546: Shell midden deposits, with associated ovens/firescoops, bin pits, and postholes

Four of the 274 lithic pieces (1.46%) were recovered from R10/1546 (Table 10). Three are most likely fragments of oven stones and show clear signs of heat fracturing. The remaining lithic is a small basalt cobble that has potentially been used as a hammerstone.

Table 10. Breakdown of R10/1546 assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
?Basalt	-	-	-	1	-	2	3	170.19
Unidentified volcanic	-	-	-	-	-	1	1	57.95
Total	0	0	0	1	0	3	4	228.14

3.1.7 R10/1547: Mid-19th century homestead with postholes that truncated earlier Māori features such as ovens and firescoops

Three of the 274 lithic pieces (1.09%) were recovered from R10/1547 (Table 11). The lithics are a chert core, a chert angular fragment and a piece of potentially ochre stained volcanic stone (Figure 4). If it was used to work ochre, given the type of stone (a dense, unidentified volcanic stone with a vesicular surface texture, rather than a sandstone) it might have been used as a pounding tool to crush bits of ochre rather than an ochre grindstone. It is notable that the staining appears to be largely confined to raised areas of the stone's surface.

Table 11. Breakdown of R10/1547 assemblage according to class and raw material

Stone type	Core	Flake	Flake Tool	Tool (other)	Angular fragment	Other	Total	Weight (g)
Chert	1	-	-	-	1	-	2	63.54
Unidentified volcanic	-	-	-	1	-	-	1	423.94
Total	1	0	0	1	1	0	3	487.48



Figure 4. Potential ochre pounding tool from site R10/1547 (Bag 1, Context 2942).

3.2 Obsidian geochemical analysis

Of the total obsidian assemblage from R10/1408, 3 samples were selected to undergo geochemical analysis. Before running the samples through the pXRF the obsidian was sorted visually by colour into the groups grey and green based on the colour of the translucency. There were 3 grey and 1 green obsidian samples. After colour, 3 samples were selected based on their size and surface flatness to obtain good quality data.

The raw data was calibrated to parts per million (ppm) using the machine-specific quantification protocols for the Bruker Tracer III-SD #T3S2521, based on 40 known obsidian standards. A basalt standard (BHVO-2) was run at the beginning and end of the session as a quality control to assess accuracy of the data generated. This standard is used to check the consistency and calibration of the results as it has a known value. Table 12 shows the accuracy of the OAL pXRF in reproducing US Geological Survey (USGS) recommended results for the BHVO-2 standard and indicates that it is particularly poor at producing accurate results for Zn. Despite this, the precision of the machine (i.e. its ability to consistently produce the same results irrespective of its accuracy) is relatively good for all elements.

Table 12. Basalt standard chemistry (ppm)

	Mn	Fe	Zn	Ga	Th	Rb	Sr	Y	Zr	Nb
BHVO-2*	1290	86300	103	22	1	10	389	26	172	18
OAL	962	69574	221	25	2	14	313	22	144	15
SD	232	11827	84	2	0	3	54	3	20	2
CV (%)	21	15	52	10	30	23	15	12	12	12

*USGS (United States Geological Survey) standard values

SD = standard deviation

CV = coefficient of variance

Each sample was analysed three times (on different surfaces where possible) and reported values are the means of the three analyses. Table 13 presents the results mid-Z trace elements identified from the obsidian samples. Five elements are considered the most useful and indicative when discriminating between obsidian sources (Rb, Sr, Y, Zr, and Nb) (McCoy and Carpenter 2014).

Table 13. Calibrated concentration values for obsidian samples (ppm)

Samples	Mn	Fe	Zn	Ga	Th	Rb	Sr	Y	Zr	Nb	Likely Source*
18	598	25453	265	23	14	121	2	106	897	76	MI
19	135	7475	117	19	18	177	19	35	121	9	GBI
20	135	7799	122	20	18	184	20	36	124	9	GBI

*MI = Mayor Island; GBI = Great Barrier Island; CVZ = Coromandel Volcanic Zone

Following calibration, the archaeological material was then compared to geological reference sample spectra and values from known New Zealand sources to identify likely sources in the assemblage (McCoy and Carpenter 2014; Ward 1972). The OAL reference collection includes samples from the following major obsidian sources: Waiare, Huruiki, Te Ahumata, Cooks Bay, Hahei, Tairua, Waihi, Mayor Island, Rotorua, Maraetai, Ongaroto and Taupo. Following comparison with geological reference sample spectra and values (McCoy and Carpenter 2014; Ward 1972), two samples are likely from *Great Barrier Island* (with a small chance of being from the Coromandel Volcanic Zone) and one is likely from *Mayor Island* (Table 13, Figure 5).

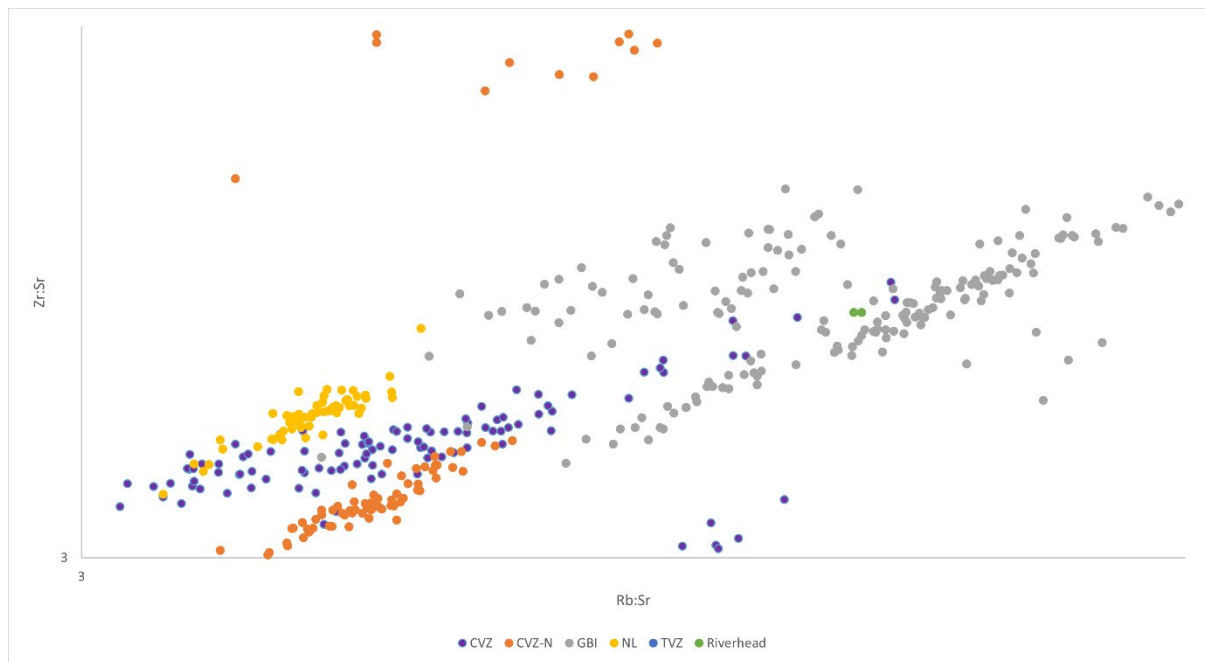


Figure 5. Scatterplot showing the two artefacts in relation to obsidian sources in New Zealand. CVZ = Coromandel Volcanic Zone, CVZ-N = Coromandel Volcanic Zone North, GBI = Great Barrier Island, NL = Northland, TVZ = Taupo Volcanic Zone.

Acknowledgments

Phil Latham and Heather Sadler assisted with the resourcing for the laboratory analysis and Les O'Neill prepared the figures. Additional thanks to Phil for fruitful discussions about northern New Zealand lithic sources.

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Walter, R., Buckley, H., Jacomb, C. and Matisoo-Smith, E. 2017. Mass migration and Polynesian settlement of New Zealand. *Journal of World Prehistory*, 30: 351-376.

Ward, G.K. 1972. *Obsidian and New Zealand Archaeology: a paradigm for sourcing artefact assemblages using X-ray fluorescence spectrography*. MA Thesis, University of Otago.

Whittaker, J. C. 1994. *Flintknapping: making and understanding stone tools*. Austin: University of Texas Press.

Digital data

The quantitative analysis has been supplied in an Excel Workbook with the follow spreadsheet:

- Riverhead lithic artefacts



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Archaeology Programme, School of Social Sciences

APPENDIX 6 – RADIOCARBON DATING RESULTS



Friday, 3 February 2023

Radiocarbon Dating Laboratory

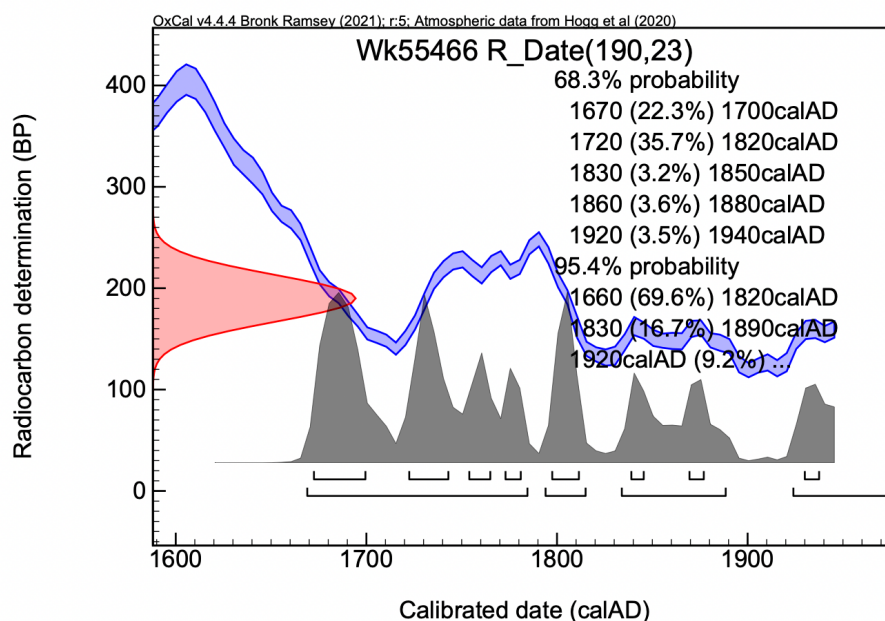
Report on Radiocarbon Age Determination for Wk- 55466

Submitter	S Phear
Submitter's Code	R10/1408, (2479) sample 4a
Site & Location	R10/1408, 29 Dinning Rd, New Zealand
Sample Material	Charcoal Manuka
Physical Pretreatment	Sample cleaned.
Chemical Pretreatment	Sample washed in hot HCl, rinsed and treated with multiple hot NaOH washes. The NaOH insoluble fraction was treated with hot HCl, filtered, rinsed and dried.

$D^{14}C$ $-23.3 \pm 2.8 \text{ ‰}$
 $F^{14}C\%$ $97.7 \pm 0.3 \%$
Result **$190 \pm 23 \text{ BP}$**
(AMS measurement)

Comments

Please note: The Carbon-13 stable isotope value ($\delta^{13}C$) was measured on prepared graphite using the AMS spectrometer. The radiocarbon date has therefore been corrected for isotopic fractionation. However the AMS-measured $\delta^{13}C$ value can differ from the $\delta^{13}C$ of the original material and it is therefore not shown.



- Explanation of the calibrated Oxcal plots can be found at the Oxford Radiocarbon Accelerator Unit's calibration web pages (<http://c14.arch.ox.ac.uk/embed.php?File=explanation.php>)
- Result is *Conventional Age or Percent Modern Carbon (pMC)* following Stuiver and Polach, 1977, Radiocarbon 19, 355-363. This is based on the Libby half-life of 5568 yr with correction for isotopic fractionation applied. This age is normally quoted in publications and must include the appropriate error term and Wk number.
- Quoted errors are 1 standard deviation due to counting statistics multiplied by an experimentally determined Laboratory Error Multiplier.
- The isotopic fractionation, $\delta^{13}C$, is expressed as ‰ wrt PDB and is measured on sample CO_2 .
- $F^{14}C\%$ is also known as *Percent Modern Carbon (pMC)*.



Friday, 3 February 2023

Radiocarbon Dating Laboratory

Report on Radiocarbon Age Determination for Wk- 55467

Submitter	S Phear
Submitter's Code	R10/1410, (4070) sample 87
Site & Location	R10/1410, 29 Dinning Rd, New Zealand
Sample Material	Charcoal Manuka
Physical Pretreatment	Sample cleaned.
Chemical Pretreatment	Sample washed in hot HCl, rinsed and treated with multiple hot NaOH washes. The NaOH insoluble fraction was treated with hot HCl, filtered, rinsed and dried.

D¹⁴C -25.1 ± 2.8 ‰

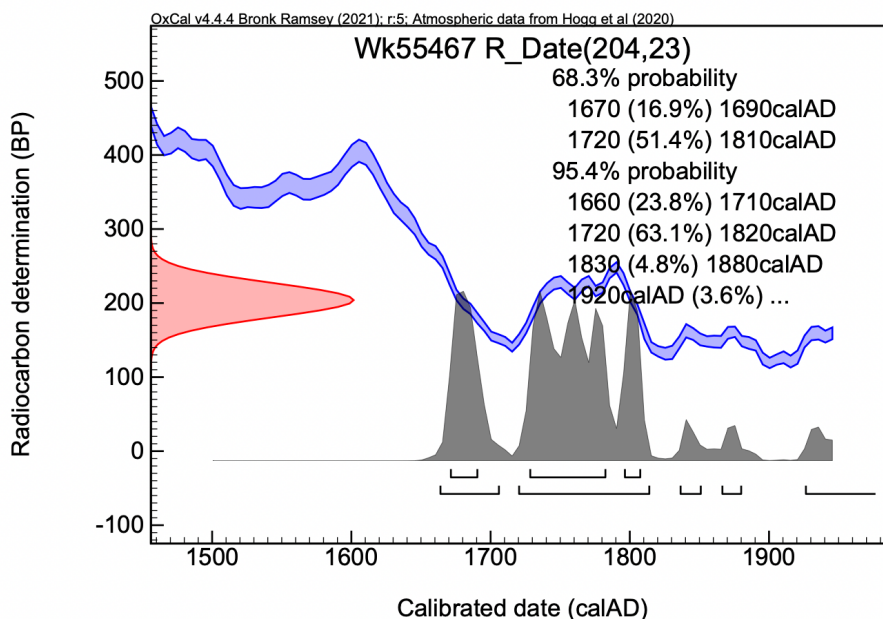
F¹⁴C% 97.5 ± 0.3 %

Result 204 ± 23 BP

(AMS measurement)

Comments

Please note: The Carbon-13 stable isotope value ($\delta^{13}\text{C}$) was measured on prepared graphite using the AMS spectrometer. The radiocarbon date has therefore been corrected for isotopic fractionation. However the AMS-measured $\delta^{13}\text{C}$ value can differ from the $\delta^{13}\text{C}$ of the original material and it is therefore not shown.



- Explanation of the calibrated Oxcal plots can be found at the Oxford Radiocarbon Accelerator Unit's calibration web pages (<http://c14.arch.ox.ac.uk/embed.php?File=explanation.php>)
- Result is *Conventional Age or Percent Modern Carbon (pMC)* following Stuiver and Polach, 1977, Radiocarbon 19, 355-363. This is based on the Libby half-life of 5568 yr with correction for isotopic fractionation applied. This age is normally quoted in publications and must include the appropriate error term and Wk number.
- Quoted errors are 1 standard deviation due to counting statistics multiplied by an experimentally determined Laboratory Error Multiplier.
- The isotopic fractionation, $\delta^{13}\text{C}$, is expressed as ‰ wrt PDB and is measured on sample CO_2 .
- F¹⁴C% is also known as *Percent Modern Carbon (pMC)*.



Friday, 3 February 2023

Radiocarbon Dating Laboratory

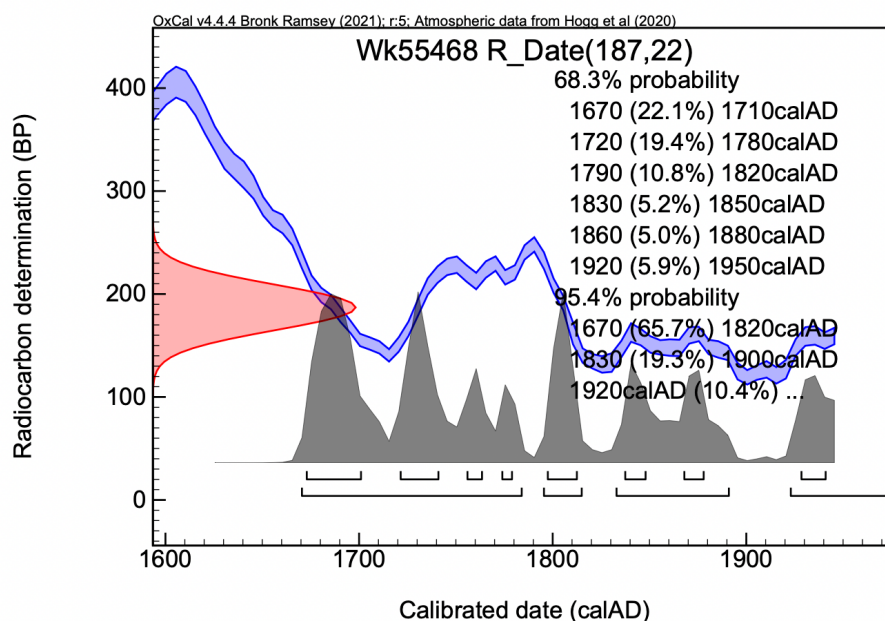
Report on Radiocarbon Age Determination for Wk- 55468

Submitter	S Phear
Submitter's Code	R10/1408, (2469) sample 55
Site & Location	R10/1408, 29 Dinning Rd, New Zealand
Sample Material	Charcoal Manuka
Physical Pretreatment	Sample cleaned.
Chemical Pretreatment	Sample washed in hot HCl, rinsed and treated with multiple hot NaOH washes. The NaOH insoluble fraction was treated with hot HCl, filtered, rinsed and dried.

$D^{14}C$ $-23.0 \pm 2.7 \text{ ‰}$
 $F^{14}C\%$ $97.7 \pm 0.3 \%$
Result **$187 \pm 22 \text{ BP}$**
(AMS measurement)

Comments

Please note: The Carbon-13 stable isotope value ($\delta^{13}C$) was measured on prepared graphite using the AMS spectrometer. The radiocarbon date has therefore been corrected for isotopic fractionation. However the AMS-measured $\delta^{13}C$ value can differ from the $\delta^{13}C$ of the original material and it is therefore not shown.



- Explanation of the calibrated Oxcal plots can be found at the Oxford Radiocarbon Accelerator Unit's calibration web pages (<http://c14.arch.ox.ac.uk/embed.php?File=explanation.php>)
- Result is *Conventional Age or Percent Modern Carbon (pMC)* following Stuiver and Polach, 1977, Radiocarbon 19, 355-363. This is based on the Libby half-life of 5568 yr with correction for isotopic fractionation applied. This age is normally quoted in publications and must include the appropriate error term and Wk number.
- Quoted errors are 1 standard deviation due to counting statistics multiplied by an experimentally determined Laboratory Error Multiplier.
- The isotopic fractionation, $\delta^{13}C$, is expressed as ‰ wrt PDB and is measured on sample CO_2 .
- $F^{14}C\%$ is also known as *Percent Modern Carbon (pMC)*.



Friday, 3 February 2023

Radiocarbon Dating Laboratory

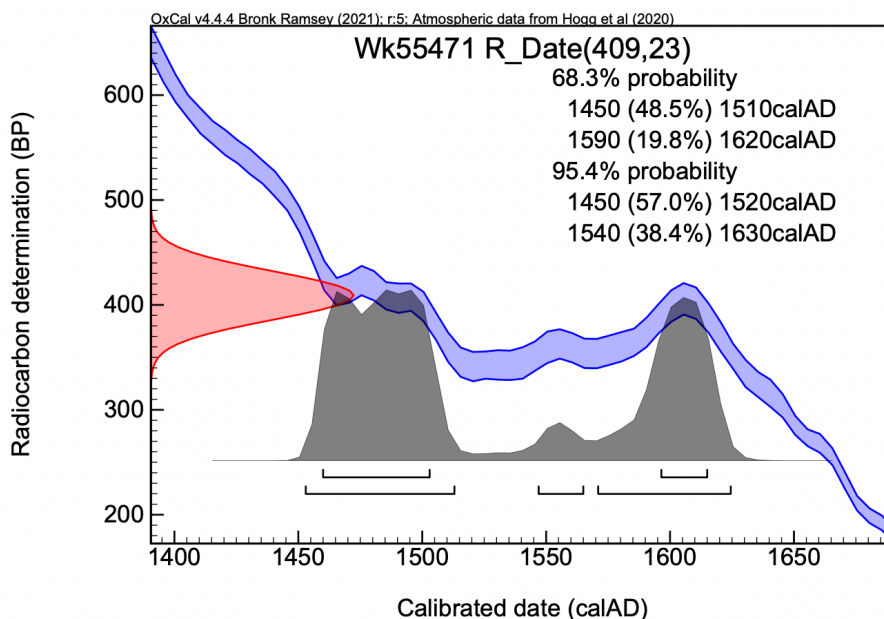
Report on Radiocarbon Age Determination for Wk- 55471

Submitter	S Phear
Submitter's Code	R10/1545, (1124) sample 19
Site & Location	R10/1545, 29 Dinning Rd, New Zealand
Sample Material	Charcoal
Physical Pretreatment	Sample cleaned.
Chemical Pretreatment	Sample washed in hot HCl, rinsed and treated with multiple hot NaOH washes. The NaOH insoluble fraction was treated with hot HCl, filtered, rinsed and dried.

$D^{14}C$ $-49.6 \pm 2.7 \text{ ‰}$
 $F^{14}C\%$ $95.0 \pm 0.3 \%$
Result **$409 \pm 23 \text{ BP}$**
(AMS measurement)

Comments

Please note: The Carbon-13 stable isotope value ($\delta^{13}C$) was measured on prepared graphite using the AMS spectrometer. The radiocarbon date has therefore been corrected for isotopic fractionation. However the AMS-measured $\delta^{13}C$ value can differ from the $\delta^{13}C$ of the original material and it is therefore not shown.



- Explanation of the calibrated Oxcal plots can be found at the Oxford Radiocarbon Accelerator Unit's calibration web pages (<http://c14.arch.ox.ac.uk/embed.php?File=explanation.php>)
- Result is *Conventional Age or Percent Modern Carbon (pMC)* following Stuiver and Polach, 1977, Radiocarbon 19, 355-363. This is based on the Libby half-life of 5568 yr with correction for isotopic fractionation applied. This age is normally quoted in publications and must include the appropriate error term and Wk number.
- Quoted errors are 1 standard deviation due to counting statistics multiplied by an experimentally determined Laboratory Error Multiplier.
- The isotopic fractionation, $\delta^{13}C$, is expressed as ‰ wrt PDB and is measured on sample CO_2 .
- $F^{14}C\%$ is also known as *Percent Modern Carbon (pMC)*.



Friday, 3 February 2023

Radiocarbon Dating Laboratory

Report on Radiocarbon Age Determination for Wk- 55469

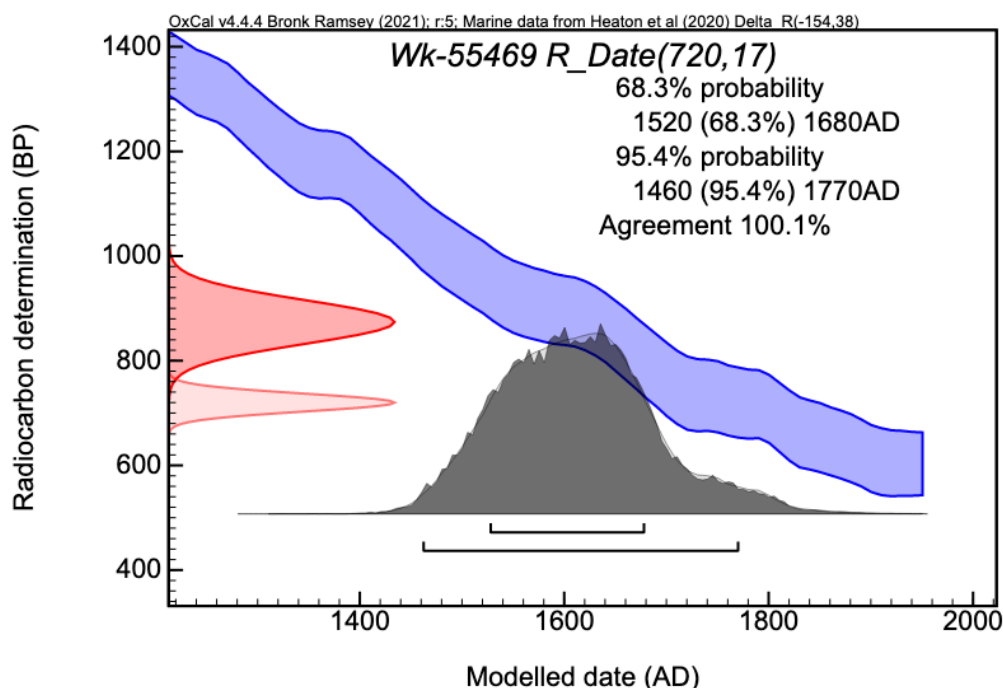
Submitter	S Phear
Submitter's Code	R10/1411, (2429) sample 103
Site & Location	R10/1411, 29 Dinning Rd, New Zealand
Sample Material	Marine shell
Physical Pretreatment	Surfaces cleaned. Washed in an ultrasonic bath. Tested for recrystallization: aragonite.
Chemical Pretreatment	Sample acid washed using 0.1N HCl, rinsed and dried.

$\delta^{13}\text{C}$	$0.8 \pm 0.3 \text{ ‰}$	(CRDS)
D^{14}C	$-85.7 \pm 1.9 \text{ ‰}$	
$\text{F}^{14}\text{C}\%$	$91.4 \pm 0.2 \%$	

Result **720 \pm 17 BP**

(AMS measurement)

Comments



- Explanation of the calibrated Oxcal plots can be found at the Oxford Radiocarbon Accelerator Unit's calibration web pages (<http://c14.arch.ox.ac.uk/embed.php?File=explanation.php>)
- Result is *Conventional Age or Percent Modern Carbon (pMC)* following Stuiver and Polach, 1977, Radiocarbon 19, 355-363. This is based on the Libby half-life of 5568 yr with correction for isotopic fractionation applied. This age is normally quoted in publications and must include the appropriate error term and Wk number.
- Quoted errors are 1 standard deviation due to counting statistics multiplied by an experimentally determined Laboratory Error Multiplier.
- The isotopic fractionation, $\delta^{13}\text{C}$, is expressed as ‰ wrt PDB and is measured on sample CO_2 .
- $\text{F}^{14}\text{C}\%$ is also known as *Percent Modern Carbon (pMC)*.



Friday, 3 February 2023

Radiocarbon Dating Laboratory

Report on Radiocarbon Age Determination for Wk- 55470

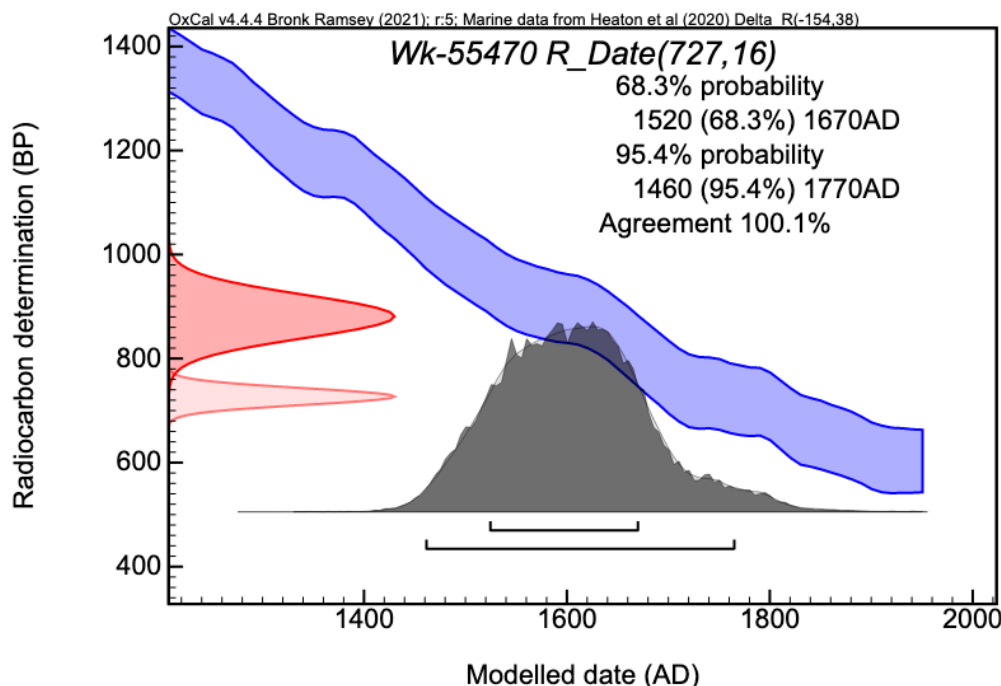
Submitter	S Phear
Submitter's Code	R10/1546, (2093) sample 6
Site & Location	R10/1546, 29 Dinning Rd, New Zealand
Sample Material	Marine shell
Physical Pretreatment	Surfaces cleaned. Washed in an ultrasonic bath. Tested for recrystallization: aragonite.
Chemical Pretreatment	Sample acid washed using 0.1N HCl, rinsed and dried.

$\delta^{13}\text{C}$	$1.2 \pm 0.3 \text{ ‰}$	(CRDS)
D^{14}C	$-86.5 \pm 1.8 \text{ ‰}$	
$\text{F}^{14}\text{C}\%$	$91.4 \pm 0.2 \%$	

Result **727 \pm 16 BP**

(AMS measurement)

Comments



- Explanation of the calibrated Oxcal plots can be found at the Oxford Radiocarbon Accelerator Unit's calibration web pages (<http://c14.arch.ox.ac.uk/embed.php?File=explanation.php>)
- Result is *Conventional Age or Percent Modern Carbon (pMC)* following Stuiver and Polach, 1977, Radiocarbon 19, 355-363. This is based on the Libby half-life of 5568 yr with correction for isotopic fractionation applied. This age is normally quoted in publications and must include the appropriate error term and Wk number.
- Quoted errors are 1 standard deviation due to counting statistics multiplied by an experimentally determined Laboratory Error Multiplier.
- The isotopic fractionation, $\delta^{13}\text{C}$, is expressed as ‰ wrt PDB and is measured on sample CO_2 .
- $\text{F}^{14}\text{C}\%$ is also known as *Percent Modern Carbon (pMC)*.

APPENDIX 7 – ARTEFACT CATALOGUE

Provided separately in digital Excel format