

ARCHAEOLOGICAL INVESTIGATION OF 1-15 PIPITEA STREET, WELLINGTON



REPORT TO
THE NEW ZEALAND HISTORIC PLACES TRUST,
THE PIPITEA STREET TRUST
AND
RCP

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RCP

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SUMMARY

Archaeological investigations were undertaken at 1–15 Pipitea St, Wellington between 27 May and 28 June 2008 under New Zealand Historic Places Trust authority 2007/162.1

Prior to the arrival of the European settlement in 1840 Maori lived on site at Pipitea pa. In 1840 the New Zealand Company surveyed the area into Town Acres. Two of the three Town Acres at 1–15 Pipitea St remained Maori freehold (Tenths) and were not utilised by Europeans until the 1860s or later. The other had a house from the 1860s by John Elisha Smith at 3 Pipitea St. The Smith household occupation was the main focus of investigation. Houses were built at 11–15 Pipitea St in 1881, at 5 Pipitea St in 1862 and at 9 Pipitea St in 1936 (Chapter 2).

A garden soil and a storage pit are evidence of Maori occupation of the pa prior to 1840. These features show a European influence (Chapter 3).

19th century houses at 5, 11, 13 and 15 Pipitea St were still standing until just prior to the archaeological investigation. These were recorded in detail (Chapter 4).

Excavation concentrated on the house at 3 Pipitea St and the back yards of 3 and 9 Pipitea St, which were far better preserved than features elsewhere on site. These related to the Smith household occupation of 3 Pipitea St and John Smith's lease of 9 Pipitea St where the household dumped rubbish in pits. This activity continued after Smith's death up to the construction of the house on 9 Pipitea St in 1936, when a fence was built between the two properties. Three clear phases of house construction could be seen in the archaeology of the house. The final footprint of the house coincided with the 1891 Thomas Ward survey map, as did most structures on site. Archaeological features on the properties at the front of the excavated area (1, 5, 7 and 11–15 Pipitea St) were significantly damaged by more recent activity and excavation concentrated on the front of 9 Pipitea St and the back yards of 11–15 Pipitea St. The latter extended backyard fences 1.5 m into the front of 9 Pipitea St prior to 1936 (Chapter 5).

The artefacts were analysed and show a continuity of occupation in 3 and 9 Pipitea St from the beginning of the Smith household occupation up to John Smith's death in 1900 and beyond into the early–mid 20th century. Rubbish in pits at the front of 9 Pipitea St probably came from off site (Chapter 6).

Faunal remains were dominated by sheep and cattle, and most remains were associated with the Smith household occupation of 3 Pipitea St (Chapter 7).

The use of vacant space, principally 9 Pipitea St, by occupants of the surrounding sections is re-examined in the concluding chapter (Chapter 8). Smith had a formal lease on 9 Pipitea St but the occupants of 11–15 Pipitea St did not, though this did not stop them claiming the vacant space as though it were their own.

The changing size of the Smith household is inferred from the amount of children's wares found on site and the fairly rapid expansion of the house through its three phases of construction.

The historic period Maori evidence is placed in its wider context – it is notable that such features have not previously been recorded.

¹ This report can be downloaded in digital format from www.cfgheritage.com/2008_72pipitea-reet.pdf.

Acknowledgements

The excavation team consisted of Matthew Campbell (director), Beatrice Hudson (assistant director), Jaden Harris (finds), Ben Thorne (surveyor), David Carley, Greg Gedson, Peter Holmes, Christina Neale, Raylene Reihana Ruka, Colin Sutherland and Ella Ussher. Thanks to Tony Walzl for his excellent historic research; to Nicola Molloy for assistance with the standing buildings; Nick Jones, Christean Monreal and Tristan McDonald of RCP; and to Nick Clayton and Dave Anderson of Naylor Love.

1 INTRODUCTION

MATTHEW CAMPBELL AND BEATRICE HUDSON

Pipitea Street Trust are developing an office block on land at 1–15 Pipitea Street, Wellington. Archaeological investigations were undertaken on the properties between 27 May and 28 June 2008 under authority 2007/162 issued by the New Zealand Historic Places Trust under section 14 of the Historic Places Act 1993. Pipitea St is located in an area that was central to early Wellington and were also close to Pipitea Pa, actually a fenced kainga, which was inhabited by Maori in the late 1830s and 1840s, in other words, at the time of settlement by the New Zealand Company in 1840. The properties are located above a low sea cliff while and the core of the pa was on the coastal flat below and immediately north of Pipitea Street. The properties are where gardens associated with the pa have been recorded historically. The 1843 Pipitea redoubt was also believed to have been here, though it was not found during excavation.

The properties were part of the original town acre grants established by the New Zealand Company in 1840 though boundaries have since changed. The earliest recorded houses date to the 1860s on 3 and 5 Pipitea St, houses were not built on 1, 11, 13 and 15 Pipitea St until the 1880s and 90s, while 9 Pipitea St was not built on until 1936.

Research design

The research design was written by Opus International Consultants Ltd and the following section is adapted from this. This research aimed to determine how the Pipitea Street site fits into the context of New Zealand's and Wellington's history. Nineteenth century European settlement was known to exist on site and early historic (contact) period Maori occupation was suspected. There was also a chance that earlier pre-European Maori occupation might be found, though this turned out not to be the case.

Early historic period Maori occupation

Te Atiawa were occupying Pipitea pa at the time of European settlement. The properties, though just outside the central, fenced part of the pa, were part of the wider settlement.

- Is there evidence in the archaeology of the adaptation of Maori culture to European influences in the period leading up to, and immediately after, the establishment of Wellington?
- Is there material culture or chronological data which provides evidence for relationships and interactions between Maori and Europeans during the contact period?
- How does the archaeology illuminate the wider settlement pattern of Wellington Maori in this period?

European settlement

The main focus of excavation was on the 19th century European houses and the features associated with them, such as rubbish pits, back yard structures, fences, etc.

- How does the archaeology of the properties relate to processes of colonisation and settlement?
- What does the material culture and structural information reveal about 19th century settler attitudes and consumer behaviour?
- How does the use of space relate to these processes?

Method

A report on the history of the excavation area (1–15 Pipitea St) was commissioned in order to provide context for and guide the investigation.

The standing 19th century buildings at 5, 11, 13 and 15 Pipitea St were recorded by measured drawing and photography. The standing building at 9 Pipitea St dated to 1936 and was not recorded.

Once the houses were moved off the site, topsoil, overlying fill and building debris were removed using a hydraulic excavator to reveal subsurface features. Surfaces were then cleaned down by hand by a team of up to 11 archaeologists, with occasional assistance from volunteers. Features were fully excavated by hand and recorded on a handheld computer (iPaq 4750) using Data on the Run 5 software, which was synchronised with a desktop MS Access database.¹ Details of the features' fill, shape, dimensions and relationships were entered into the database along with the date, excavator and additional notes. Each excavator kept a notebook to record or sketch additional information. All features were mapped using a Leica 1205 robotic total station on the Wellington 2000 datum. Digital photographs were taken to illustrate features and areas. A cherry picker was hired for a short period in order to photograph large features from a height.

All artefactual material from the 19th and early 20th century (pre-World War II) was retained for analysis except for non-diagnostic bottle glass. Faunal material (mostly bone) associated with 19th or early 20th century features was retained for analysis. Initial processing of finds was carried out on site. Non-diagnostic material was discarded following an established protocol. Remaining finds were returned to the lab in Auckland for specialist analysis. Methodologies for discard and analysis of artefactual and faunal material are detailed in the relevant chapters (Chapters 6 and 7).

¹ This database is included on the CD that accompanies this report. CD data contents can be downloaded from www.cfgheritage.com/2008_72pipiteastreet.zip.

2 HISTORIC BACKGROUND

TONY WALZ¹

This chapter is assembled from a variety of primary and secondary source materials to provide a summary of occupation and tenure for 1–15 Pipitea St, including two documents already prepared in relation to the current development: *1–15 Pipitea Street. Wellington: Cultural Impact Report* (Wellington Tenth Trust 2006); and *Archaeological and Heritage Assessment: 1–15 Pipitea Street, Wellington* (Opus International Consultants 2006).

A number of secondary sources have been considered relevant to various time periods before 1900 and the Thorndon suburb in which the sections are located. In addition, the many primary and archival sources, such as records from pre-1840 European visitors, early land transactions and pictorial evidence, have been examined.

The 1–15 Pipitea St properties are parts or remnants of original New Zealand Company town acres that were surveyed during the establishment of the Wellington settlement. Pieces of these town acres were swapped between each other and with other sections due to changes in surveying, old land claims, land exchanges and other matters. Basically, however, the existing properties today can be said to be part of the town acres listed in Table 2.1, as they were configured from 1851 on.

Town Acre	Pipitea St property
544	1, 3, 5, 7
542/543	9 (only a small part of 542 is involved)
543	11, 13, 15

Table 2.1. 1851 Town Acres and their relation to the 1–15 Pipitea St properties.

Town Acres 542 and 543 were Native Reserves under the administration of the New Zealand Company or Crown officials and were leased out for much of the period prior to 1900. Town acre 544 was settler allocated and privately owned from the beginning of New Zealand Company administration.

Despite there being a good amount of material available on title developments and ownership of the land on which 1–15 Pipitea St are now located, it is less easy to specifically identify the nature of occupation, especially before 1880. Often, however, contextual information associated with land title can be used to ascertain the likely use.

To provide an easy point of reference Table 2.2 illustrates the ownership and occupation of 1–15 Pipitea St from prior to 1840 through to 1900.

Pre-1840s

By 1800 Te Whanganui-a-Tara (Wellington Harbour) was occupied by the descendants of Ira and Kahungunu. Historian Angela Ballara has suggested that at this time, and for the following two decades, the western side of the harbour including

¹ Walghan Partners

	No. 1	No. 3	No. 5	No. 7	No. 9	No. 11	No. 13	No. 15
Pre- 1840	Owner/occupier Use	Te Rei Pukekura Garden?	Ngake/Reweti Garden	Ngake/Reweti Garden	Ngake/Reweti Garden	Ngake/Reweti Garden	Ngake/Reweti Garden	Ngake/Reweti Garden
1840s	Title	pt 544	pt 543	pt 543	pt 543, 542	pt 543	pt 543	pt 543
	Owner/occupier Use	Moreing	10ths	10ths	10ths	10ths	10ths	10ths
	Use	Unused	Unused	Unused	Unused	Unused	Unused	Unused
		excl redoubt						
1850s	Title	pt 544	pt 544	pt 544	pt 543, 542	pt 543	pt 543	pt 543
	Owner/occupier Use	Moore	Davis	Bannister	10ths/	10ths/	10ths/	10ths/
	Use	Unused	Unused	Unused	Unused	Unused	Unused	Unused
1860s	Title	pt 544	pt 544	pt 544	pt 543, 542	pt 543	pt 543	pt 543
	Owner/occupier Use	Abraham	Abraham	Abraham	10ths/ Smith	10ths/ Abraham	10ths/ Abraham	10ths/ Abraham
	Use	Unused	Pt of 7	House	Garden	Paddock	Paddock	Paddock
1870s	Title	pt 544	pt 544	pt 544	pt 543, 542	pt 543	pt 543	pt 543
	Owner/occupier Use	Abraham;	Smith	Abraham;	10ths/Smith	10ths/Sewell	10ths/Sewell	10ths/Sewell
	Use	S. Cemino	House	S. Cemino	Garden	et al	et al	et al
	Use	Unused	House	House		Paddock	Paddock	Paddock
1880s	Title	pt 544	pt 544	pt 544	pt 543, 542	pt 543	pt 543	pt 543
	Owner/occupier Use	S. Cemino	Smith	S. Cemino	10ths/Smith	10ths/H. Barber	10ths/H. Barber	10ths/H. Barber
	Use	House	House	House	Garden	House	House	House
1890s	Title	pt 544	pt 544	pt 544	pt 543, 542	pt 543	pt 543	pt 543
	Owner/occupier Use	C. Cemino	Smith	Ames	10ths/Smith	10ths/P. Barber;	10ths/P. Barber;	10ths/P. Barber;
	Use	House	House	House	Garden	Johnston	Johnston	Johnston
	Use	House	House	Pt of 5	Garden	House	House	House

Notes:

Owner/occupier: only the primary owner or occupier is shown for each decade. If there are several owners or occupiers of similar tenure this is indicated by 'et al'. If only one name is recorded, then this means owner and occupier are the same. A comma separating names indicates the owners or occupiers held the section at the same time. A semicolon indicates one owner or occupier followed by another during the same decade.

'Unused' means there is no specific evidence regarding use.

'10ths' refers to the Wellington Tenth's Maori Reserves Estate.

Table 2.2. Summary of ownership and occupation for 1–15 Pipitea St from prior to 1840 through to 1900.

the flatland around Pipitea Point was unoccupied, with settlement instead focusing on places such as Island Bay or the Miramar Peninsula (Ballara 1990: 13). It appears that it was after the 1824 battle of Waiorua that Ngati Tama and Ngati Mutunga groups came across from the western coast to occupy Te Whanganui-a-Tara. At this time Ngati Tama came to occupy the harbourside kainga of Tiakiwai, in the vicinity of current day Tinakori Road (Waitangi Tribunal, Wai 145 2003: 22–5). As subsequent Tama and Mutunga groups moved into Te Whanganui-a-Tara and the original people of the harbour were expelled, the Pipitea Point area became a major focus of settlement.

Available evidence from early visitors to Wellington suggests that the Pipitea plateau from the beachfront to the base of Tinakori Hill was cleared and cultivated land. Pioneer chronicler Louis Ward recorded that Thondon Flat was once covered with potato cultivations (Ward 1929: 308). Published recollections from the arrival of European settlement describe the intended town site at Thorndon as being “fairly clear ... what remained of the former bush were but the scattered tree trunks ... they were fairly plentiful with here and there a great deal of manuka scrub.” (*Evening Post*, 17 April 1920). New Zealand Company draftsman Charles Heaphy visited the harbour in 1839 onboard the *Tory*. He recorded that there were Maori cultivations above the intended town site of Thorndon and that Thorndon flat was covered in fern (Heaphy 1879, cited in McGill 1984: 23). Heaphy also drew a panoramic ‘Birdseye view of Port Nicholson’ which, as the detail in Figure 2.1 indicates, shows cleared land around and back from Pipitea along with areas of scrub or trees inland (Heaphy 1839–40, reproduced in Maling 1999: plate 135).

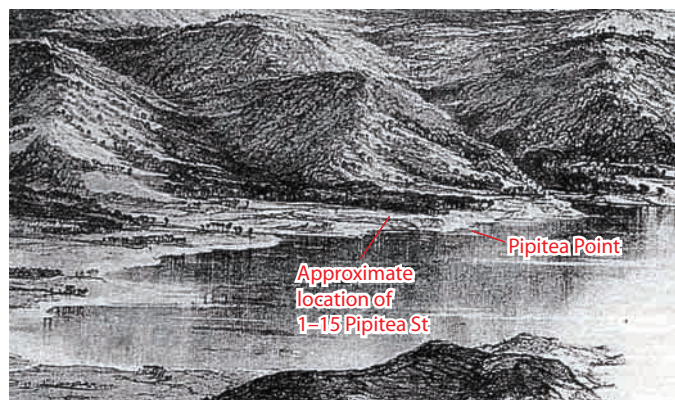
Good information is available on the pre-1840 ownership and use of the land that came to be included in Town Acres 542, 543 and 544 (and therefore the properties now known as 1–15 Pipitea St). This information is generated by the Old Land Claims Commission which was established by the Crown after 1840 to investigate claims made by Europeans that they had completed legitimate land transactions with Maori before the signing of the Treaty of Waitangi. Two Old Land Claims are relevant to the Pipitea St sections: one made by Robert Tod based on a transaction conducted with Ropiha Moturoa and Te Wira Mangatuku (Heaphy 1879, cited in McGill 1984: 23); and another by Thomas Barker based on a transaction associated with the Ngake and Reihana Rewiti.

Robert Tod’s claim is of contextual relevance to the occupation and use of the land that eventually came to be included in sections 1–15 Pipitea St as Tod’s claim lies immediately adjacent to the south and east of the sections.

Robert Tod was a Sydney speculator who came to Wellington with his family on 4 December 1839 to acquire land before the expected arrival of the British Crown. Tod signed two deeds in January 1840. One of these transactions (OLC 465) extended into the boundaries of the later surveyed Town Acres 542 and 543 (Figure 2.2, Figure 2.7 and Figure 2.14). One boundary of this claim ran through Town Acre 543 and today makes up the western boundary line of 9 and 15 Pipitea St (Wellington Tenths Trust 2006: 4).

Moturoa was one of three brothers who came to join Patukawenga of the Ngati Mutunga tribe at Te Whanganui-a-Tara in 1827. The evidence given at the hearing of Robert Tod’s claim in 1842 reveals that Ngati Mutunga had cultivated the piece of land later transferred to Tod by Moturoa and Mangutuku. When Moturoa provided testimony during Tod’s claim, he con-

2.1. Pipitea flat
(annotated detail from
Heaphy 1839–40,
‘Birdseye view of Port
Nicholson’, lithograph
of drawing, Alexander
Turnbull Library
C-029-006-b).

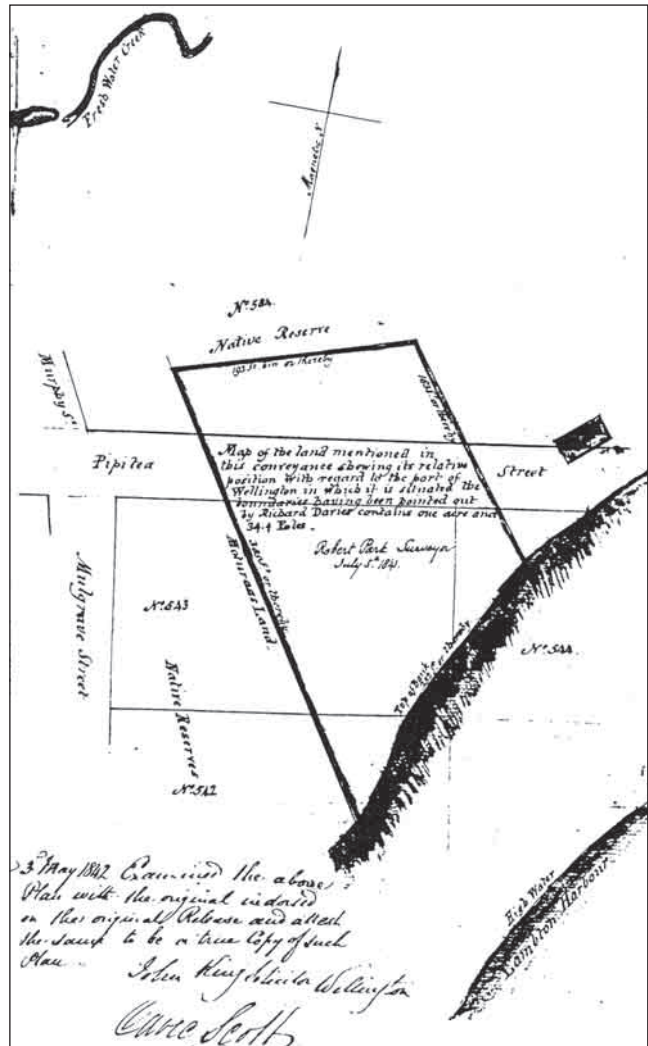


As the discussion below will reveal, there is evidence supporting all four sites identified by Adkin as areas of habitation associated with the Pipitea papakainga which probably extended over much of the southeastern end of the Pipitea/Thorndon flat.

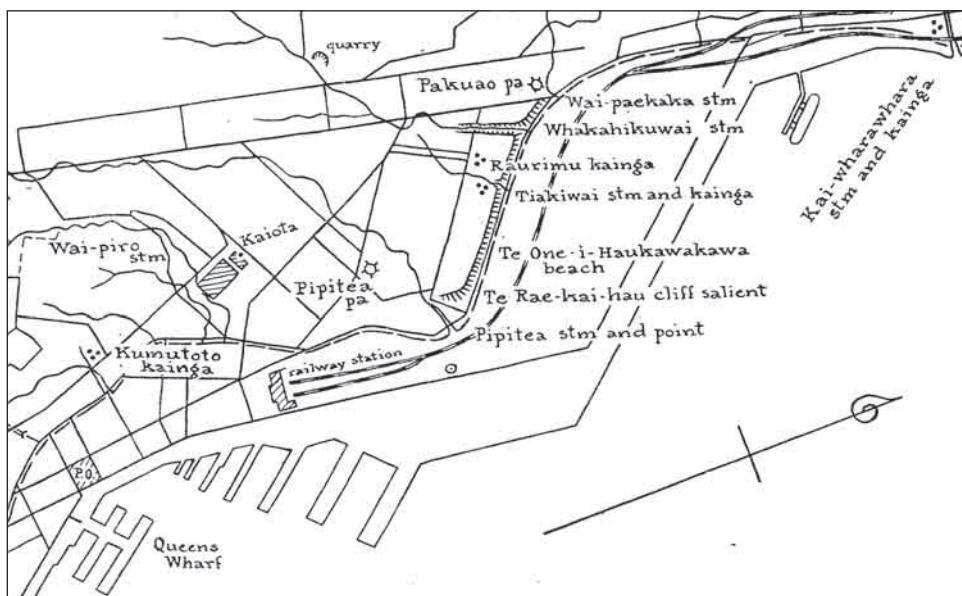
During the hearing of the Wellington Tenth's claim before the Waitangi Tribunal, submissions argued that the wider papakainga associated with Pipitea extended towards the forested slopes of Tinakori Hill. This claim was based on oral information from kaumatua and written sources.

The ground on which Parliament Buildings is now situated was known to be the site of cultivation grounds and an urupa called Kaiota (Figure 2.4). The cultivations of Pipitea papakainga were said by Wellington kaumatua to have stretched out to the Waihouhou Stream, towards Kumutoto and the Tinakori range. The embankment extending down what later became Mulgrave St towards Thorndon Quay was known by the name Te Hokianga (Waitangi Tribunal, Wai 145 F2: 3-4).

Furthermore, there is written source material that shows the Pipitea pa area being more extensive than the confines of Town Acre 545. Firstly, a report by New Zealand Company Surveyor-General Felton Mathew recorded "Thorndon Flat is occupied by an extensive native pah..." (1841: 534). In addition, a map drawn in 1846 by Company surveyor Thomas Fitzgerald (Figure 2.5), shows the Pipitea pa



2.3. Plan of the claim of Thomas Barker (records of the Old Land Claims Commission, Series 1, OLC 635 Thomas Barker, Archives New Zealand, Wellington).



2.4. Location of Pipitea pa (detail from Map IV, Adkin 1959: 30).

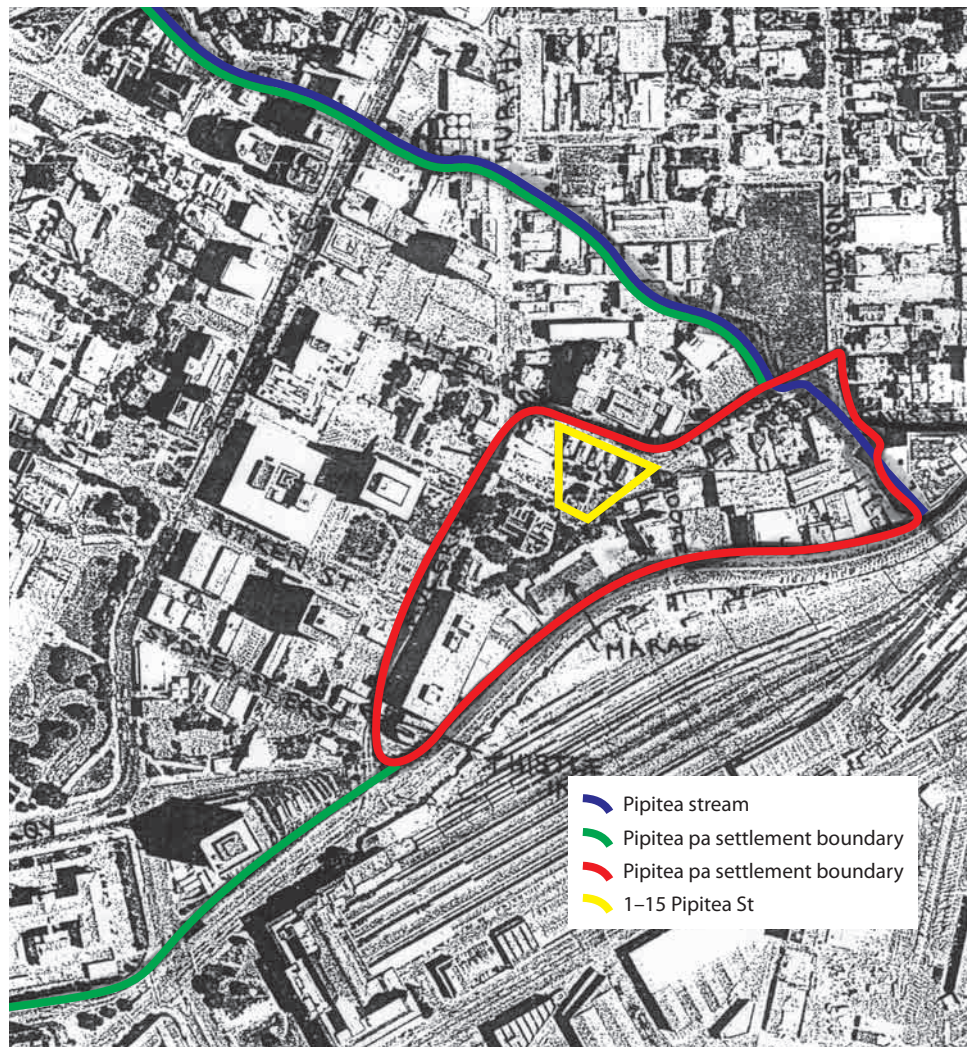


extending from the harbour up along the banks of Pipitea Stream. When this map is compared with the later Wellington Town Sections (Figure 2.8) it can be seen that the pa at least extended over many more Town Acres than 545.

Pipitea papakainga also extended northwards beyond the Pipitea Stream. When Reihana Reweti, who was a catechist, first arrived at Pipitea, a church was built on land on the northern side of Pipitea Stream (Wellington Tenths Trust 2006: 14, footnote 30).

During the Wellington Tenths hearings, historian Neville Gilmore combined the oral and written evidence and produced a map, superimposed over a modern aerial photograph to illustrate

2.5. Fitzgerald's 1846 map of Pipitea pa (detail from McLervy Deed of Release for Pipitea Maori 1847, reproduced in Waitangi Tribunal Record of Documents, Wai 145 F1, Quinn 1995).



2.6. Location and extent of Pipitea Pa and settlement (annotated adaptation of a detail from aerial photograph presented in Waitangi Tribunal Record of Documents, Wai 145 F2(b) in support of the Evidence of Neville Gilmore, Wai 145 F1, 28 Feb 1996).

where he believed Pipitea pa and papakainga were located. Figure 2.6 is an annotated adaptation of Gilmore's map.

Within the district shown by Gilmore's map various chiefs held various areas of land with which they were associated. As noted above, the area of Tod's grant was associated with Moturoa and Mangatuku while to the east the area in Barker's claim, which takes in most of the area on which 1-15 Pipitea St are now located, was linked with Ngake.

Alongside and to the east of Ngake's land is an area that is associated with Te Rei Pukekura who was of Ngati Tawhirikura of Te Atiawa with close links to Ngati Hamua and Te Matehou. Looking at the map of Barker's claim that has been superimposed over later streets and town sections (Figure 2.7) it can be seen that a small portion of what became 1-15 Pipitea St lay to the east and outside of the Barker claim boundary. This area, located primarily within 1 Pipitea Street, would have belonged to Te Rei Pukekura. The map of Barker's claim (Figure 2.3) also shows a building to the right and outside of the claim located partly on what later became Pipitea Street. This building was a chapel that Te Rei Pukekura had built on his land. Available evidence shows that Pukekura's land extended over the steep sea cliff and towards the beach down and around what is today Moore St, where part of the land had been included in a pre-1840 transaction with James Heberley (Wellington Tenth Trust 2006: 8). Figure 2.7 illustrates all of these points.

1840s

Aside from pre-1840 land transactions that were claimed to have taken place by persons such as Tod and Barker, from 1839 the New Zealand Company continued with its plans to establish a town at Te Whanganui-a-Tara. The Company, which had been formed on 2 May 1839 to proceed with plans to establish settlement colonies in parts of New Zealand, sent officials on the *Tory* to purchase land from Maori.



2.7. Location of pre-1840 Pipitea Pa landholdings and land claims (annotated detail adapted from aerial photograph in Wellington Tenth Trust 2006: Appendix 1).

The *Tory* arrived in Te Whanganui-a-Tara on 20 September 1839. Negotiations proceeded and a deed was signed seven days later. Following close behind was the Company's next ship, the *Cuba*, with surveyor William Mein Smith and his assistants on board. The surveyors reached the newly named Port Nicholson on 4 January 1840. Although the surveyors began their task immediately on arrival, their activities were centred on Pito-One (Petone) where it was initially intended that the settlement would be placed. From 21 January onwards several vessels arrived carrying Company settlers. Following successive flooding of the Hutt River, on 6 April 1840 the decision was made to shift the settlement from Pito-One to Thorndon Flat (i.e., the land around to the immediate south of Pipitea Point). With the survey efforts redirected to the new location, Mein Smith completed his survey of the urban Town Acres in July 1840. Between 28 July and 14 August 1840 the Wellington colonists selected the urban lots in accordance with an order that had previously been arranged by ballot in London. Over the same days the Maori Tenth's reserve sections were also selected. It was through this surveying and selection process that the Town Acres 542, 543 and 544 came into existence. Town Acre 544 was a settler-selected section while Town Acres 542 and 543 were selected to be part of the Maori Tenth's reserves estate (Waitangi Tribunal, Wai 145 F2: 45, 52, 54, 83, 86).

Town Acres 542 and 543

Town Acres 542 and 543 were chosen as Maori Tenth's reserves during the selection of Wellington urban sections that occurred in July and August 1840. An examination of where the urban Tenth's were selected reflects that a cluster of Tenth's sections around the Pipitea pa site extended over land that formally would have been included within a more extensive Pipitea papakainga area.

The Tenth's system was supposed to have provided reserves for those Maori who sold land to the New Zealand Company. The Principal Agent of the New Zealand Company in Wellington, Colonel Wakefield, had been required to reserve "a proportion of the territory ceded, equal to one-tenth of the whole" purchase. This land would be held in trust "for the future benefit of the chief families of the tribe" ('Instructions to Colonel Wakefield...' May 1839, Waitangi Tribunal, Wai 145 A29: 372). However, beyond this instruction it is evident that the New Zealand Company had only vague ideas on how the Tenth's estate would be administered.

Research has not been able to confirm whether Tenth's reserve sections 542 and 543 were leased and occupied during the 1840s. A brief outline of Wellington Native Reserves administration indicates that it is unlikely that sections 542 and 543 were occupied under lease.

There was somewhat of a contradiction between the Company and the Crown as to the administration of the Tenth's reserves. The Company wanted Maori to vacate pa and cultivations on urban sections which had been allocated to settlers, and to move to the Tenth's reserves which had been selected for them. The Crown preferred a policy of leasing the Tenth's reserves to settlers, with the resulting rental income being put towards the benefit and welfare of Maori (Waitangi Tribunal, Wai 145 A29: 282). Ultimately, it was the Crown's perspective that came to the fore. A committee was set up to oversee the leasing of reserves not occupied by Maori for terms of up to seven years. Although reserves were advertised for leasing from late 1841, Edmund Halswell, Commissioner for the Management of the Reserves, was unable to let the reserves at the maximum term of seven years as the period was not long enough to encourage lessees to put up buildings on urban lots. By June 1842 Halswell informed Wakefield that he had only been able to lease one reserve, Town Acre 514 (Waitangi Tribunal, Wai 145 A29: 282–83).

Land agent Henry St Hill was appointed in March 1843 to replace Halswell in attempting to lease out the tenths reserves. However, St Hill had little more success than Halswell, despite the terms of the leases for the reserves being available up to 14 or 21 years. This lack of success has been ascribed to several factors including the ready availability for purchase of other sections being offered by absentee owners. By mid 1848 only two urban Tenths had produced any rental income (Waitangi Tribunal, Wai 145 A29: 284).

Therefore it is fairly certain that Town Acres 542 and 543 did not come under settler occupation during the 1840s as leased Native Reserves. It is possible, however, that they may have remained under Maori occupation. During the 1840s, some Maori claimed title to several of the Tenths reserves themselves and tried to lease them independently of the Reserves Commissioner. The Tribunal has noted that "Pipitea chief Wairarapa attempted to lease some of the Thorndon tenths in 1841, but Halswell stopped him." Furthermore, the Tribunal has also noted that "Maori also lived on and cultivated some reserves, though probably only those which had already been under cultivation when the reserves were created" (Waitangi Tribunal, Wai 145 A29: 283). There is no specific evidence, however, in relation to Town Acres 542 and 543.

In addition to problems with the administration of the Tenths reserves estate, several other developments occurred during the 1840s which affected the usefulness of Town Acres 542 and 543 as commercial propositions during the earlier period of the settlement of Wellington.

Tod's grant

Firstly, as noted above, the grant for Tod's claim was awarded to Alexander McDonald in 1845. As shown in Figure 2.13 this severely encroached on the remaining parts of Town Acres 542 and 543 splitting them into several small parcels of land.

McCleverty awards

Part of Town Acre 542 was included in the McCleverty awards. This rather complex story of reserve allocation does not need to be gone into fully as it does not directly relate to the occupation and use of 1–15 Pipitea St. As it does provide some context, however, a brief summary will be given. As part of the laying out of the town of Wellington, the New Zealand Company had sold sections to the new settlers that were already occupied by Maori. The Crown took steps to resolve this issue by a series of land exchanges. In 1844 Colonel William Anson McCleverty was appointed to obtain deeds from the various tribes concerned, exchanging their settlements and cultivations for land elsewhere. The process was not finalised until 1847. As part of this process some specific persons or families were awarded sections. Under this scheme Pipitea pa, which was primarily located on Town Acre 545, was awarded to its occupants as a group. In addition, part of Town Acre 542, on the seashore below the cliff, was awarded to Ihaia Porutu who was in occupation with a house and garden. Thus a bit more of Town Acre 542 was alienated from the Tenths reserve estate.

Hospital grants

The Waitangi Tribunal has noted that over the 1840s the Government tended to view Tenths reserves as being available to be appropriated for public purposes, without compensation and at the cost of the economic viability of reserve estates. By 1847 one of these sections, Town Acre 584, was selected as the site of new



2.8. The Wellington Hospital located on Pipitea St built after the 1848 earthquake (Alexander Turnbull Library, Photographic Collection, Ref No. F 418331/2).

Wellington hospital (Figure 2.8). This was also on Pipitea Street, directly opposite the location of 1–15 (Figure 2.9). In addition, parts of adjacent and nearby Town Acres 594, 580 and 539 were awarded as endowment reserves for the support of the hospital (Waitangi Tribunal, Wai 145 A29: 319).

Church and College endowment

Similarly, Tenths reserves were appropriated for church and college purposes. In 1848, part of Town Acre 542 that adjoined Mulgrave Street was given for the site of the new St. Paul's cathedral (Waitangi Tribunal, Wai 145 A29: 319).

All these reductions of Town Acres 542 and 543 could have lessened the attractiveness of the property from the perspective of a commercial leasing proposition in the new settlement and might explain why it appears these sections were not finally leased out until the 1860s (see below). Furthermore, the location of the hospital (which remained at the Pipitea site until 1872) and the church on Mulgrave Street also shaped the nature of leasing that eventually took place.

Town Acre 544

During the 1840s three developments associated with the ownership and use of Town Acre 544 (and therefore the area later occupied by part of 1–15 Pipitea St) were: the allocation of the section to Henry Moreing in 1840; the establishment of a redoubt in 1843; and the transfer and re-transfer of the section.

The allocation to Henry Moreing

As part of the establishment and settlement of Wellington, Town Acre 544 was allocated to Company settler Henry Moreing under land order No. 25 and it remained in his ownership throughout the first half of the 1840s. Research conducted to date has not located any evidence on how Moreing specifically utilised Town Acre 544 during the 1840s. However, contextual information about Moreing suggests he may have done little with the land as his commercial and land interests were widely spread around Wellington and elsewhere. When the urban sections of Wellington were allocated Moreing did not only acquire Town Acre 544. Under the ballot allocation of Wellington sections he also acquired 12 other town acres.² Moreing was a farmer and was in occupation of land in Wanganui by around 1843 (Beaglehole 1990: 168). He also was the claimant in the Mana Island Old Land Claim and in 1845 was awarded 1,872 acres of land on the island (OLC 552–553, ANZ–W: 33). By this time, however, he had left New Zealand (*New Zealand Spectator* 1845: 3–4).

Considering the above information it is likely that Town Acre 544, despite being in Moreing's ownership, was not occupied by him and there is no other specific evidence located to date of formal or informal occupation by others during

² These were: 134 (Ingestre St), 476 (Wellington Tce), 530 (Molesworth St), 556 (Hill St), 650 (Tinakore Rd), 710 (Wallace St), 778 (Daniel St), 785 (Riddiford St), 787 (Constable St), 930 and 931 (Hanson St) and 1064 (Herald St) (Ward 1929: 190–206; NZC Series 133/5, Register of Selection of Town Sections chosen, ANZ–W).

the 1840s of that part of the acre on which 1–15 Pipitea St are currently located. There is one possible exception, however: the Pipitea redoubt.

The establishment of the redoubt

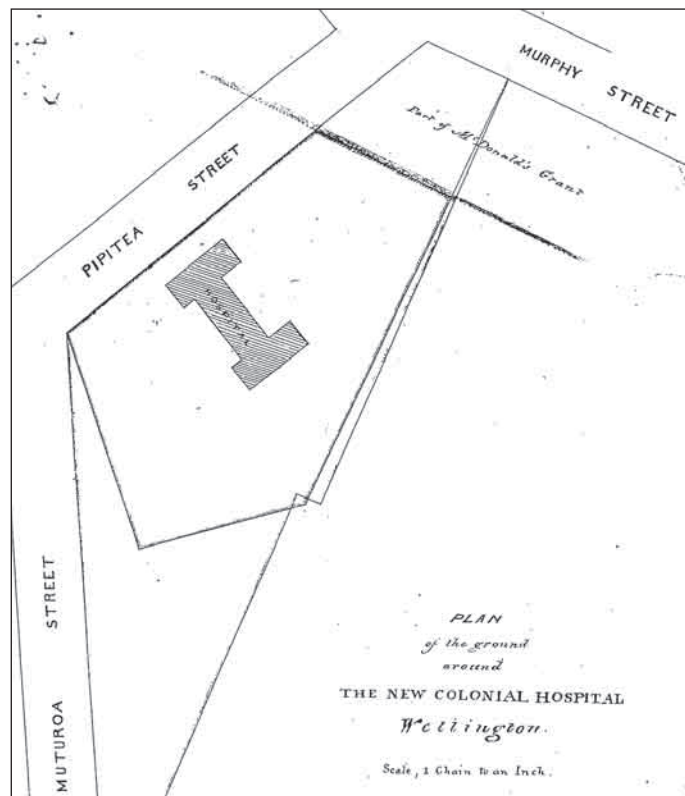
Available information suggests that a redoubt was constructed on part of Town Acre 544 following the 'Wairau affair' of June 1843. On 27 June 1843, a 'Committee for public safety' issued a notice, which was published in the *New Zealand Gazette and Wellington Spectator* on 1 July: "The Committee have resolved that two Batteries be erected as a precautionary measure. The public are requested to lend assistance tomorrow, Wednesday, at 9 o'clock, under the superintendence of Capt. R. Smith, R.A., in the erection of the Batteries and rendezvous; one on the Clay hill, behind the Commercial Hotel, and the other on Thorndon Flat, near the Emigration Houses. Each volunteer to provide himself with a spade or pickaxe." The latter battery was intended to be the meeting point for the Thorndon Flat settlers "in case of alarm." The officers to be in command of the Thorndon Flat battery were Captain Daniell and Major Baker (*The New Zealand Gazette and Wellington Spectator* 1 July 1843: 2).

At a subsequent meeting of the 'Military Sub-Committee' on 6 July it was again decided "that a public notice be issued, calling upon all parties to assemble on Thorndon Flat on Monday morning next, at 9 o'clock provided with spade and pickaxe, to assist at the erection of the Battery now in progress, the completion of which has been retarded by the late unfavourable weather" (*New Zealand Journal* 6 January 1844: 342).

Military historian Peter Cooke states that while work on the ditch and bank of the redoubt had started by mid July 1843, the fortification, intended as a defensible gun battery, was never completed (Cook 2000: 21).

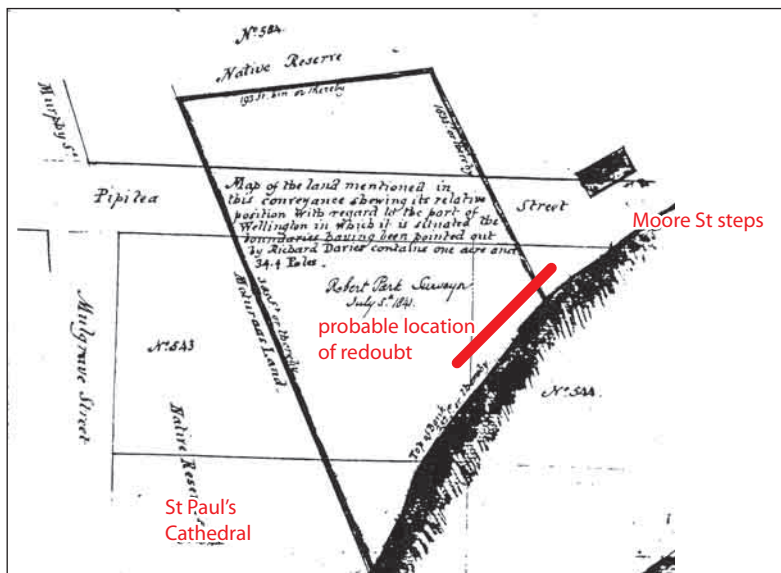
Information also exists as to the specific location of the Thorndon redoubt. According to Cooke, it was located "on the clifftop above Pipitea" next to the house of a Mr. Clifford, and was therefore known as "Clifford's Redoubt." Historian Ian Wards, however, locates the redoubt's position as "on Thorndon Flat near the Emigration Houses, near the junction of Pipitea and Mulgrave Streets" (Cook 2000: 20–1; Wards 1968: 79, cited in Opus 2006: 9). Historian James Cowan published a recollection by "pioneer settler" John Waters of the establishment of redoubt which pinpoints the position more specifically:

It was on the seaward extremity of the flat above Pipitea that the first Thorndon redoubt was built, or rather commenced. I remember it very well, because I saw it being built by the volunteers of the town in 1843, just after the Wairau fight, and, in fact, assisted in the work as a boy. It stood very close to the cliff above Pipitea, between the present steps at the foot of Pipitea Street and the English Church of St Paul's, but much nearer Pipitea St than the church. Just below it on



2.9. Plan showing location of the hospital on the opposite side of Pipitea St from 1–15 (detail from 'Plan of the Ground around the New Colonial Hospital Wellington', Colonial Secretary, IA 1852/277, Archives New Zealand, Wellington).

the beach-front, now Thorndon Quay, was the police station, a long *whare* thatched with *raupo*. We boys were given a holiday one day to help the men by carrying the sods which had been cut close by to the workers, who placed them in position on the parapet. The earthwork was not completed the rear was left open. It consisted of three sides of an oblong, the longer side facing the sea, and the flanks extending back a short distance westward. It was not of any great size. The redoubt ditch was about 5 feet in depth and the same in width. We boys used to amuse ourselves by helping to deepen it. The earth parapet was about 6 feet high. The later redoubt was built in a different place altogether, further on in Thorndon, towards what is now Fitzherbert Terrace (Cowan 1955: 93, cited in Opus 2006: 9–10).



2.10. Likely location of 1843 redoubt based on Waters' description (adapted and annotated map of Figure 2.3).

The culmination of these three coordinates places the redoubt quite clearly on Town Acre 544, at the corner where the bank meets the steps meaning that it is either 1 or 3 Pipitea Street.³

The transfer and re-transfer of Town Acre 544

During a later investigation into several claims for compensation relating to Town Acre 544 it was revealed that in early March 1846 Henry Moreing transferred the land to William Matravers. Several years later, however, on 6 August 1849, Matravers retransferred the land back to Moreing under Land Transfer Certificate

³ The Wellington Tenth's Trust *Cultural Impact Report* (2006: 8–10) also held that the redoubt was located within the boundaries of 1–15 Pipitea St, noting that it was most likely located within the use right of Te Rei Pukekura or Ngake. The use right of Ngake comprised the land that Barker had claimed through his transaction with Reihana, while Pukekura's interest was to the east of Ngake's, closer to the shorefront "where Pipitea Street today meets the Hospital steps heading down onto Moore St."

Waters' description is fairly specific and allows some pinpointing of the location of the redoubt:

- firstly, he notes that the redoubt stood "very close to the cliff above Pipitea", placing it somewhere along the cliff that marks the south-eastern boundary of 1–15 Pipitea St;
- secondly, his account, which comes from the turn of the century, adds that it was between "the present steps at the foot of Pipitea Street and the English Church of St Paul's" – the steps are likely to be the Moore Street steps and St. Paul's Church is the Cathedral in Mulgrave Street;
- thirdly, Waters adds that the redoubt was "much nearer Pipitea St than the church."

No. 926 (Bell, 5 April 1852: Lands Claim Commissioner Report, Claim No. 290). Despite this brief change of ownership, there is no specific evidence of occupation of Town Acre 544.

Pictorial Evidence

In addition to the documentary evidence, pictorial evidence has also been closely examined. The founding of a new settlement at Wellington generated a number of paintings, drawings and lithographs showing views of the harbour and of the new township. Unfortunately, as most of them were created from the vantage point of hillsides to the south and east of the Wellington township, the area around Pipitea Point tends to feature in the background at too great a distance to identify any specific buildings or nature of occupation.

There are two exceptions. Both of these were completed in 1841 and both take the form of many panelled panoramic drawings. They provide a good clear view of the area of interest for this report, but are of limited usefulness as they cover only one year early in Wellington's settlement, and they both use a style of drawing that presents only basic information.

The first example is one produced by the artist George P. Hilliard and consists of the sixth and last panel of a 'Panorama of Port Nicholson.' The entire panel is reproduced in the Figure 2.11.

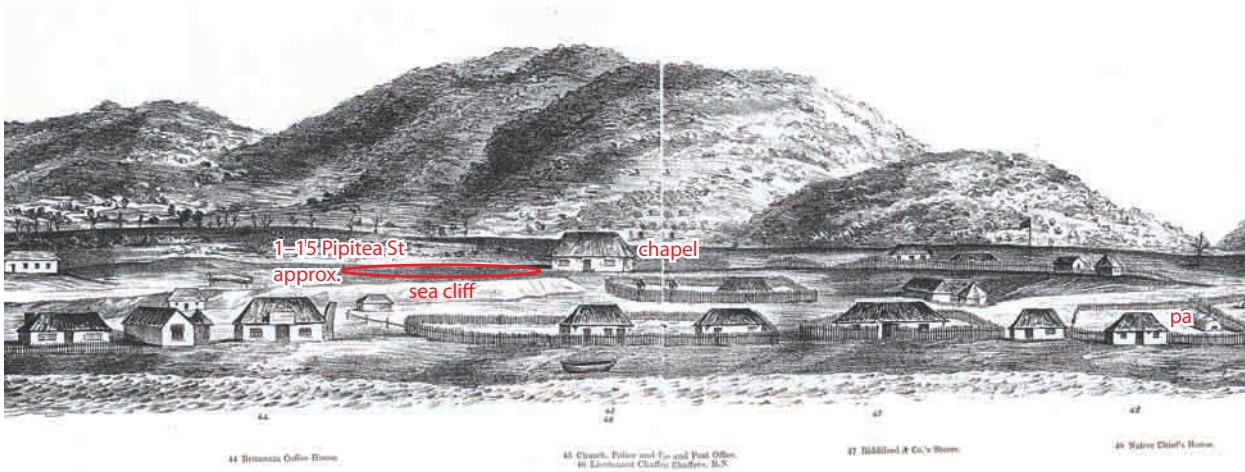
Key landscape markers are identified that help pinpoint the likely location of 1–15 Pipitea St on Hilliard's drawing. These are:

- Pipitea stream, lying to the north of Pipitea St and, as a natural feature, providing a line of demarcation to the north;
- Pipitea pa, depicted by Hilliard as being a concentrated group of buildings located primarily on Town Acre 545;
- the sea cliff, stretching from the corner of Mulgrave St and Thorndon Quay and providing the eastern boundary of 1 and 3 Pipitea St;
- and the chapel built above the beach on the land of Te Rei Pukekura which was located encroaching on Pipitea St and was immediately to the north of 1 Pipitea St (Figure 2.3).

The second panorama of the new township at Port Nicholson dating from 1841 was produced by Luke Nattrass. This drawing was most ambitious in its scope and was made up of more than a dozen panels. To provide a comparable point of refer-

2.11. Annotated drawing of Pipitea pa and Thorndon flat, 1841 (panel VI of 'Panorama of Port Nicholson' 1841 by George P. Hilliard, Alexander Turnbull Library, Ref No. F 49390 1/2).





2.12. Annotated drawing of Pipitea pa and Thorndon flat, 1841 (detail from two parts of a panorama by Luke Natrass of Port Nicholson 1841, Alexander Turnbull Library, Nos. F 76985 1/2 and 76086 1/2).

ence with Hilliard's work, two of Natrass' panels have to be used and cropped to fit on the page. The result is presented in Figure 2.12. The presentation of the same parts of the Natrass panorama as the Hilliard panorama enable the same four landscape features, Pipitea stream, Pipitea pa, the sea cliff and the chapel, to be used to pinpoint the likely location of 1–15 Pipitea St.

1850s

Despite settlement having occurred in Wellington during the 1840s, the parts of Town Acres 542, 543 and 544 which eventually were formed into 1–15 Pipitea Street seem to have remained unoccupied. During the 1850s it appears that the situation as far as occupation was concerned was the same. However, significant changes occurred in relation to land title and tenure matters.

Town Acres 542 and 543

No specific evidence of the leasing of the remaining parcels of Tenth's reserves 542 and 543 has been located. Although a new board of management for the Wellington Tenth's estate had been appointed in 1848, consisting of St Hill, McCleverty and Attorney-General Daniel Wakefield, the overall impression is that the reserves still struggled to attract lessees during the 1850s (Waitangi Tribunal, Wai 145 A29: 286–7). As noted above, Town Acres 542 and 543 may have been an even less than attractive proposition due to the interference of several encroachments during the 1840s.

The possibility of informal occupation, however, remained. There is some further information from 1850 as to the extent of cultivations at the Pipitea settlement. On 1 January 1850 Native Secretary H. Tacy Kemp produced a report on Wellington Maori settlements during which he described Pipitea kainga as “a reserve, with a fair share of plantation ground immediately in the rear of the Pa, which is also a reserve” (*New Zealand Government Gazette* 21 August 1850: 73–4). There were 96 Maori living at the Pipitea settlement at the time. This source indicates that some Thorndon town acres, presumably Tenth's, were still been being used for cultivations in 1850, as they had been in the 1840s. Possibly this included parts of Town Acres 542 and 543.

Town Acre 544

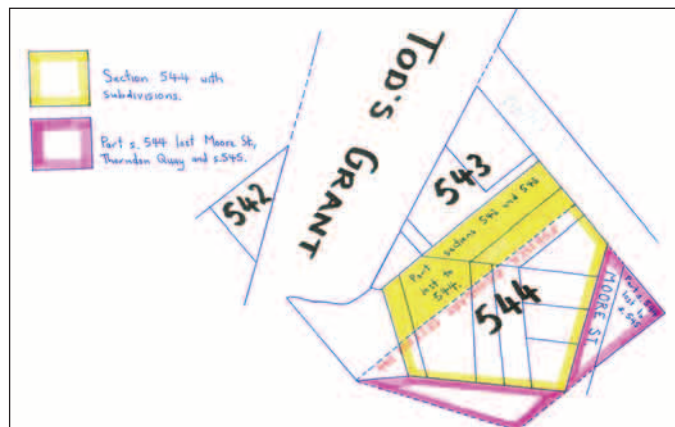
On 4 October 1851 Town Acre 544 was acquired by George Moore from Henry Moreing for £200 (Opus 2006: 10). Soon after, Moore subdivided his interest in Town Acre 544 but not before a reconfiguration of boundaries occurred among the sections in the immediate area. At around the time that Moore acquired Town Acre 544, Pipitea and Hobson Streets were altered and three new streets created, Moore, Moturoa and Davis Streets, resulting in encroachment on a part of Town Acre 544. Furthermore, finalisation of another Old Land Claim in the vicinity, the Heberley grant (Figure 2.7), and alterations to Thorndon Quay also removed further acreage from the original Town Acre 544. In response, however, it appears that Moore was compensated for the various encroachments occurring on his land. He was given some land out of the eastern boundary of Native Reserves 542 and 543 (Wellington Tenths Trust 2006: 9–10). Figure 2.13 shows all of the changes from 1840 that altered the size and boundaries of Town Acres 542, 543 and 544 and shaped the properties into what would later become 1–15 Pipitea St. The following can be noted from the figure:

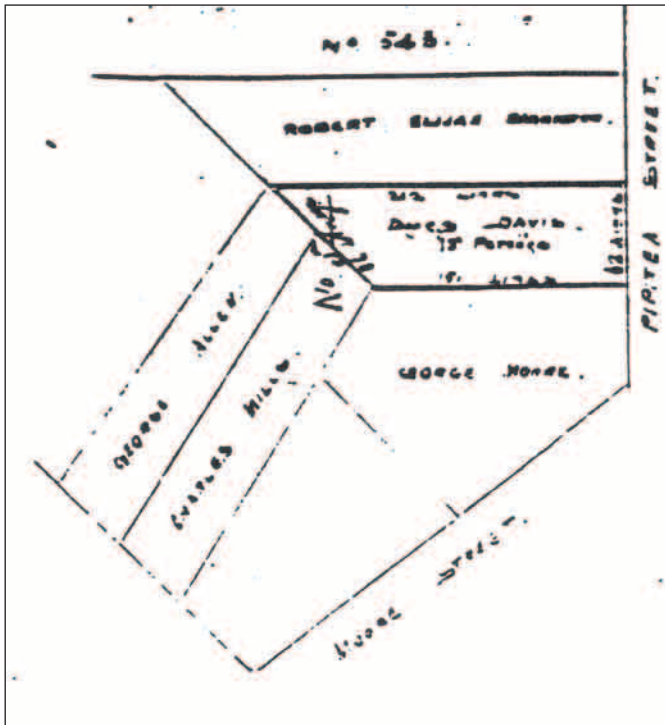
- 1 Pipitea St: originally in Town Acre 544 in 1840 and still in Town Acre 544 in 1852;
- 3 Pipitea St (including right of way to Pipitea St): in 1840 most of the property was in Town Acre 543 with a very small triangular portion on the southern boundary in Town Acre 542. What later became the right-of-way was in Town Acre 544 in 1840. After 1851, all was included in Town Acre 544;
- 5 and 7 Pipitea St: in 1840 both properties were in Town Acre 543 and after 1851 both were in Town Acre 544;
- 9 Pipitea St, in both 1840 and 1851 most of the property was in Town Acre 543 with a small quadrangle on the southern boundary in Town Acre 542;
- 11–15 Pipitea St: in both 1840 and 1851 part of Town Acre 543.

After the land swap, and before the end of 1851, Moore's interests in the reconfigured Town Acre 544 were subdivided and surveyed. As a result, ten new Crown Granted sections were created. The land covered today by 1, 3, 5 and 7 Pipitea St were granted to George Moore, James Davis and Robert Bannister (Wellington Tenths Trust 2006: 26–27). The *Supplement to the New Zealand Government Gazette* (12 May 1852: 8, 10) provides details of the Crown Grants issued to the three men on 1 May 1852:

- George Moore (Report No. 69, Claim No. 290) was entitled to a Crown Grant of part of Town Acre 544, with a frontage of 85 feet to Pipitea and Moore Sts. Moore's grant was situated on the corner of Moore and Pipitea Sts and therefore would have included the current area of 1 Pipitea St and possibly the current accessway to 3 Pipitea St;
- James Davis (Report No. 90, Claim No. 225) was entitled to a Crown Grant of part of Town Acre 544, with a frontage of 41 feet to Pipitea St. Davis' grant was adjacent to Moore's and would therefore probably include the current area of 5 Pipitea St as the front portion and part of the current area of 3 Pipitea St as the property's back portion;
- Robert Elijah Bannister (Report No. 89, Claim No. 288) was entitled to a Crown Grant of part of Town Acre 544, with a frontage of 41 feet to Pipitea St. Bannister's grant comprised the land between Davis' grant and the new eastern boundary of Town Acre 543. It prob-

2.13. Cumulative changes to Town Acres 542, 543 and 544 (detail from Quinn 1995: Appendix A, Map 6, Wai 145 F1).





2.14. The subdivision of Town Acre 544 showing sections on Pipitea St (detail Vol.1 part 2, Deed Index Map A, Land Information New Zealand, Wellington Regional Office).

ably included the current area of 7 Pipitea St as the front portion and part of the current area of 3 Pipitea St as the property's back portion.

Research to date has not located any specific material from the 1850s on the use and occupation of that part of Town Acre 544 that now constitutes 1, 3, 5 and 7 Pipitea St. The sections' owners did not seem to live on their land there.

- George Moore: Electoral rolls compiled from 1853–1858 for the Wellington Provincial Council and published in the Wellington Provincial Gazette indicate that Moore lived on Lambton Quay during the 1850s and held freehold property on Lambton Quay (Wellington Provincial Council electoral rolls, 1853–1858, *Wellington Provincial Gazette*). He appears to have still been living on Lambton Quay in 1866, when a photo was taken of the street including his residence. Biographical information associated with Moore reveals him to be a man of many commercial interests of

which his section in Pipitea Street seems to be only a small part;⁴

- James Davis: little is known of Davis as research conducted to date has not been able to identify any definite information on him;
- Robert Bannister: Like Moore, Bannister's primary landed or residential interests do not seem to focus on Pipitea Street.⁵ The electoral rolls for

⁴ Extensive biographical information exists on George Moore (1805–1877), a prominent Wellington merchant and politician. Moore arrived in Wellington in 1842 and soon established storehouses and became a prominent merchant (*New Zealand Spectator* 13 October 1877: 15a; Heaphy 1842: 71). He also served in the Wellington Militia during 1845–1846 as a commissioned officer (ensign) (*New Zealand Spectator* 16 September 1846: 2; Ward 1929: 429–430). From 1 July 1853 he traded as a merchant under his own name, having previously conducted business under the name Johnson & Moore (*New Zealand Spectator* 6 July 1853: 2). Moore's occupation is listed as a merchant in the Wellington Provincial Council electoral rolls 1853–1858 (*Wellington Provincial Gazette*). He held various political posts in Wellington. He stood for the Borough Council in October 1842 but was not elected. He was nominated to the Legislative Council of New Munster in 1848 and was a Member until the formal dissolution of the Council in 1853 (Beaglehole 1990: 178, 183). He was then elected to the Wellington Provincial Council in August 1853 for the City of Wellington electorate (*New Zealand Spectator* 10 August 1853: 2). He served until July 1854, when he resigned from the Council having recently won a tender to provide supplies to the Public Service (*New Zealand Spectator*, 5 July 1854: 3). Moore was also a Wairarapa runholder with his brother John Moore. A 'Schedule of Runs' awarded by the Commissioner of Crown Lands, F.D. Bell, dated 15 July 1855, records his run as containing an estimated 18,000 acres extending inland from the coast between the Patanui and Kaiwata Rivers (Moore had purchased 640 acres within the boundaries of the run) (*New Zealand Spectator* 1 August 1855: 415). In 1859 Moore, introducing himself as a 'Merchant of Wellington', wrote to the Governor of New Zealand on behalf of himself and his brother as 'Sheep and Cattle Farmers of Waikaraka' in the 'Warehama District on the East Coast.' Moore explained they had continued to occupy the run since being issued a depasturing licence in 1856. They had spent 'several thousand pounds' on stock, buildings and fences for the property since that time (George Moore to Thomas Gore Brown, 20 May 1859: MS-Papers-0032-0456). Another political post came in 1863, when he was elected to the Town Board and appointed a Commissioner for the Lambton Ward (Ward 1929: 177).

⁵ Biographical information also exists for Robert Elijah Bannister. Born on 29 August 1829, he arrived at Wellington on board the *Bolton* on 21 April 1840 with his father William Bannister, his

1853–1858 indicate that Bannister held freehold property on Pipitea St and Taranaki St as his qualification to be on the roll during this period. His place of abode during this period is given as Lambton Quay (Wellington Provincial Council electoral rolls 1853–1858; *Wellington Provincial Gazette*).

1860s and 1870s

Specific details of occupation for 1–15 Pipitea St are potentially difficult to work out during the two decades of 1860s and 1870s due to the lack of specific confirming sources and the presence of the Bishop of Wellington Charles John Abraham and John Elisha Smith as lessees of the Native Reserve (pt Town Acres 543 and 542) as well as being owners of parts of Town Acre 544. There appears enough contextual evidence, however, to gain some idea of how the various pieces of land were being used.

The leasing of parts Town Acres 542 and 543

The remaining parts of Town Acres 542 and 543 were parts of the Wellington Maori Tenth estate, although no evidence has been located of leasing prior to 1860.

The first recorded lease of the remaining parts of Town Acres 542 and 543 Tenth reserve was to John Elisha Smith.⁶ This involved the back portion of the 542/543 sections, the area currently designated as 9 Pipitea St. When Smith applied for the lease in November 1864 he noted his intention to fence the section and convert it into a “garden or shrubbery” (Smith to Swainson, Archives New Zealand, Wellington). The lease was for fourteen years commencing on 31 March 1865. The lease also secured Smith a right of way to Pipitea St. The right of way had a twelve foot frontage on Pipitea St. The terms were £2 per year for the first seven years and £3 per year for the second seven-year period. Smith’s lease was due to expire on 31 December 1878. At this time, however, the Commissioner of Native Reserves, Charles Heaphy, accepted Smith’s offer of £6 per year for 21 years for a renewed lease of the section (Evidence of Neville Gilmore, cited in Wellington Tenth Trust 2006: 12).

Also in 1865 the Rev. Charles John Abraham, Anglican Bishop of Wellington, leased the front part of the remainder of Town Acre 543 that now comprises 11, 13 and 15 Pipitea St. The lease commenced on 26 May 1865 for fourteen years at £12 per annum (Evidence of Neville Gilmore, cited in Wellington Tenth Trust 2006: 12). The portion occupied by the Bishop’s lease has been identified as being 23 perches in size. At some time before 1875 the Bishop transferred his lease to Henry Sewell (Wellington Tenth Trust 2006: 12; Appendix 1, Map 13).⁷ In 1875 Sewell

mother and two brothers. The family settled on the Porirua Road (Carman 1956: 64). Bannister entered the Customs Department in 1848 and held his position until 1859 (*New Zealand Times* 16 June 1882: 4d). His occupation is listed as a clerk in the Wellington Provincial Council electoral rolls for the years 1853–1858 (*Wellington Provincial Gazette*). In 1856 his position was first clerk and warehouse keeper at the Customs House on the corner of Farish and Old Customhouse Sts (Ward 1929: 223).

⁶ John Elisha Smith was the Registrar of Deeds for the Wellington District. He had been born in Clifton, Bristol, in Somerset, England, in 1826. He arrived in New Zealand in 1842 allegedly having travelled with the Rev. Bishop George Augustus Selwyn. He qualified as a solicitor and he was married in 1858 in Wellington to Lilia McHardy. In the latter part of the nineteenth century Smith served as a church warden at Old Saint Paul’s Cathedral Church in Mulgrave Street. He died on 5 June 1900 and was interred in Bolton St Cemetery (Wellington Tenth Trust 2006: 10–11).

⁷ Henry Sewell was 45 when he came to New Zealand in 1853 for the Canterbury Association to spend about 17½ years in total over three periods in the colony; 1853–56, 1859–66 and 1870–76. He became, briefly, New Zealand’s first Colonial Premier in 1856. He was born on 7 September 1807 in Newport, Isle of Wight, England the son of Thomas Sewell, a solicitor and his wife Jane Edwards. He was upper middle class, educated at Hyde Abbey School, Winchester and served articles to become

applied to obtain a new lease of the section despite there being three and a half years left to run. A new lease was approved and the rental fixed at £18 per annum. Sewell meanwhile transferred the lease to James Holt. As a result, on 1 July 1875 a lease for 21 years was issued to Holt at £18 per year. Later that year the lease was transferred from Holt to William Freeman and in April 1879 Freeman transferred his interest to Henry Barber (Evidence of Neville Gilmore, cited in Wellington Tenth Trust 2006: 12-13).

There are several pieces of evidence which reveal that the two rented portions of Town Acres 543 and 542 remained bare land through to 1880 and beyond. By the end of the 1870s, within the context of lease renewals, it was noted that while the front section was leased by the Bishop of Wellington, “it appears to have been used as a paddock for horses” (28 May 1879, Heaphy memo, AAMK 869 W3074/171c 6/47/1402 Maori Reserved Land, Archives New Zealand, Wellington). From 1865 to 1878 the rental for the front section was £12. When the lease was renewed, the rental was £18 which was more commensurate with bare land than a dwelling. Furthermore, there were no discussions of improvements (Wellington Tenth Trust 2006: 12). Similarly, the low rentals paid for Smith’s back portion and no mention of improvements in any leasing documentation suggest the land remained bare and was used as a garden as Smith had noted.

The land transfer of parts Town Acre 544

Although there is some evidence available from the 1860s of the ownership and use of that part of Town Acre 544 which later comprised 1–7 Pipitea Street, it comes from rating books that need to be interpreted within the context of other, more definite title material. Such material is provided from 1871, when the land that now comprises 1, 3, 5 and 7 Pipitea St was brought under the land transfer system.

On 20 May 1871 Land Transfer Act notices for these properties were published in the *New Zealand Gazette*:

- on 20 June 1871 title was issued to Charles John Abraham for 1, 5 and 7 Pipitea St (Wellington Tenth Trust 2006: 27). The frontage for 1 Pipitea St was 43 feet on Pipitea St and 43 feet on Moore St. The frontage for 5 and 7 Pipitea St was 69 feet on Pipitea St. Abraham had returned to England by 1871. Subsequently, he sold his property to James Holt on 9 February 1875, who within months onsold the properties to Salvatore Cemino on 9 April 1875 (Wellington Tenth Trust 2006: 27);⁸
- on 20 June 1871 title was issued to John Elisha Smith for 3 Pipitea St (Wellington Tenth Trust 2006: 27). It had a frontage of 13 feet on Pipitea St. Therefore, Abraham’s properties were divided by the driveway for 3 Pipitea St (*New Zealand Gazette* 20 May 1871: 224–225). Smith remained in ownership and occupation until his death in 1900.

a solicitor and join his family Law Firm around 1826. He married Lucinda Marianne Nedham on 15 May 1834 and they had six children. He died on 14 May 1879 at Cambridge and is buried at Waresley, Huntingdonshire (McIntyre, cited in Wellington Tenth Trust 2006: 12).

⁸ Salvatore Cemino was born in Italy although it seems likely that his mother was English. He came to Wellington in 1840 and married Rebecca Wright in 1841. He operated in Wellington as a boatman and later became the owner of several different small coastal trading vessels. Still later he was involved in farming on Kapiti Island. His first wife died in 1861. His second wife also pre-deceased him. When Cemino died in 1899 he was aged 90 (Kelly 2001: 46–47, cited in Opus 2006: 20–21).

legal description	owner	occupier	description	land value	building value
–	Hospital Land	unoccupied	–	–	–
–	Lord Bishop	Rev J. Thatcher	house	£200	£300
–	J.E. Smith	J.E. Smith	house	£150	£300
544	Lord Bishop	unoccupied	–	£75	–

Table 2.3. Rating book data from 1863 and 1864.

The use of rating book data

Rating book evidence for Wellington township is available from 1863. This information provides specific information about the occupation of the sections, but there are a number of issues that need to be sorted through.

For the first year of 1863 and the following year of 1864, four entries are recorded under Pipitea St, running south from Mulgrave Street to Moore Street (Table 2.3).

Taking into account the leasing information from 1865 for part Town Acres 543 and 542, and the 1871 title information for Part Town Acre 544, the above information can be interpreted as follows:

- the hospital land could represent the unleased part Town Acres 543 and 542; while it could also represent the land in Tod's grant, the various ways this land is entered in the rating book over successive years makes this unlikely;
- the first entry for the Lord Bishop and the entry for J.E. Smith probably do not reflect an earlier occupation of the lease of Town Acres 543 and 542 as both entries specifically record the presence of a house, and Town Acres 543 and 542 were leased as land only throughout the 1860s and 1870s;
- therefore, the first entry for the Lord Bishop and the entry for J.E. Smith are likely to be located on Part Town Acre 544 which is where these men were recorded as owning land in 1871. Judging by the 'running south' record for the sections, the rating book evidence therefore shows that a house belonging to the Bishop was located on the Part Town Acre 544 that probably today is 5 and 7 Pipitea St. Smith also had a house on Part Town Acre 544 which probably is in the same area as 3 Pipitea St;
- the fourth entry, which specifically records a property on Town Acre 544, is for a smaller piece of land judging by the comparative land values of the other sections. It is, therefore, probably for the piece of land covered by 1 Pipitea St. The separate entry for this property suggests that the right of way which Smith had between 1 and 5 Pipitea St. was already in place and resulted in two entries for the Bishop.

The rating book entry for 1865 essentially records the same four properties in the same way. Additional information is given for the hospital land with the legal description specifically being recorded as 543, confirming it is probably the unleased land of part Town Acres 543 and 542. The other additional information is that the occupant of the Bishop's house is no longer Rev. Thatcher, but the Bishop himself.

Oddly, in 1866, the only entry recorded is of the unoccupied 'Hospital Land.' In 1867, there is no clearly identifiable entry along Pipitea St that reflects the former or later information recorded about the land that now features as 1–15 Pipitea St. Information from 1868 and 1869 is shown in Table 2.4.

The rating books seem to be recording the continuing occupation of what is now 5 and 7 Pipitea St although the occupant of the house is a man named Stowe.

legal description	owner	occupier	description	land value	building value
543	Hospital Land	Bishop of Wellington	Paddock	£150	–
–	Bishop Abraham	Stowe	House	£200	£300
–	J.E. Smith	J.E. Smith	House	£150	£300

Table 2.4. Rating book data for 1868 and 1869.

They also seem to record the continuing presence of Smith in his house on what is now 3 Pipitea St. The Bishop's leasing of the section of land on part Town Acres 543 and 542 that occurred from 1865 seems to be recorded. Interestingly, the section is still named as 'Hospital Land' and additionally it is noted to be a paddock, possibly used for hospital purposes. Smith's lease of the back portion of part Town Acres 543 and 542 does not appear as his valuation details remain unchanged. Also the Bishop's previously recorded unoccupied section which has been identified here as 1 Pipitea St also is not separately recorded.

From 1870 to 1876, only the Bishop's house and Smith's house are recorded as distinct properties in the rating books. In both cases, however, they are recorded as being on Town Acre 543. This may reflect the combination of the Bishop's leasehold and freehold interests along Pipitea St and Smith's leasehold and freehold interests of the back portion of part Town acres 542, 543 and 544. While Smith remains the owner/occupier, there are changes recorded for the Bishop's property (Table 2.5).

The combination of recording Sewell (who only ever acquired an interest in the lease of part Town Acres 543 and 542) and Cemino (who acquired the freehold of the Bishop's property in Part Town Acre 544) indicates that previous entries had referred to both the leasehold and freehold lands held by the Bishop.

From 1877 to 1880 the rating books record William Freeman as occupier of land only (i.e., the Pipitea St frontage of part Town Acres 543 and 542), Salvatore Cemino as occupier of a house on Pipitea St (i.e., the Pipitea St frontage of part Town Acre 544) and John Smith as occupier of a house (i.e., the back portion of Pipitea St frontage of part Town acres 542, 543 and 544)

Pictorial evidence

A search for photographic evidence from the 1860s and 1870s has not produced good results. Just as the drawings and paintings of the 1840s tended to consider

	Owner	Occupier
1870/1	Bishop	Stowe
1871/2	Bishop	Sewell
1872/3	Bishop	Sewell
1873/4	Sewell	Sewell
1874/5	Sewell/Cemino	Sewell/Cemino
1875/6	Sewell	Cemino
1876/7	Cemino	Cemino

Table 2.5. Changing ownership and occupation of 1, 5 and 7 Pipitea St, 1870–77

the new township from the eastern and southern hills, during the 1860s and 1870s photographs tended to be taken of the whole Thorndon Flat from Tinakori Hill. With Pipitea Street being the most easterly area away from the hill, the photographs tend not to capture enough detail on which to base analysis of the way in which the land of 1–15 Pipitea St is being used.

As a result, only one comparatively clear photograph has been located, dating from the late 1860s, and this is reproduced in Figure 2.15. On the right, St. Paul's Church and the Diocesan Offices provide a landmark position. Both buildings, which are located next to each other on Town Acres 542 and 541, have a frontage on Mulgrave St. To the left of the photo the Wellington Hospital can be seen behind trees. This is the same hospital as depicted in the photograph in Figure 2.8, and its location is the same as shown on the plan depicted in Figure 2.9. This means that the space between St. Paul's Church and the Wellington Hospital, if occupied by buildings, could be depicting any of the structures located on 1–15 Pipitea St. Within the space between St. Paul's Church and the Wellington Hospital there is at least one, if not more, buildings. Are these the house of Bishop Abraham (located on 5–7 Pipitea St) or John Smith (located on the back section at 3 Pipitea St.)? There are several reasons for thinking that this is not the case:

- the gable facing the camera has a distinct edging around the top of the visible window (visible in the original but not in this reproduction) which is reminiscent of the edgings seen on the Hospital windows as depicted in Figure 2.8;
- the angle of the camera would mean that the area in question is more likely to be showing 9–15 Pipitea St which throughout the 1860s and 1870s remained bare land (see Figure 2.17, dating to ca. 1885 when houses are on 9–15 Pipitea St to confirm this impression);
- although a close examination of the house with a gable facing the camera could suggest it is a small stand alone building and that the roofline behind it may be another building, the proximity of the structures make it unlikely as being on the other side of a wide Pipitea St road.



2.15. Thorndon Flat with Pipitea St (centre left) ca. 1867–69 (Alexander Turnbull Library Photographs, Harding Denton Collection, Ref No. 10,900 1/2).

1880s and 1890s

For the remaining two decades of the 19th century there were effectively three groups of properties located on 1–15 Pipitea St:

- part Town Acre 543 (11–15 Pipitea St) held as Leasehold;
- part Town Acre 544 (1, 5 and 7 Pipitea St) fronting on Pipitea St and held as Freehold;
- part Town Acres 542, 543 and 544 (3 and 9 Pipitea St) held as Freehold and Leasehold respectively.

Analysis of tenure and occupation will reflect these three groupings.

Part Town Acre 543 (11–15 Pipitea St.)

Henry Barber obtained the main lease of the front part of native reserve Town Acre 543 from William Freeman in April 1879. In 1881 he built the houses that were present on 11, 13, and 15 Pipitea St until just prior to the archaeological excavation (Wellington Tenth Trust 2006: 13). A deed of consignment occurred on 12 October 1885 between Henry Barber and his wife, Philippa Jane Barber (Waitangi Tribunal Wai 145 A12 1991, cited in Wellington Tenth Trust 2006: 13).⁹

In 1895 the Native Reserves Act extended the perpetual renewal leasing provisions of the 1892 West Coast Settlements Reserves Act to the Wellington Tenth. Philippa Jane Barber's attempts to lease part of Town Acre 543 took place in the context of this legislation. In 1896 the Public Trustee offered Barber a renewed lease before her old lease expired on 31 July 1896. Barber was offered a new 21 year renewable lease at £85 per annum, equivalent to 5 percent of the capital value. Barber declined the offer, viewing the rise in rent from £18 to £85 as excessive (this was despite her renting out each house for £60 per year, leaving a profit of £95 even after the rise in rent). The properties were offered on public tender as three separate lots. The leases were won by Charles John Johnston, who tendered £30 a year for each property (Wellington Tenth Trust 2006: 17, 19, 20). The leases were still held by Johnston in 1900.

At this time, the tenants all changed to weekly tenancies (£5 per week or £260 per year). The names and occupations of the tenants during the 1890s are recorded by *Stones* street directories:

- George William Pauling lived at 11 Pipitea St from 1891 to 1899 (*Wises Directory*, 1885–86; 1887–88; 1890–91; *Stones Directory of Wellington, Hawke's Bay and Taranaki*, 1891–92; 1896; 1899, cited in Opus 2006: 26);
- Charles Naverne, a teacher of French, also lived at 11 Pipitea St in 1896. In 1900 and 1901 Mrs. Maria Pauling and Mrs. E. Sait were living in the house (*Stones Directory of Wellington, Hawke's Bay and Taranaki*, 1896; 1899; 1900; 1901, cited in Opus 2006: 26);
- in 1891 Captain Spencer M. Medley of the Royal Navy was living at 13 Pipitea St with his wife Mary, and probably also their daughter Adela. Selwyn Medley also lived in the house at this time. Captain Medley died in 1893 while Mary Medley continued to live there until at least 1905 (*Stones Directory of Wellington*,

⁹ Henry Barber was born 3 January 1838 and, along with brother James, had a substantial butchering business in Wellington with butcher shops on Molesworth, Cuba, Willis and Tory Streets and land at the Hutt, in Featherston and leased land in Petone and Johnsonville. In the 1880s they had freehold property worth £10,000 and the export label 'Barber's Brand' was to be found in London. Henry and James were the sons of a butcher in High Holborn, London. They leased land at Ngauranga from Tare Waitara for the slaughterhouse and freezing works. When the Wellington Meat Preserving and Refrigerating Company was formed in 1883 out of Barbers Company and Woods, Crosbie and Company, Henry Barber was its first Managing Director (Bremner 1981: 3,9; Memorial Index database, Karori and Bolton Street Cemeteries, National Library of New Zealand; both cited in Wellington Tenth Trust 2006: 13).

Hawke's Bay and Taranaki, 1891–92; 1896; 1899; 1900; 1901; 1903; 1905, cited in Opus 2006: 27).

- the occupants of 15 Pipitea St were William McLeod (labourer) in 1891–92; and James Gibb (timber yardsman) and Neil Galbraith (clerk) in 1895–96. Galbraith remained at 15 until 1905, residing there in 1900 with Thomas Layton Smith, a painter with Pithcaithy Wallace & Co (*Stones Directory of Wellington, Hawke's Bay and Taranaki*, 1891–92; 1895–96; 1900; 1905, cited in Opus 2006: 28).

At the time of the changeover from Philippa Barber to Charles Johnson a valuation was completed of the three houses built in 1881. This valuation, dated 18 May 1896, describes the houses, room dimensions and the origins of materials used in the houses:

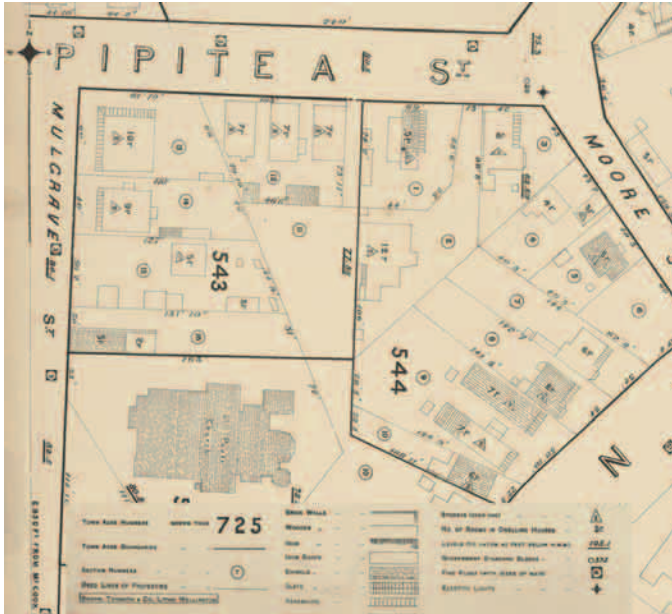
Containing 8 rooms each, viz parlour 12 x 14, dining room 11 x 14 kitchen, scullery and servant's room on the ground floor and 4 bedrooms and bath room up stairs. The buildings are framed of timber the fronts rusticated, the remainder of the outside walls are weatherboarded except the side wall of one building which is covered with iron. The roofs are iron, the chimneys are brick, 4 fireplaces in each house and copper set in brick in the wash house. The roofs are leaking in several places and the ceilings have got stained in consequence otherwise the houses are in very fair repair. I understand these houses have been up about 21 years and were principally constructed of materials from the old Wellington Hospital however they are in very fair condition so far as it is possible to ascertain and with proper attention to the roofs and a coat of paint occasionally they are good for another 21 years (AAMK 869, Archives New Zealand, Wellington).

Part Town Acre 544 (1, 5 and 7 Pipitea St)

During the 1880s Salvatore Cemino continued to be the owner/occupier listed on that part of Town Acre 544 that now includes 1, 5 and 7 Pipitea St. In street directories and rating books to 1882, Cemino's occupation is recorded as a single dwelling. After this date and for the rest of the decade, Cemino is recorded on Town Acre 544 with two rating entries and a dwelling on each (Wellington City Council rate books, Thorndon Ward, 1884–1888, Wellington City Council Archives).

The second house is likely to have been built on 1 Pipitea St. In 1891 Cemino transferred the ownership of 1 Pipitea St to his daughter Catherine (Cancelled CT Vol.1/8, LINZ, Wellington Regional Office, cited Wellington Tenths Trust 2006: 27–28). The property was still held by Catherine Cemino at 1900. A house was still located on 1 Pipitea St at this time.

In 1891 Salvatore Cemino also transferred the ownership of 5–7 Pipitea St to his other daughter Brunetta Lucia Cemino (who married Wellington solicitor Edward Percy Bunny) (Cancelled CT 1/8, LINZ, Wellington Regional Office, cited in Wellington Tenths Trust 2006: 27–28). As noted previously, a house had been located on what is now 7 Pipitea Street. Evidence records this building as a two-story five-room house with a shingle roof and a verandah facing east (Thomas Ward survey maps 1891 and 1901). This house has not survived. Instead, on 9 September 1893, 5 and 7 Pipitea Street were acquired by James Ames (CT 61/91, cited in Opus 2006: 21) who was issued a building permit for a residence on 9 November 1896. Ames constructed the house that still remained on 5 Pipitea St until just prior to the archaeological investigations (Building permit/Consent plans, 1918, 5 Pipitea



2.16. Plans of houses located on 1–15 Pipitea St in 1892 (detail of Ward Plan, Wellington City Archives).

St, dwelling, 19 November 1896, Wellington City Council Archives, Opus 2006: 21).¹⁰

Parts Town Acres 542, 543 and 544 (3 and 9 Pipitea St)

In the meantime, John Smith's freehold occupation of Part Town Acre 544 with one dwelling located on it continued during the 1880s and 1890s through to 1900, the year of his death.

Also during this time Smith maintained occupation under lease of the back part of Town Acres 542 and 543, i.e., 9 Pipitea St. During the 1890s Smith's lease came up for renewal. A new term of 21 years commenced on 1 January 1897. At the time of the renewal a valuation of the land recorded nil improvements. It has been noted that Smith's house on 3 Pipitea St was located right up against the boundary of 9 Pipitea St and it has reasonably been surmised that

Smith used the leased land at 9 as a garden allotment (Wellington Tenths Trust 2006: 21; Opus 2006: 23; Ward map 1891).

Pictorial Evidence

The Ward map of 1891 shows the housing situation on 1–15 Pipitea St (Figure 2.16). Depicted on the plan, from right to left, is: Cemino's house on 1 Pipitea St; Smith's back section house at 3 Pipitea St, Ames' house on 5 Pipitea St (after the house at 7 has been removed) and the three house on 11–15 Pipitea St. The situation was unchanged on the 1901 Ward map.

The search for photographic evidence for the 1880s and 1890s has again been comparatively fruitless. As with the 1860s and 1870s, the tendency to photograph all Thorndon Flat from western vantage points such as Tinakori Hill has not produced photographs with enough detail to support close scrutiny. Added to this is the fact that the Hospital, which was pulled down in the late 1870s, was replaced by the multi-storied Wellington Girl's College from the mid 1880s, which had the effect of obscuring 1–7 Pipitea St at the eastern end even more than the Hospital did formerly. To add a further difficulty, the increase of houses in the streets between Pipitea and Tinakori Hill makes it difficult to view the street during the 1890s.

Due to these combined difficulties, only one photograph from around 1885 has been found to be useful. Depicted in Figure 2.17 is a detail of a much larger picture so the clarity is not good. Nevertheless, in the centre of the photograph, the three

2.17. Detail from a photograph of Thorndon flat ca. 1885 showing houses on 11–15 Pipitea St. (centre) (Alexander Turnbull Library Photographs, William Williams photographer, Ref No. G 25530 1/1).



Officer for Wellington. He had been born in Sydney his parents. He was educated in private schools in gold fields and in farming in Wellington and Otago. on its formation as assistant clerk and rate collector. provisions of the Rating Act 1867 and remained in the *media of New Zealand* 1897: Vol. 1, 283, cited in Opus

very similar houses built on 11–15 Pipitea St can be seen clearly due to the demolition of the Hospital with the Girl's College construction not yet finished. Behind the three houses is the hint of another building that could well be Smith's house on 3 Pipitea St but there is no clear detail. To the left of the three houses is another two-storied house set a little back from the street which could well be the house on 7 Pipitea Street that had stood there since the 1860s. However, a fairly mature tree obscures a good look at the house.



2.18. Detail from a photograph of Moturoa St. showing houses on eastern end of Pipitea St ca. 1890s (Alexander Turnbull Library Photographs, Ref No. 52923 1/2).

There is one other photograph that held some potential to show all the houses of Pipitea St which are the subject of this report, but it is somewhat marred by its poor quality. The photograph depicted in Figure 2.18 is a detail of a larger photograph of Moturoa Street which shows on the right the newly built College at some time during the 1890s. In the background, somewhat overexposed, are the Pipitea St houses.

A fairly good view is given on the far left of a house which it is believed to be 1 Pipitea St. Considering the right of way and possibility that the Ames homes built after 1896 was not yet completed, the house shown next to 1 Pipitea St is probably the back section 3 Pipitea St house of John E. Smith. However, the quality of photograph does not reveal many details. To the right at least two of the houses situated on 11–15 Pipitea St can be seen. However, the third house or the one located on 7 Pipitea Street are obscured by trees.

The 20th century

The house at 1 Pipitea St stood until the 1970s when it was demolished and the sea cliff cut away to make space for an electrical substation on the flat below.

The houses at 5, 11, 13 and 15 Pipitea St stood until just before the commencement of the archaeological investigation. They are described in Chapter 4 and changes to them are detailed.

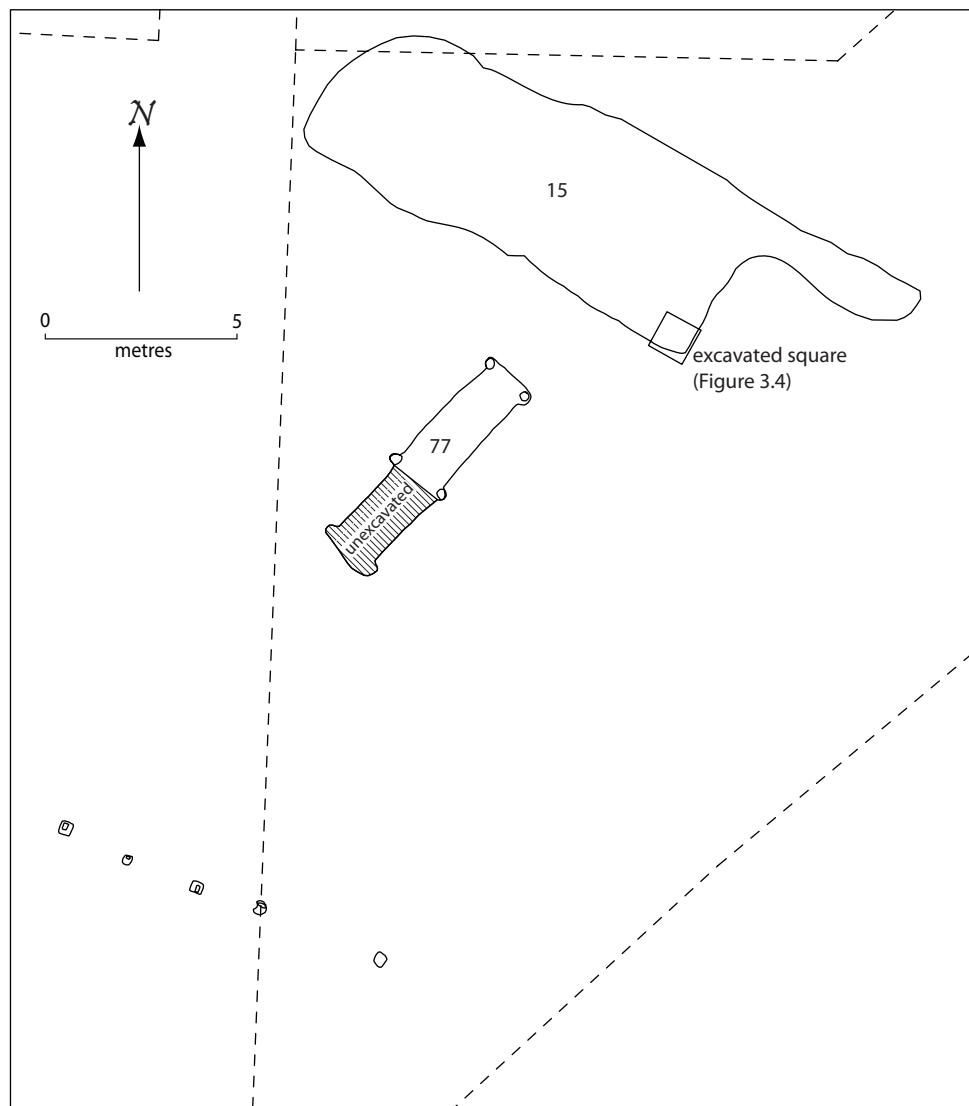
John Elisha Smith's house at 3 Pipitea St stood until the late 1960s as the Reardon Guest House. City Engineer's file notes (Wellington City Archives 00009:332:9/309) record repeated requests to bring the boarding house up to standard, and by August 1965 the note reads "Premises Vacant." The note for 1 July 1969 is even shorter: "Demolished."

9 Pipitea St remained bare land until 1936 when a house was built for James and Kenneth Ames. This house also stood until just prior to the archaeological investigations. It is not clear when Smith's lease on the property ended but the archaeology (Chapter 5) makes clear that he utilised the section in conjunction with the backyard of his house at 3 Pipitea St. In 1918 the Property Inspector described the area as "a mess at present with this land, in the centre of several backyards at the rear of Mulgrave and Pipitea Streets ... and is serving on backyards for five neighbours" (cited in Wellington Tenth Trust 2006: 23). This situation would have remained much the same until the house was built.

3 EARLY HISTORIC PERIOD MAORI OCCUPATION

MATTHEW CAMPBELL, MARK HORROCKS¹ AND ANDREW HOFFMANN

A partial fenceline of five posts was revealed at the level of the pre-Smith house structure at the rear of 3 Pipitea Street (Area 3 Rear Phase 1, see Chapter 5), running at right angles to the sea cliff (Figure 3.1). All European structures on the properties, with the exception of the retaining wall behind 3 Pipitea St, were aligned on Pipitea Street rather than the sea cliff. Two other features were aligned on the sea cliff, both largely in 3 Pipitea Street. Both these features were cut by the postholes of the Phase 1 house (Chapter 5). One was Feature 15, a soil measuring 11.5 x 4.5 m, aligned north west–south east and, where it was excavated, up to 220 mm deep into the clay subsoil (Figures 3.2 and 3.3). It was a well dug topsoil incorporating gravels



3.1. Probable historic period Maori features.

¹ Microfossil Research Ltd



that seemed to be imported, that is they were not the angular chunky gravel that underlay the clay layer. A 1 x 1 m sample square was excavated (Figure 3.4), which showed that the feature was shallow and its sides sloped gently down to its base. Soil samples were taken from across the feature for microfossil analysis. Samples were also taken for particle size analysis to determine the nature of the added gravels within the feature and, for comparison, the natural matrix adjacent to it.

3.2. Top-down composite photo of Feature 15, a large well-dug soil beneath the house foundations of No. 3 Pipitea Street.

A pit (Feature 77) measuring 6500 x 1400 mm and 700 mm deep was located 2.6 m to the south west and aligned at right angles to the Feature 15 soil. The northern 3800 mm of the pit was excavated (Figure 3.5). The fill of the pit was a chunky mottled yellow brown soil that became increasingly dark towards the base (Figure 3.6). A soil sample was taken from the base for microfossil analysis. This pit had heavy round postholes rebated into the walls. They were generally 280



3.3. Close-up of the edge of Feature 15 showing how the gravel fill was more concentrated around the edge. South east corner, facing north, scale 0.5 m.

3.4. A 1 x 1 m square excavated from the south east corner of the garden spoil showing the incompletely mixed gravels. Facing north east, scale 1 m.



3.5. Feature 77 from the southern end. The wooden post and brick foundations of the No. 3 house can be seen in the foreground cut into the unexcavated portion of the pit. Facing north east, scale 1 m.



mm in diameter, situated at each corner and halfway along each side. The fill at the base of each had been rammed leaving a raised collar around the top of each posthole (Figure 3.7).

Microfossil analysis

Four soil samples from Feature 15 and one from the base of Feature 77 were analysed for plant microfossils to provide a record of past vegetation and environments and to look for evidence of cultigens. Analysis was carried out by Mark Horrocks of Microfossil Research Ltd.

Pollen

Pollen analysis includes pollen grains of seed plants and spores of ferns. It provides insight into past vegetation and environments and in New Zealand allows the differentiation of sediments deposited in pre-settlement, Polynesian and European times (Hayward et al. 2004; Matthews et al. 2005). Pollen may also provide direct evidence of Polynesian introduced plants, namely bottle gourd (*Lagenaria siceraria*) and paper mulberry (*Broussonetia papyrifera*) and European introduced crops such as maize (*Zea mays*) (Horrocks 2004; Horrocks et al. 2008).

Samples were prepared for pollen analysis by the standard acetylation method, with the

hydrofluoric acid step replaced by density separation using sodium polytungstate (Moore et al. 1991; Lentfer and Boyd 2000). At least 100 pollen grains and spores were counted for each sample and slides were scanned for types not found during the count. Fragments of microscopic charcoal are extracted along with pollen during preparation, providing evidence of fires.

Phytoliths

Phytoliths are particles of silica formed in inflorescences, stems, leaves and roots of many higher plants (Piperno 2006). Phytolith analysis compliments pollen analysis, especially regarding grasses (Poaceae). Grass phytoliths are much easier to differentiate below the family level than grass pollen. Also, silica is often better preserved than pollen. Phytoliths (like pollen) may provide direct evidence of bottle gourd and paper mulberry (Horrocks 2004). Other types of microscopic biogenic silica, notably diatoms and sponge spicules, are extracted along with phytoliths during preparation. Diatoms are unicellular algae found in aquatic and sub-aquatic environments and have cell walls composed of silica. Sponges, exclusively aquatic, are multi-cellular animals with an internal skeleton often



3.6. Feature 77, facing south west and showing the fill profile. Scales 1m and 0.5 m.



3.7. The large, round postholes in the northern end of Feature 77 showing the raised collars of rammed earth around their bases. Facing north east, scale 0.5 m.

composed of siliceous spicules. Diatoms and sponges are found in both marine and freshwater environments.

Samples were prepared for phytolith analysis by density separation with sodium polytungstate (Horrocks 2005). At least 100 phytoliths were counted for each sample and slides were scanned for types not found during the count. Sponge spicules were not included in the count. They are still however expressed as a percentage of the base count therefore the total of the values of samples in the phytolith diagram may exceed 100%. Phytoliths categorised as “degraded” in the phytolith diagram were too corroded to assign to any other type.

Starch and other residues

This analysis includes starch grains and other plant material such as raphides (needle-like calcium oxalate crystals) (Torrence and Barton 2006). Starch is the main substance of food storage for plants and is mostly found in high concentrations of microscopic grains in underground stems (e.g., tubers, corms), and roots and seeds. Starch grains are normally colourless. The position of the hilum (developmental origin of the grain) can be seen under cross-polarised light; grains characteristically show birefringence with dark lines intersecting at this point (‘Maltese cross’). Well-preserved starch grains generally will have retained their optical properties, however the Maltese cross progressively disappears as grains degrade and lose their structure. Raphides are found in bundles in specialised cells in both the aerial and subterranean parts of many plant species. Starch analysis may provide direct evidence of Polynesian introduced starch crops, namely kumara (*Ipomoea batatas*), taro (*Colocasia esculenta*) and yams (*Dioscorea*), and European introduced crops such as potato (*Solanum tuberosum*) (Horrocks et al. 2007, 2008).

Starch and other residues were prepared for analysis by density separation with sodium polytungstate (Horrocks 2005). Slides were scanned for starch and other significant material, and presence/absence noted.

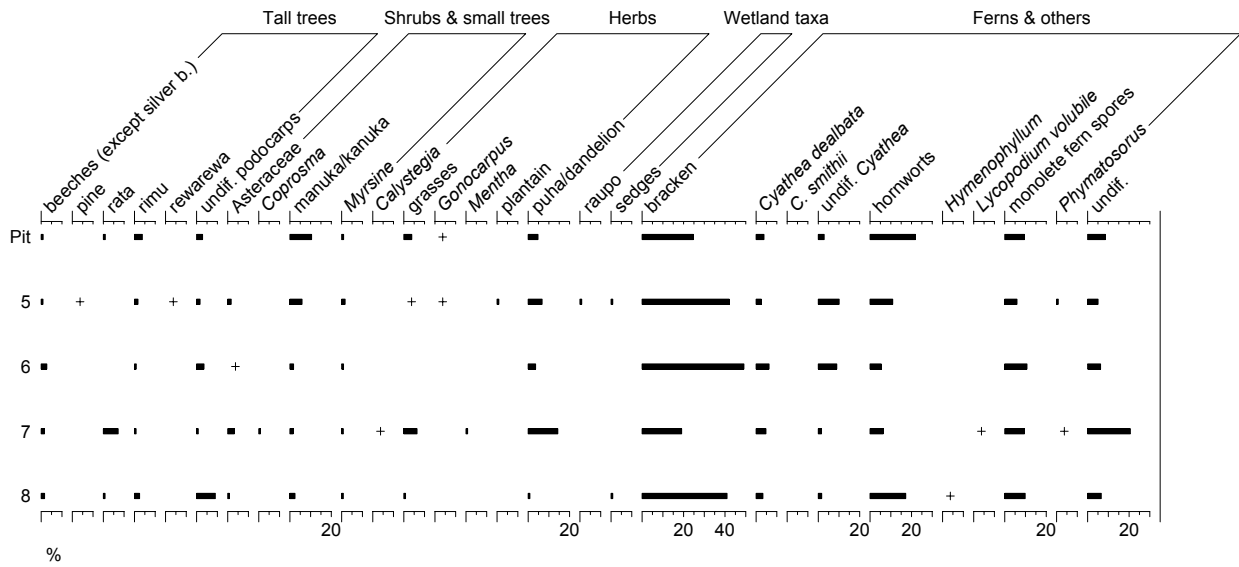
Results

Pollen

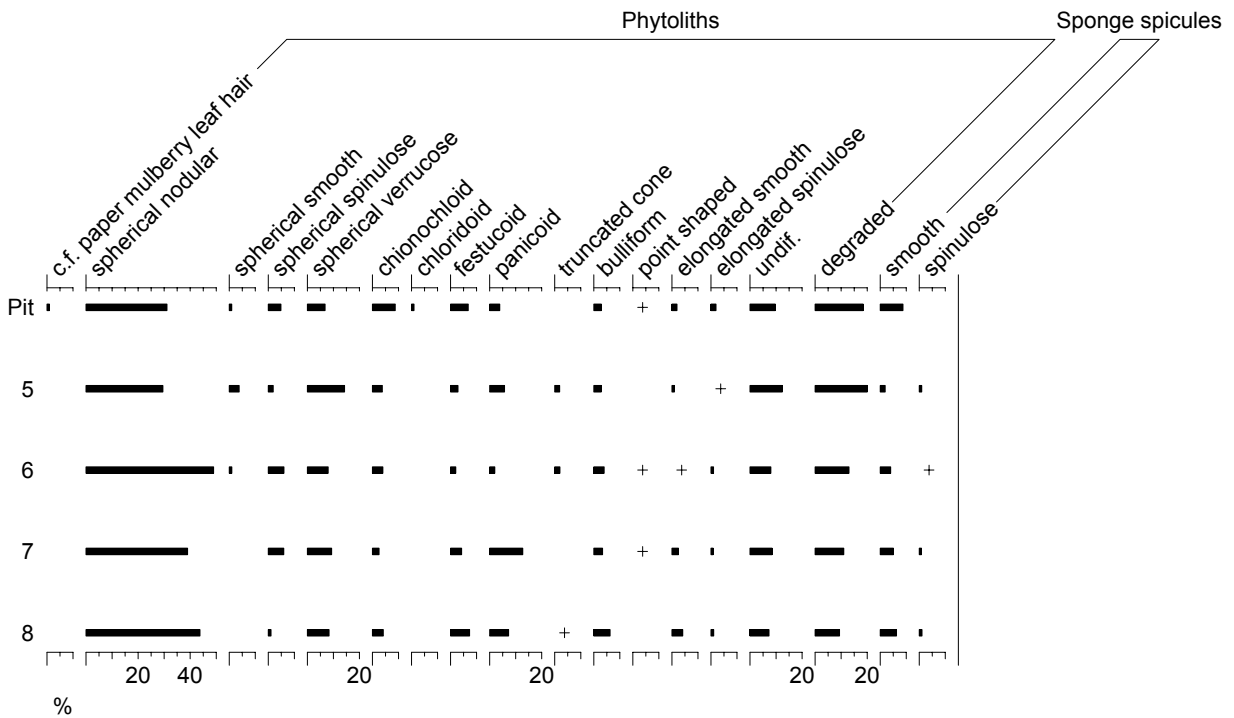
Abundant fragments of microscopic charcoal were found in all five of the Pipitea St samples. The pollen (and spore) assemblages of the samples are dominated by bracken (*Pteridium*) fern, ferns with monolet spores, hornworts (Anthocerotae) and puha/dandelion (*Sonchus/Taraxacum*) (Figure 3.8). Pollen of manuka/kanuka (*Leptospermum/Kunzea*) and grasses also features. Pollen of tall trees, notably beeches (*Fuscopsora*), rata (*Metrosideros*) and rimu (*Dacrydium*) is recorded in generally small amounts. The widely dispersed pollen of European introduced pine (*Pinus*) and plantain (*Plantago lanceolata*) was found in sample 5.

Phytoliths

The phytolith assemblage of all samples is dominated by spherical nodular phytoliths (Figure 3.9). Several other significant types of phytoliths were found in moderate to small amounts, notably spherical spinulose, verucose, chionochloid, festucoid, panicoid and bulliform. A single leaf hair phytolith, consistent with paper mulberry, was found in the pit sample. Of the other types of biogenic similar, diatoms were not present, however sponge spicules were found in small amounts in all samples.



3.8. Percentage pollen diagram (+ = found after count).



3.9. Percentage phytolith diagram (+ = found after count).

Starch and other residues

No significant starch or other plant remains were found in the Pipitea St samples.

Interpretation

Together with the abundant charcoal, the bracken, hornwort and monoete spores in the Pipitea St samples reflect burning of vegetation in the area (Figure 3.8). Bracken, an invasive ground fern with widely dispersed spores, is often abundant in New Zealand pollen assemblages of the last millennium and is commonly associated with large scale, repeated burning of forest by people. It may form dense stands, averaging 1–2 m tall, over extensive areas. Hornworts are very small, inconspicuous plants that colonise freshly exposed soils. Approximately half of New Zealand's numerous fern species (211) have monoete spores (Large and Braggins 1991), most of which are difficult to differentiate in fossil deposits. Many of these fern species are disturbance-related. Pollen of puha/dandelion (an edible herb), grasses and manuka/kanuka (small trees) also indicates vegetation disturbance. The grass pollen possibly reflects the establishment of early European pasture in the area. Rata and rimu trees were a significant part of local forest remnants. The small amounts of beech pollen (which is dispersed long distances) in all samples are probably from distant highland beech forests. The presence in sample 5 of pollen of European exotics, namely pine trees and plantain, supports the attribution of the gardened soil to the early historic period.

Phytoliths in the Pipitea St samples provide further insight into the local vegetation at the time (Figure 3.9). Spinulose phytoliths occur in palms (Arecaceae) and bromeliads (Bromeliaceae) (Piperno 2006). As New Zealand has no indigenous bromeliads, in this case this phytolith type is from nikau palm (*Rhopalostylis*), New Zealand's only representative of this family. Spherical verrucose phytoliths are common in rewarewa (*Knightia*) and *Fuscospora* (beech species other than silver beech) (Kondo et al., 1994). Unfortunately, little is known of the range of plants that produce spherical nodular phytoliths (Kondo et al. 1994), the most abundant type in the Pipitea St samples; unlike pollen, phytoliths are relatively under-researched in New Zealand. Of the grasses, chionochloid phytoliths originate from the Arundinoideae sub-family of grasses; in this case probably mainly toetoe (*Cortaderia*). Festucoid phytoliths are found commonly in the Pooideae sub-family (e.g., *Poa*, *Festuca*). Panicoid phytoliths are found in the Panicoideae sub-family, some *Chionochloa*, toetoe and *Rhytidosperma*. Bulliform phytoliths are exclusively from grasses, in New Zealand originating commonly from *Rhytidosperma*. The sponge spicules in the samples reflect the proximity of the site to the sea and may be a result of people using estuarine resources at the site.

The identification of the leaf hair phytolith of cf. paper mulberry in the pit sample is tentative (Figure 3.9). Only a single example was found and although phytolith taxonomy of economic plants is well known and many species have distinctive phytolith morphology (Piperno 2006), the phytolith taxonomy of non-economic plants is not as well known. All local plants therefore cannot unequivocally be ruled out as possible sources. Paper mulberry is part of the small group of six introduced plant species cultivated by Maori at the time of European contact in the late 18th century. Native to China and Japan, it is cultivated throughout the Pacific for its bark, which is prepared into tapa cloth (Whistler 1991).

The cf. paper mulberry phytolith is the only possible plant microfossil evidence of horticulture found at the Pipitea St site and even this is uncertain. The lack of significant starch remains indicates that the soils and pit at Pipitea St were likely not associated with starch crops such as kumara or potato, at least not intensively so.

Soil grain size analysis

Four soil samples of approximately 5 litres each were taken for analysis. Samples 1 and 2 were taken from Feature 15, the gardened soil. Samples 3 and 4 were control samples taken from the natural soils: Sample 3 from the B horizon adjacent to Feature 15 and Sample 4 from the C horizon beneath Feature 15. Samples were analysed to determine if the gravels in the Feature 15 soil were native to the site or brought in from elsewhere to improve soil quality (drainage, aeration, heat retention) for gardening.

Method

The samples were air dried and weighed prior to wet sieving through a 2 mm screen to remove all clay. The sieved material was then air dried and weighed. The residue was then sieved again through 3 and 5 mm screens. The residue from the 5 mm screen was laid out on mm square graph paper and sorted by hand into size categories of 5 mm increments based on maximum dimension. Each size category was weighed and its percentage of total weight was calculated. Sample analysis was carried out by Andrew Hoffmann of CFG Heritage Ltd.

Results

Summary results are given in Table 3.1.

Sample	2–3 mm	3–5 mm	5–15 mm	15–30 mm	30 mm +	total
1	6.8	12.9	13.8	4.6	2.5	40.6
2	2.2	3.7	1.8	2.2	2.1	12
3	0.5	0.4	0.1			1
4	7.1	15	22.2	7.5	5.6	57.4

Table 3.1. Percentages of gravel size classes by weight of total sample.

Control Samples 3 and 4

After initial drying both control samples were olive yellow in colour (2.5Y 6/6). Sample 3, from the soil layer below the topsoil, contained a very low percentage of natural gravels, all of which were less than 5 mm.

Sample 4 contained almost 60% gravel. The very gravelly nature of these lower layers can be seen in the walls of the pit, Feature 77 (Figures 3.5 and 3.6). The gravel is derived from greywacke (sandstone), which forms a common basement material across the Wellington region. Less than 5% of the gravel is formed of a finer grained material, which may also be derived from the greywacke source, or could be of other, possibly volcanic, origin. The vast majority of the gravel is sharply to moderately angular. Less than 1% is rounded or spheroid.

Feature 15 Samples 1 and 2

After initial drying both samples from the gardened soil were light yellowish-brown (2.5Y 6/3). The colour difference between these and the control samples is the result of organic material within the soil.

The gravels in Samples 1 and 2 are derived from greywacke similar to Sample 4. Though overall there was less gravel in these samples, noticeably greater proportions of the finer grained material were present than in Sample 4.

All size categories of gravel in Samples 1 and 2 were predominantly rounded (water rolled) but with a low amount of moderately angular pieces also present. A few individual pieces of quartzite/chalcedony type gravel were evident in Sample 1. No equivalent material was found in either of the control Samples 3 and 4.

The higher proportion of finer grained material in the Sample 1 and 2 gravels, its predominantly water rolled nature and the presence of small quantities of quartzite/chalcedony suggests that these gravels were introduced into Feature 15 from an off-site context, not from the natural C horizon in the immediate vicinity of Feature 15. This context is quite likely to be the beach gravels that would have been available on the coastal flat below the site, less than 100 m distant, though these gravels were not tested by us (they are probably inaccessible, buried beneath reclamation fill). They could also originate in a river bank or river mouth.

Discussion

The grain size analysis of the soil samples shows that imported gravels were added to the gardened soil. This is typical of Maori cultivation practice (Furey 2006: 19, 46) and indicates a Maori origin for these soils. The microfossil analysis was unable to indicate what plants were cultivated in these soils – we had hoped to find starches of Maori cultigens, particularly kumara, or of white potato or other introduced European cultigens such as turnip, but no starches were found. The historic evidence (Chapter 2) is quite clear that the general area was cultivated by Maori living at Pipitea pa prior to the New Zealand Company settlement and that white potato was one of the crops. This evidence is located in Town Acre 544, which was not included in the Maori Tenths reserves, and so these cultivations are unlikely to post-date 1840. Reihana Rewiti gave evidence before the Old Land Claims Commission that he gardened potatoes on Barker's Claim, incorporating most of 1–15 Pipitea St, in 1839. While we couldn't claim that the soils we found were gardened by Rewiti, the attribution of the soils to Maori gardening is reasonably robust but not definitive.

While the basic description of modified soil and pit indicates Maori gardening, there are however some essential differences from what would be considered standard Maori gardening. Firstly, the gardened soil is in the form of a clearly defined plot. Secondly pre-European Maori storage pits generally had postholes down the centre to support a roof ridgepole. Postholes at the sides of the pit indicate European style frame construction. These features, including the fence, probably are from Contact period Maori gardens and, if so, indicate the adoption of European technologies along with the probable adoption of European crops. 1–15 Pipitea St lay within the 'core area' of Pipitea pa (Figure 2.6) and it is this occupation that we can attribute the Maori garden evidence.

4 STANDING BUILDINGS

BEATRICE HUDSON

Four 19th century houses, 5, 11, 13 and 15 Pipitea St (Figure 4.1), and one 1930s house, 9 Pipitea St, remained standing on the site until just prior to the archaeological excavations. It was a requirement of the Historic Places Trust authority that the 19th century buildings were recorded before being relocated off site. This was not required for the Art Deco 1930s house, which was demolished.

Arcad was contracted to prepare floor plans and elevation drawings of the 19th century buildings. John Rennie of Arcad made measured floor plans of each house indicating current doors, windows and amenities. Presumed later additions or alterations were highlighted in red on the plans. The houses were comprehensively photographed – a selection of photos is reproduced in this chapter and both Arcad and CFG Heritage hold copies of the full set of photos. North, east, south and west elevations were also prepared for each house and these were annotated. The drawings and photographs present a record of the houses as they stood prior to their relocation. These drawings are reproduced in Figures 4.10 to 4.25.

As Arcad were architects rather than archaeologists the Historic Places Trust required that the drawings be signed off by a qualified archaeologist, for which CFG Heritage was contracted. The drawings were field checked by Matthew Campbell on 19 December 2007. The buildings were recorded with the fact of their removal, not demolition, in mind and the level of recording was set accordingly.

11–15 Pipitea St were all built in 1881 by William Freedman, while 5 Pipitea St was built later, in 1896, by James Ames. All four houses were two-storey, timber framed buildings with weatherboard cladding and corrugated iron roofing. An 1896



4.1. 5–15 Pipitea St from the street, 15 in foreground (photo: Arcad).



4.2. Street frontage of
11 Pipitea St (photo:
Arcad)

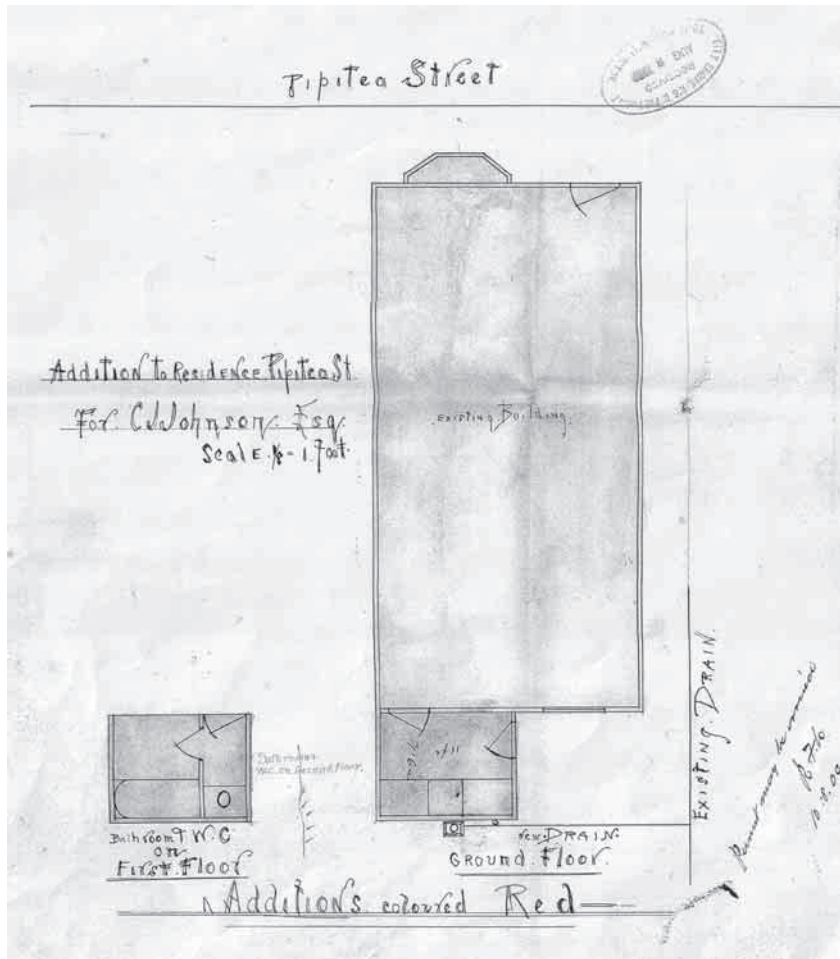
valuation report on 11–15 Pipitea St (quoted on page 25) indicates that the buildings were built principally of material recycled from the old Wellington Hospital on the other side of Pipitea St (Figure 2.8). All had fireplaces but only 5 Pipitea Street retained its chimney. Piles were wooden; some on all buildings had been replaced at the time of their removal but some remained original. 11–15 Pipitea St were the same size, and although 5 Pipitea St is larger than the others, all four were of a similar layout with only minor variations and few additions over time. The number of rooms in each house is between 10 and 14, varying by relatively minor details of internal walls and external additions.

Additions were mostly to the southern ends of the houses, where 11–15 Pipitea St all had two-storied extensions for bathrooms and toilets added to the back. Bay windows were also added on the front and sides of the houses (Figures 4.2 and 4.3).

13 Pipitea St was the first to be altered, or at least the first for which plans of proposed alterations survive. Engineer's specifications, dated October 1909, stipulate "a small addi-



4.3. Street frontage of
15 Pipitea St (photo:
Arcad)



4.4. 1909 plan of alterations to be made to 13 Pipitea Street (City Engineer's Department August 3 1909, Wellington City Archives, Ref. 0053:153:8443).

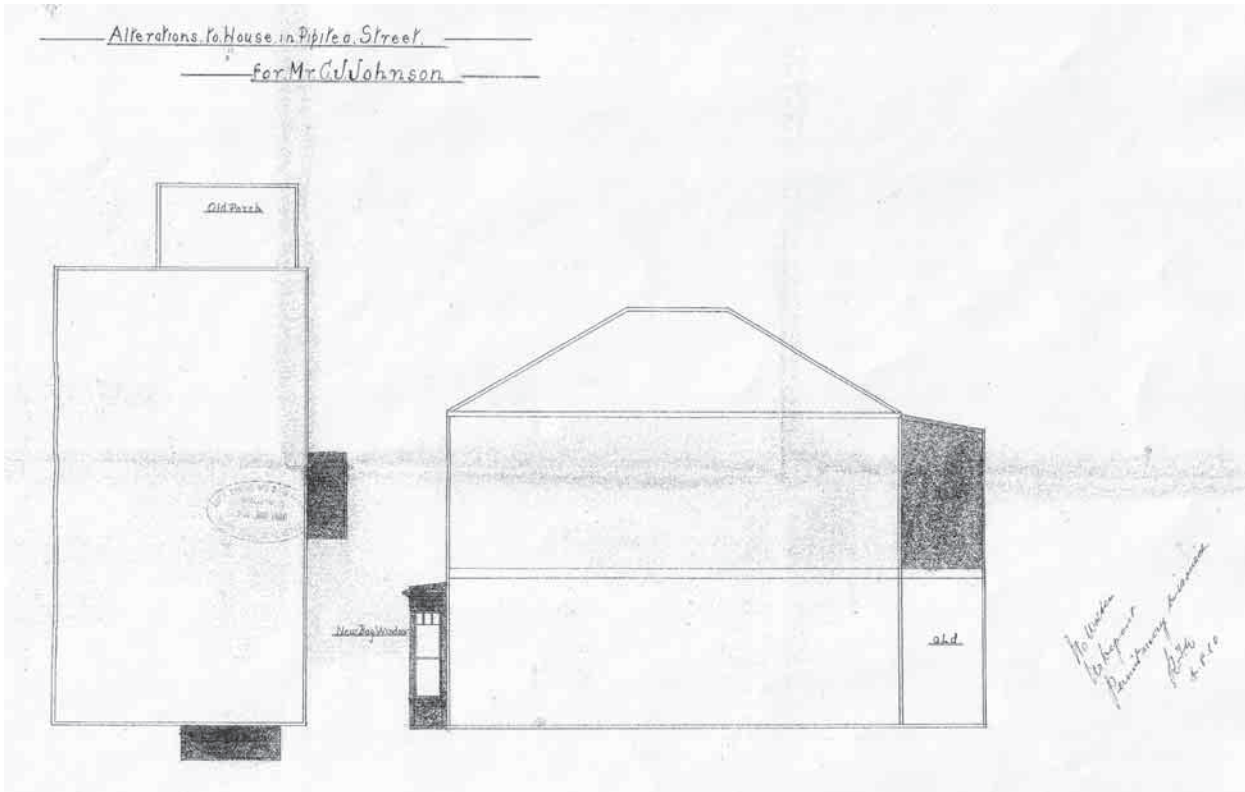
4.5. The late additions of the bay window and external stairs on the west side of 13 Pipitea St (photo: Arcad).

tion that is to be a scullery on the ground floor and a bathroom and W.C. upstairs" which are both new additions (Figure 4.4).

The bowed bay window in the front of 13 Pipitea St, to judge from the plan, was already in place at this time. Plans dated October 1910 show that a new, square bay window was to be constructed at 11 and 15 Pipitea St. The ground floor "porch" or "scullery" is labelled "old" (Figure 4.6). It is not clear when they had been built but the inspection of the standing buildings showed them to be additions: there was a slight change in floor levels between them and the main buildings; and when the carpet was lifted in one of the buildings it could be seen that the timber flooring was not continuous between the two parts. A document from the City Engineer's Department, dated 26 July 1910, gives specifications for the addition to 11 and 15 Pipitea St of bay windows on the front and side of each house and "a bathroom on top of each scullery."

Although bay window additions are specified on the front and sides of each house, it appears that the bay window on the west side of 11 Pipitea St was never





4.6. 1910 plan of alterations to be made to 11 and 15 Pipitea Street (City Engineer's Department July 26 1910, Wellington City Archives, Ref. 0053:158:8733).



4.7. Southern ends of 11-15 Pipitea St from above showing the later additions of scullery and bathroom/WC (photo: Arcad).

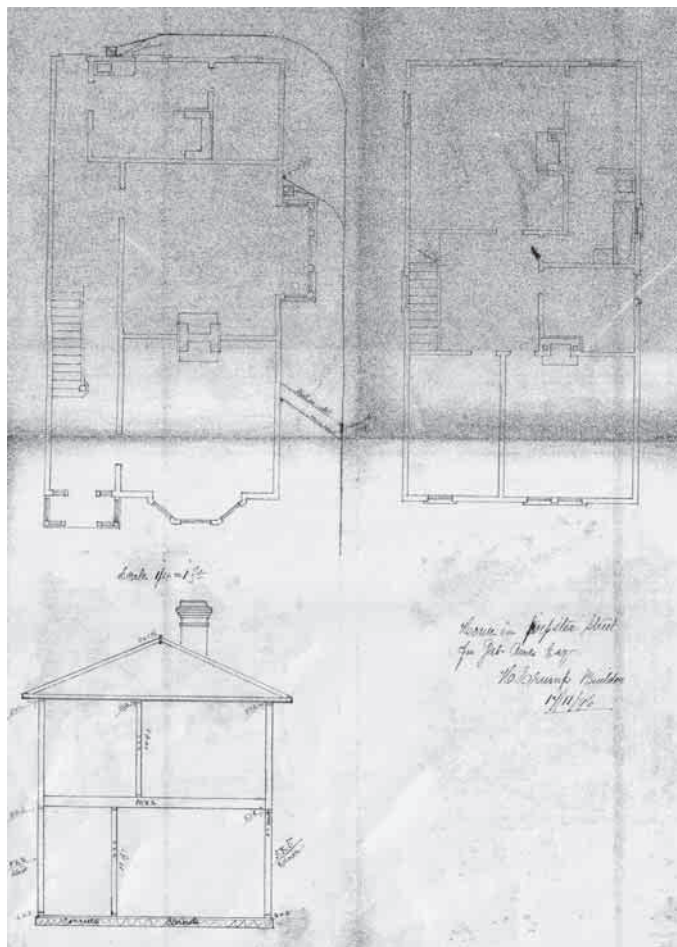


4.8. 5 Pipitea St from south west, above. The staircase and covered entrance on the right are the later additions (photo: Arcad).

4.9. 1896 plan of 5 Pipitea Street (Wellington City Archives).

built. The side bay window on 15 Pipitea St can be seen in Figure 4.1. At the time of the investigation 11 Pipitea St had only standard windows on this side, and there was no sign of a bay window having been removed. The front, square bay windows specified in the plans were built (Figures 4.2 and 4.3).

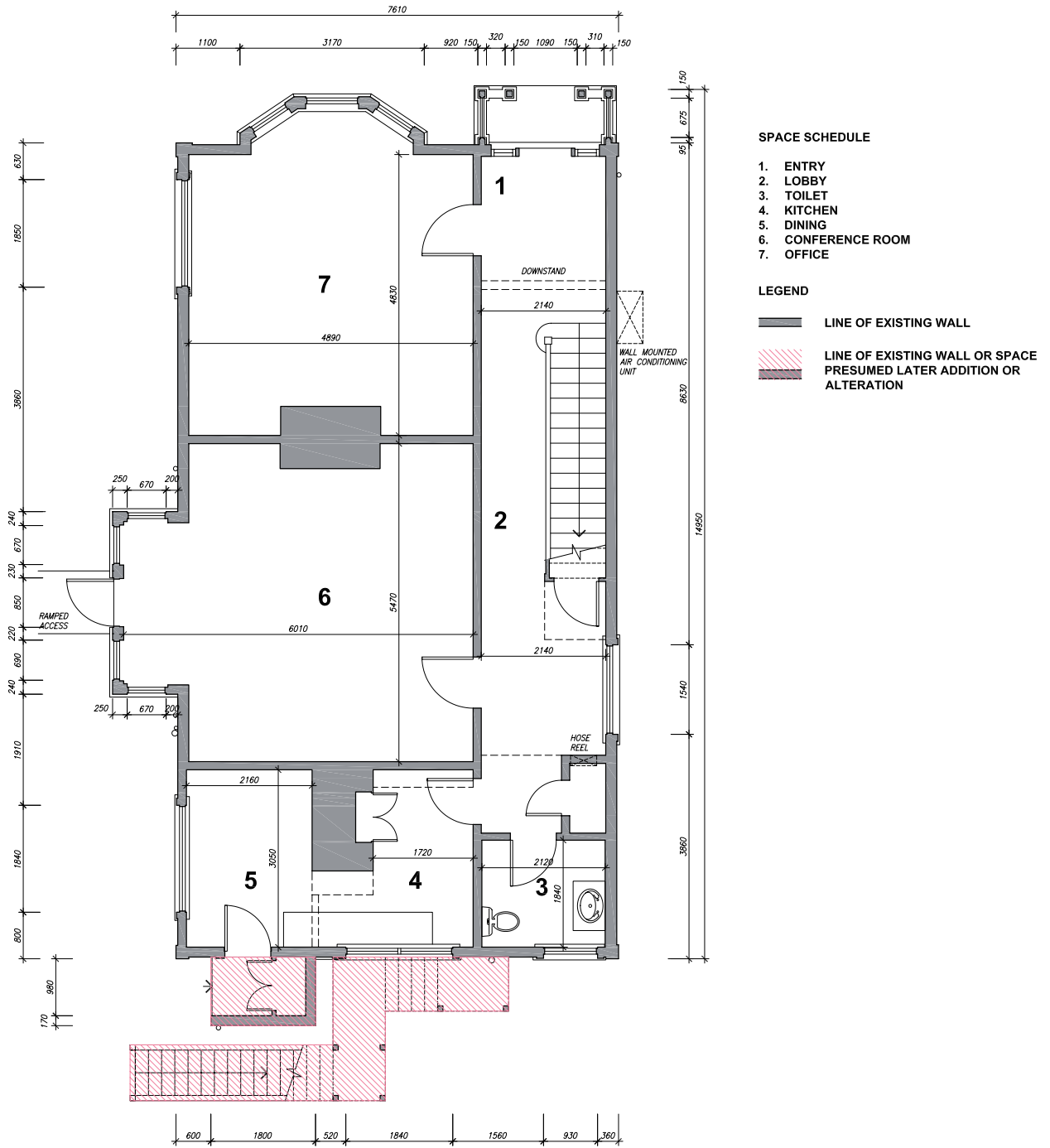
The additions to the back of the houses appear to have necessitated changes in the organisation of the rooms on the southern half of the first floor in each of 11, 13 and 15 Pipitea St. In each house a passage way leads from the landing to the addition (marked Space 10 on the floor plan of 11 Pipitea St, Figure 4.15). In 13 and 15 Pipitea St the skirting boards of this passage are the same as throughout the rest of the house, which would suggest that the passage was original. However, there would have been no need of these passage ways before the southern additions were built. Also, all the walls leading to the corridors seem to have had some changes over time, for instance: in 11 Pipitea St there is an empty door frame, presumably original, at the beginning of the corridor and a closed-up connecting door from the kitchen; in 13 Pipitea St the wall leading to the corridor is at an angle and is a change from the original; 15



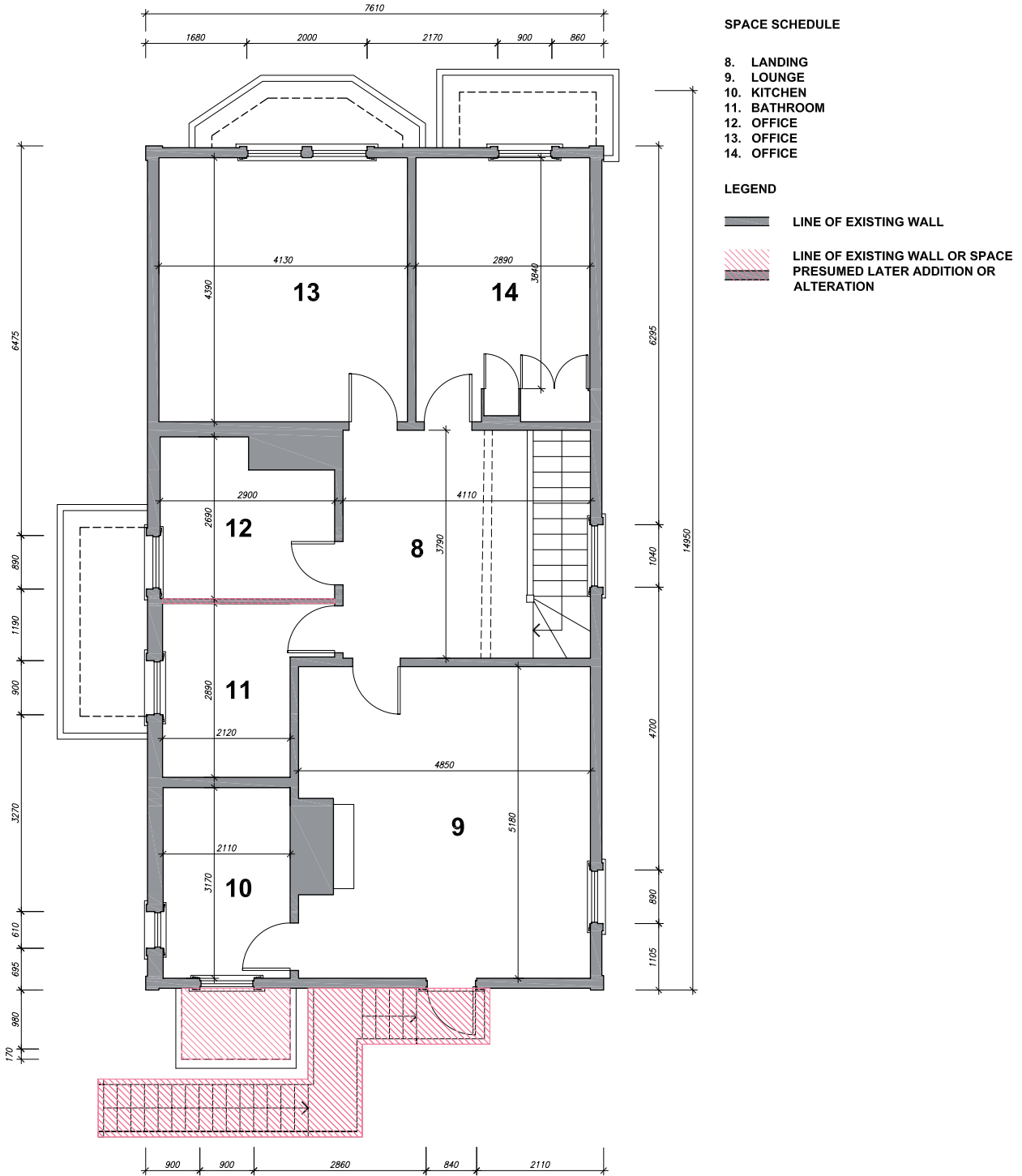
Pipitea St has a rebated alteration to the wall before the start of the corridor. It seems most likely that the corridors were created in conjunction with the external additions, probably by adding in the walls between the corridor and the east room (Space 13 for 11 and 13 Pipitea St (Figures 4.15 and 4.19), Space 14 for 15 Pipitea St (Figure 4.23)).

Other changes were made to 13 Pipitea Street: internally, Spaces 15 and 16 would originally have been a single room, as they are in 11 (Space 15) and 15 Pipitea St (Space 16). The small room between Space 16 and the stairwell would have been separate. In these cases there seems to have been reuse of skirtings and door mouldings, or use of identical mouldings. This has the effect of potentially disguising other alterations. Externally there was the addition of an external staircase and balcony on the west side of the house.

The alterations to 5 Pipitea St were few. It simply had an external staircase, probably a fire exit, and a small covered entranceway added to the southern end (Figure 4.8). The bay windows are both original on this house, since they are present on a plan dated to 1896, when the house was built (Figure 4.9).



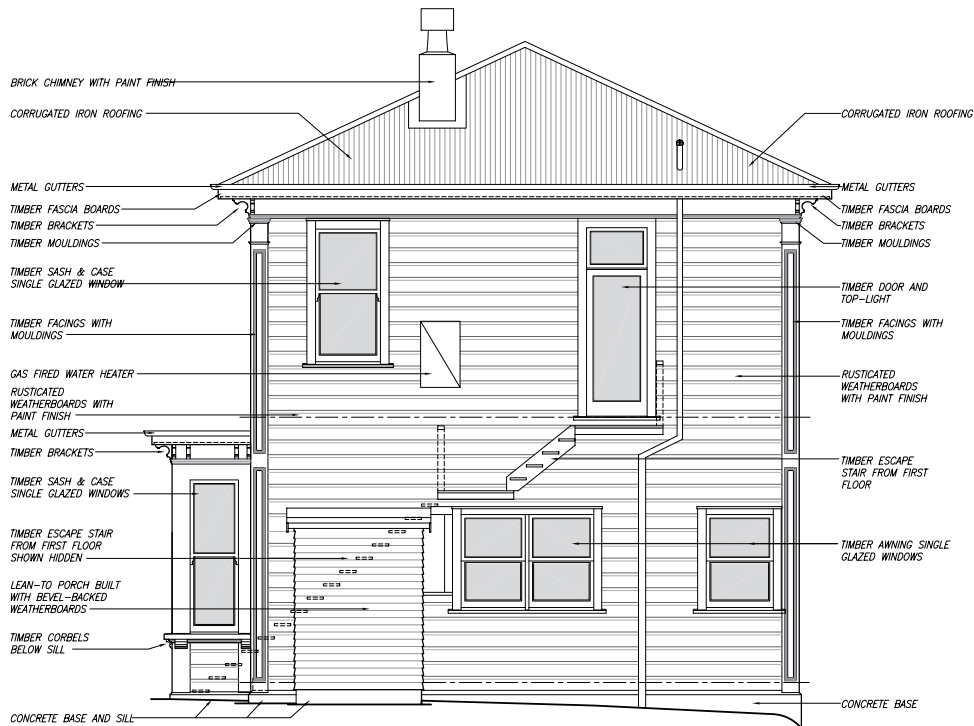
4.10. Ground floor plan of 5 Pipitea Street (Arcad).



4.11. First floor plan of 5 Pipitea Street (Arcad).



PIPITEA STREET ELEVATION (NORTH)



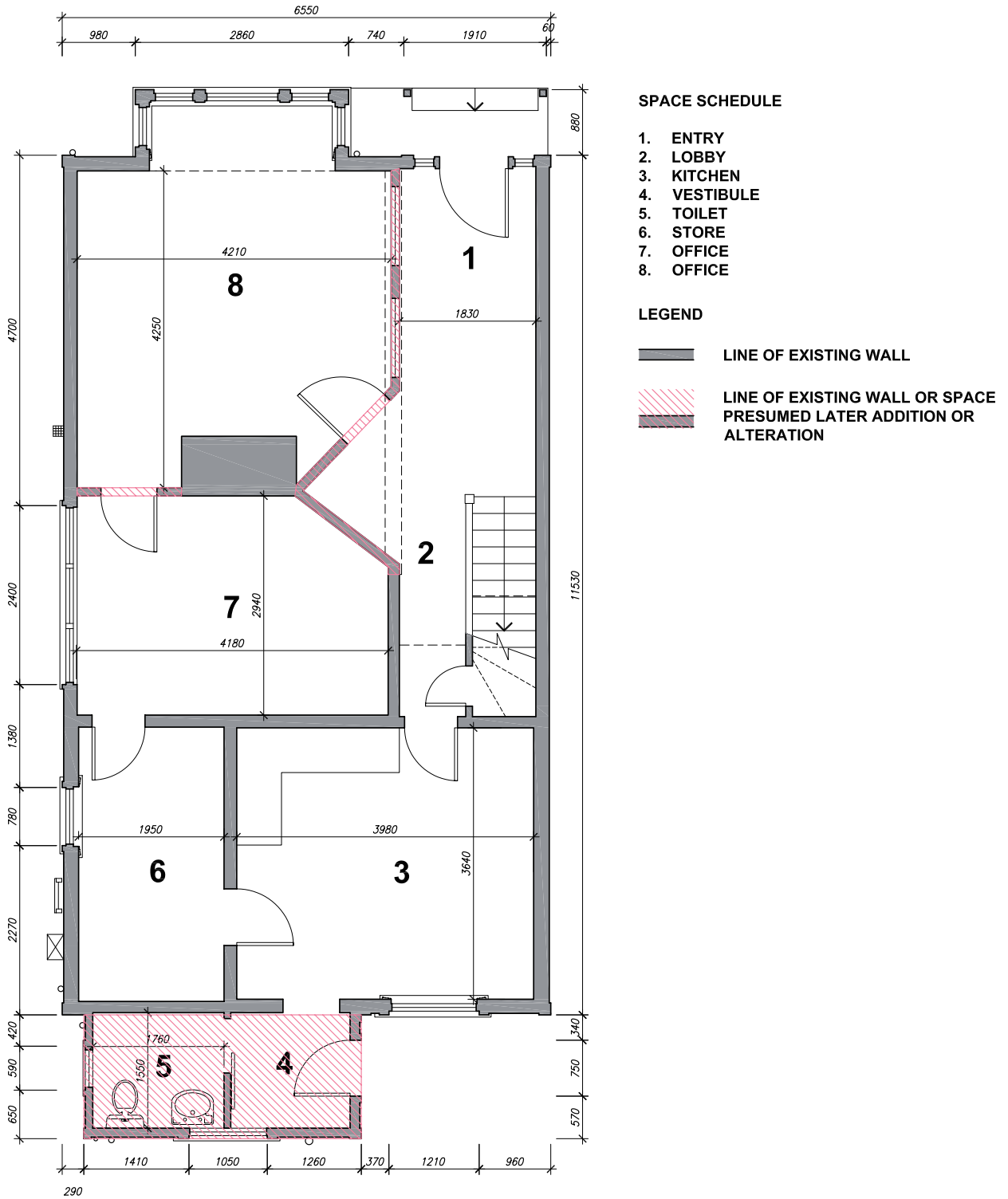
SOUTH ELEVATION

4.12. North and south elevations of 5 Pipitea Street (Arcad).

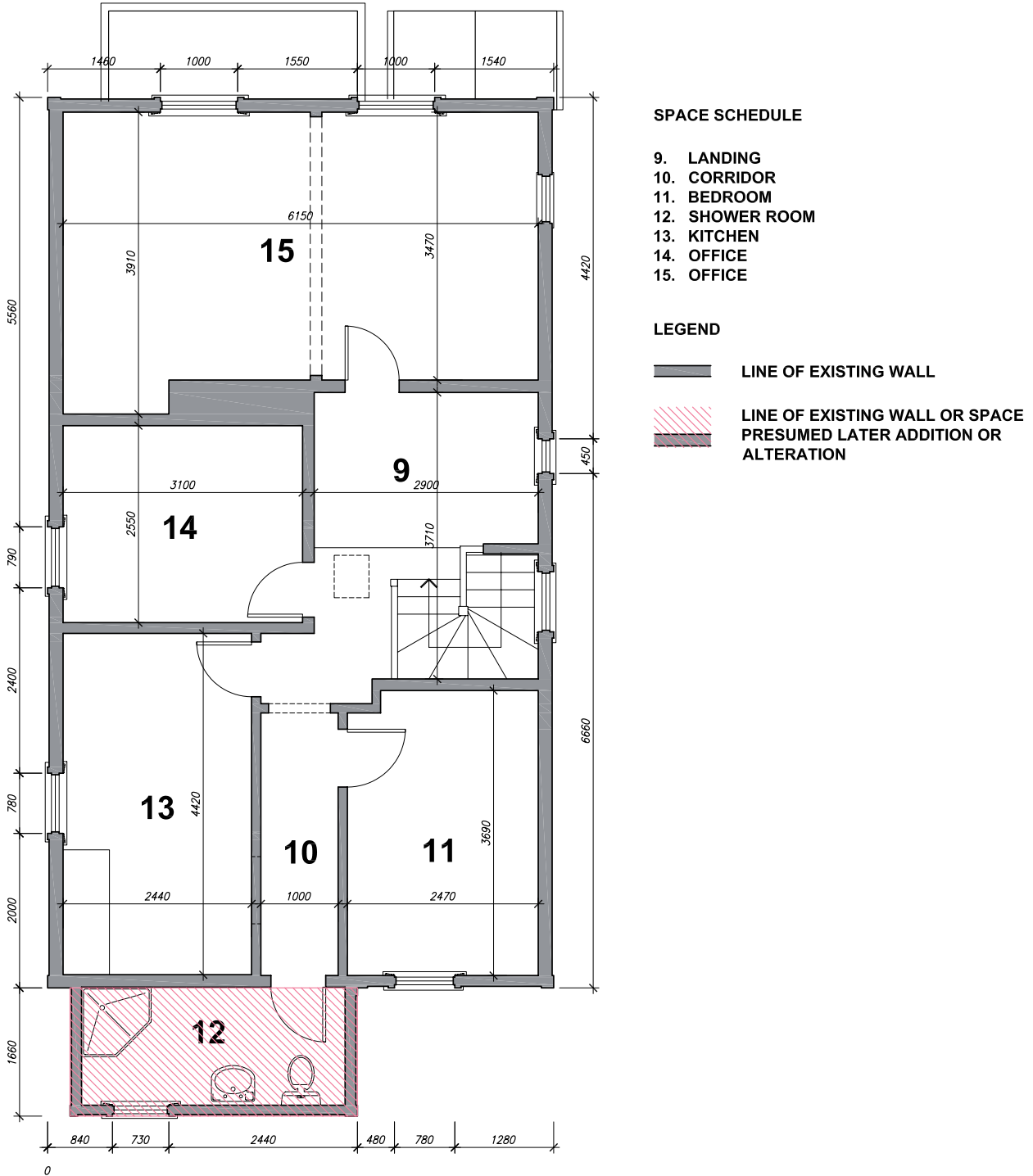
Pipitea St
4 Standing buildings



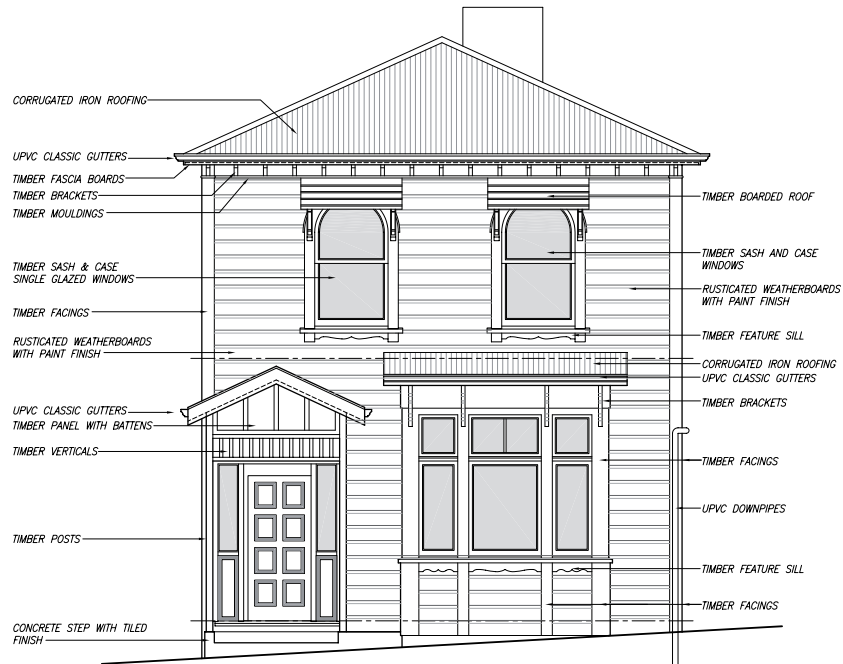
4.13. East and west elevations of 5 Pipitea Street (Arcad).



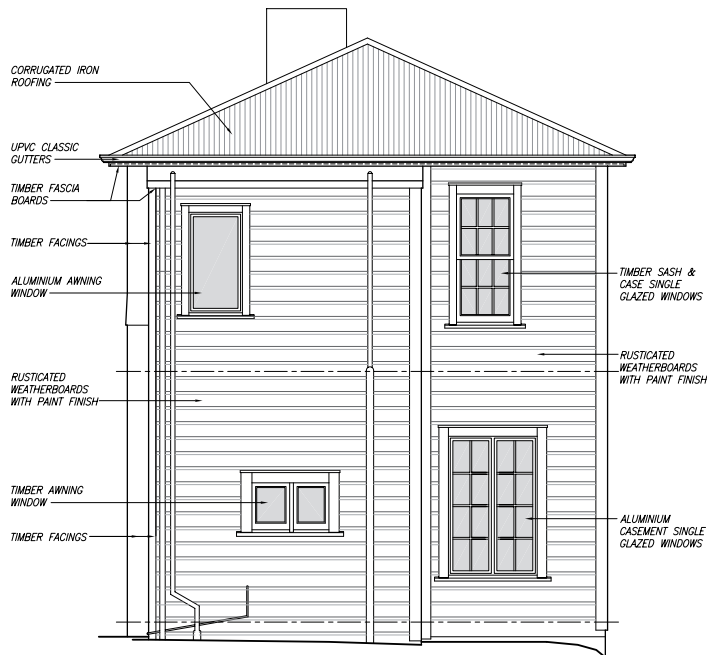
4.14. Ground floor plan of 11 Pipitea Street (Arcad).



4.15. First floor plan of 11 Pipitea Street (Arcad).



○ **PIPITEA STREET ELEVATION (NORTH)**



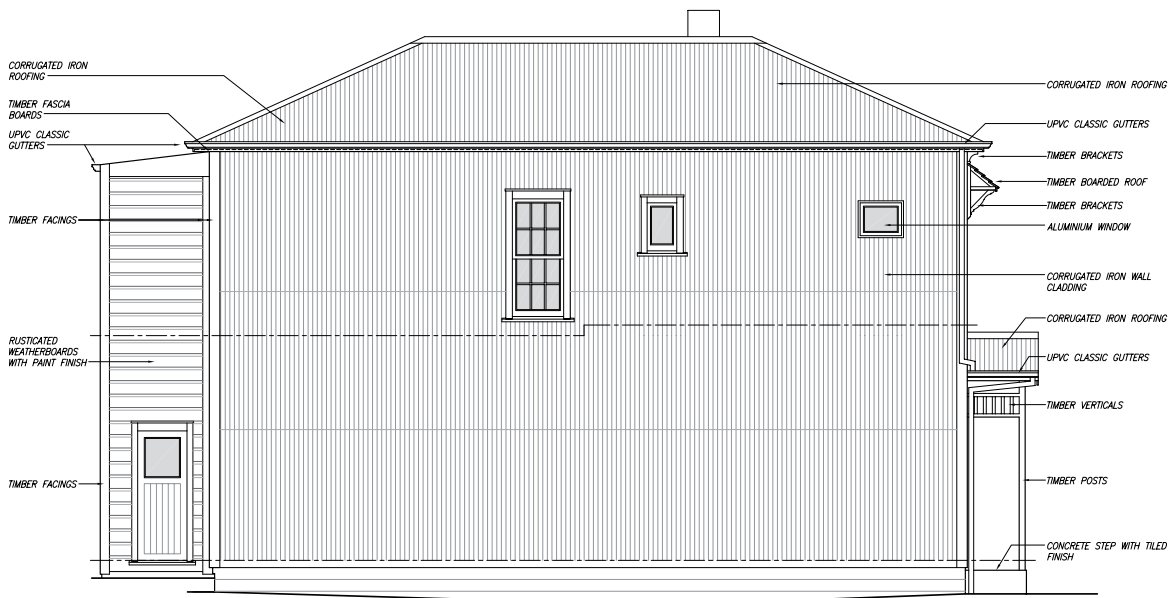
○ **SOUTH ELEVATION**

4.16. North and south elevations of 11 Pipitea Street (Arcad).

Pipitea St
4 Standing buildings

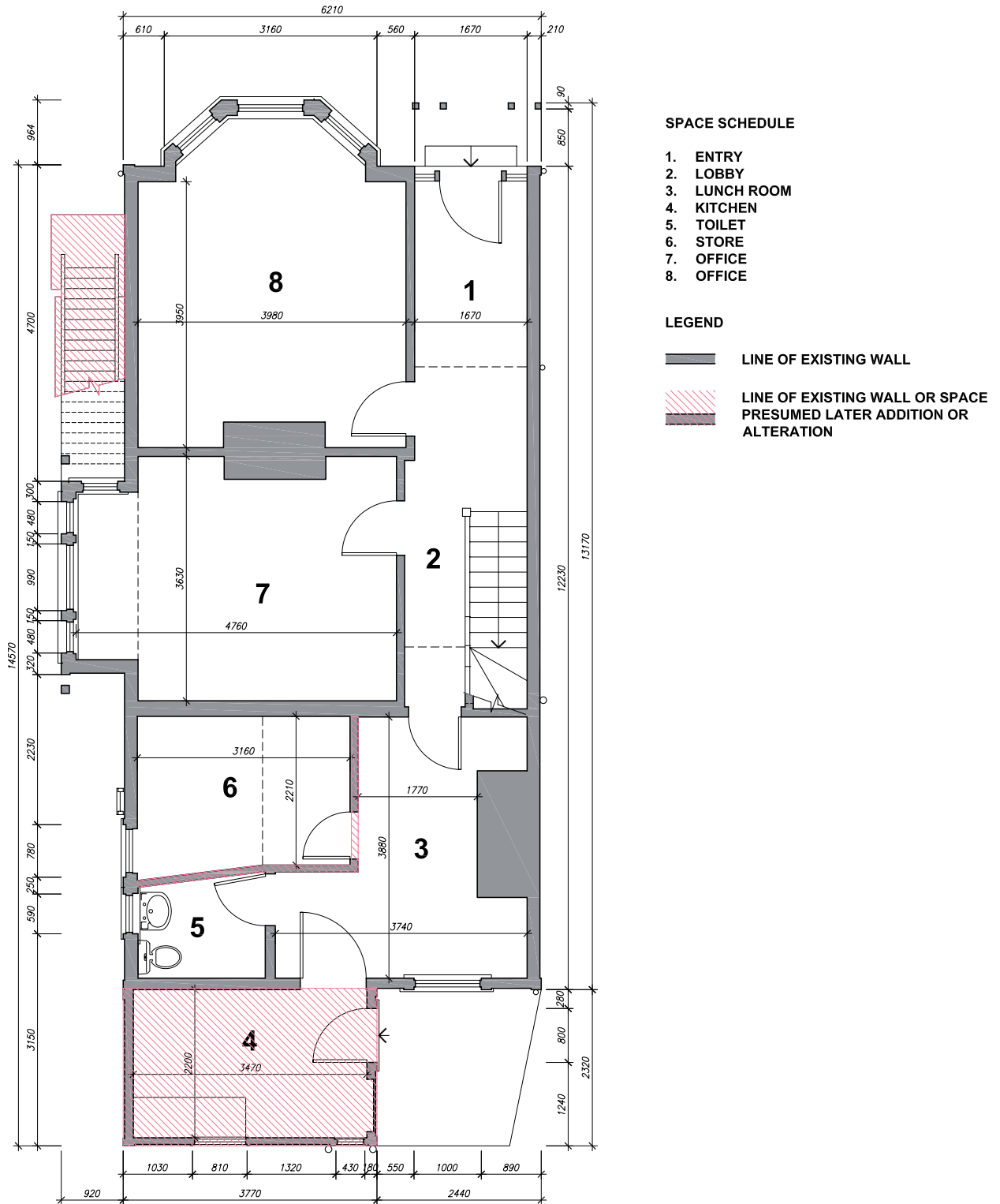


○ WEST ELEVATION

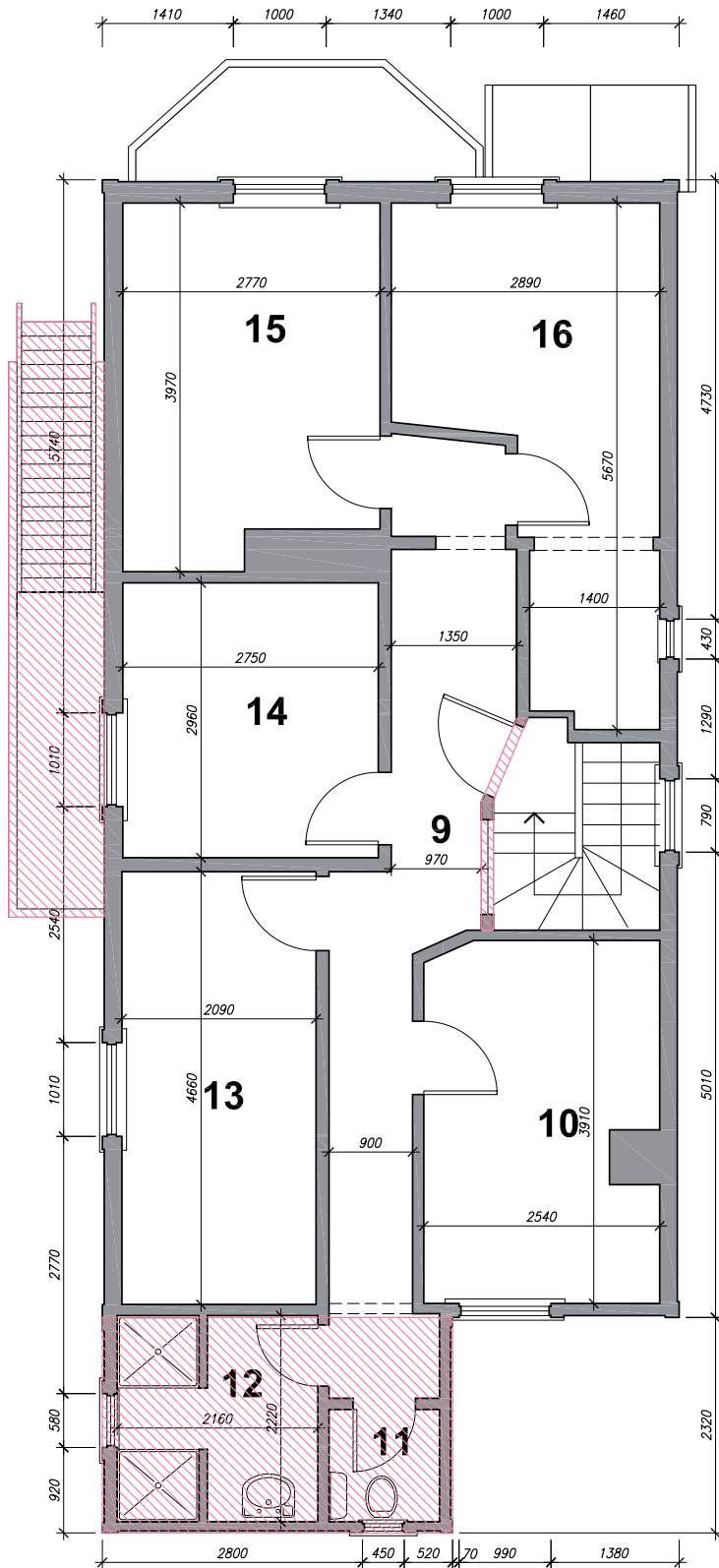


○ EAST ELEVATION

4.17. East and west elevations of 11 Pipitea Street (Arcad).





4.18. Ground floor plan of 13 Pipitea Street (Arcad).



SPACE SCHEDULE

- 9. LANDING
- 10. OFFICE
- 11. TOILET
- 12. SHOWER ROOM
- 13. KITCHEN
- 14. OFFICE
- 15. OFFICE
- 16. OFFICE

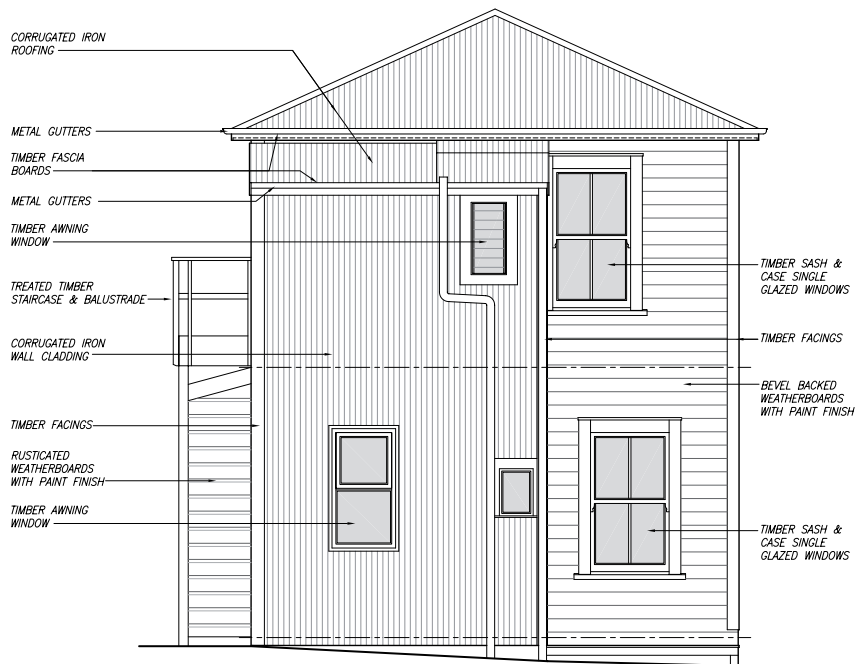
LEGEND

-  LINE OF EXISTING WALL
-  LINE OF EXISTING WALL OR SPACE PRESUMED LATER ADDITION OR ALTERATION

4.19. First floor plan of 13 Pipitea Street (Arcad).

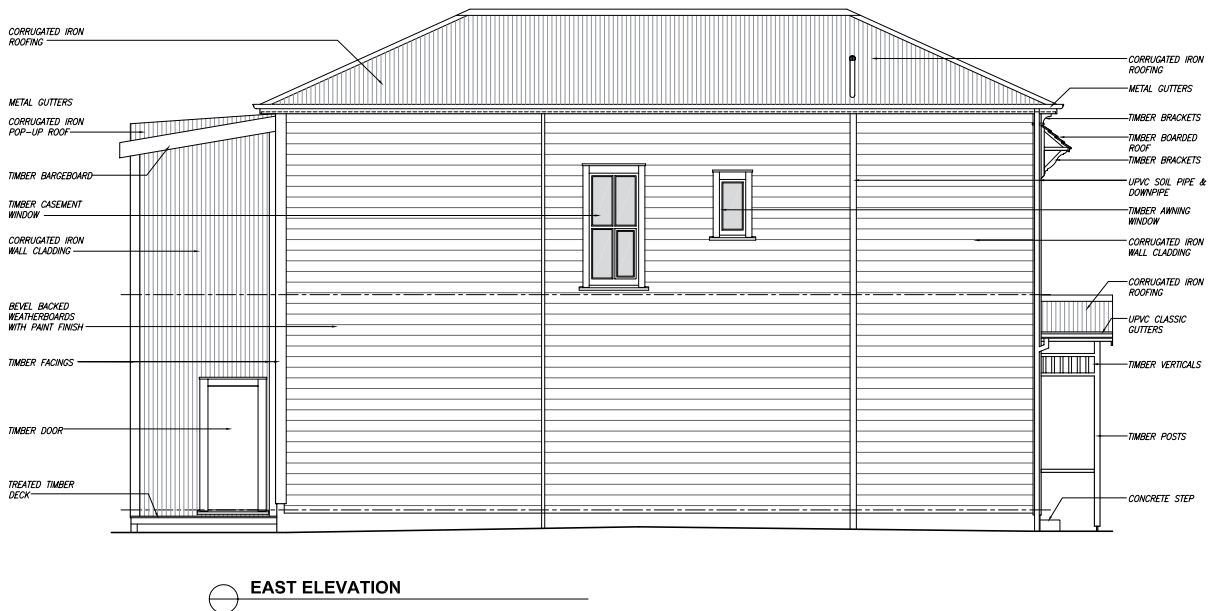
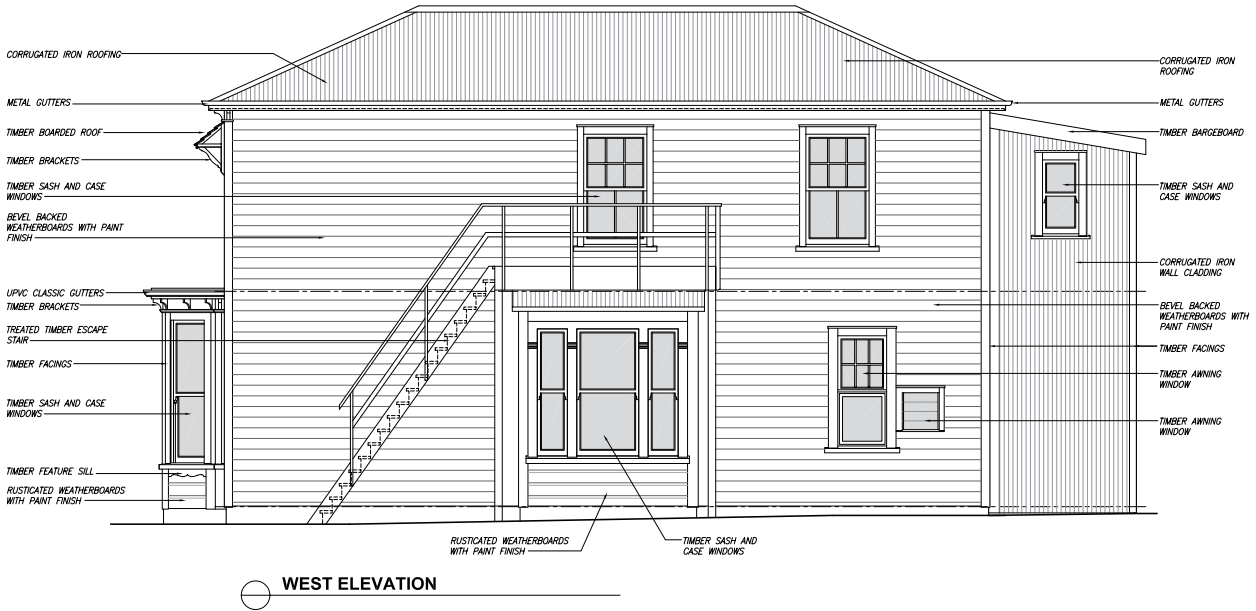


PIPITEA STREET ELEVATION (NORTH)

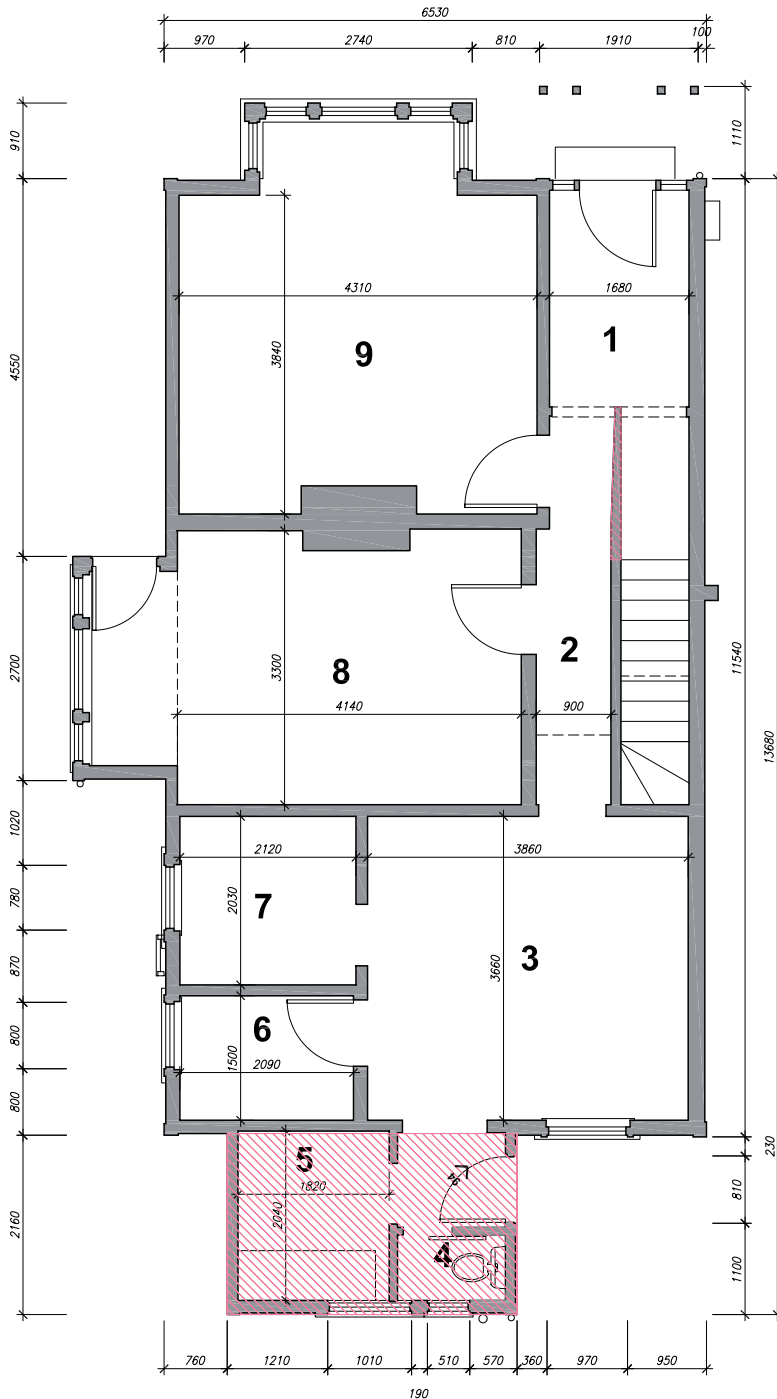


SOUTH ELEVATION

4.20. North and south elevations of 13 Pipitea Street (Arcad).






4.21. East and west elevations of 13 Pipitea Street (Arcad).



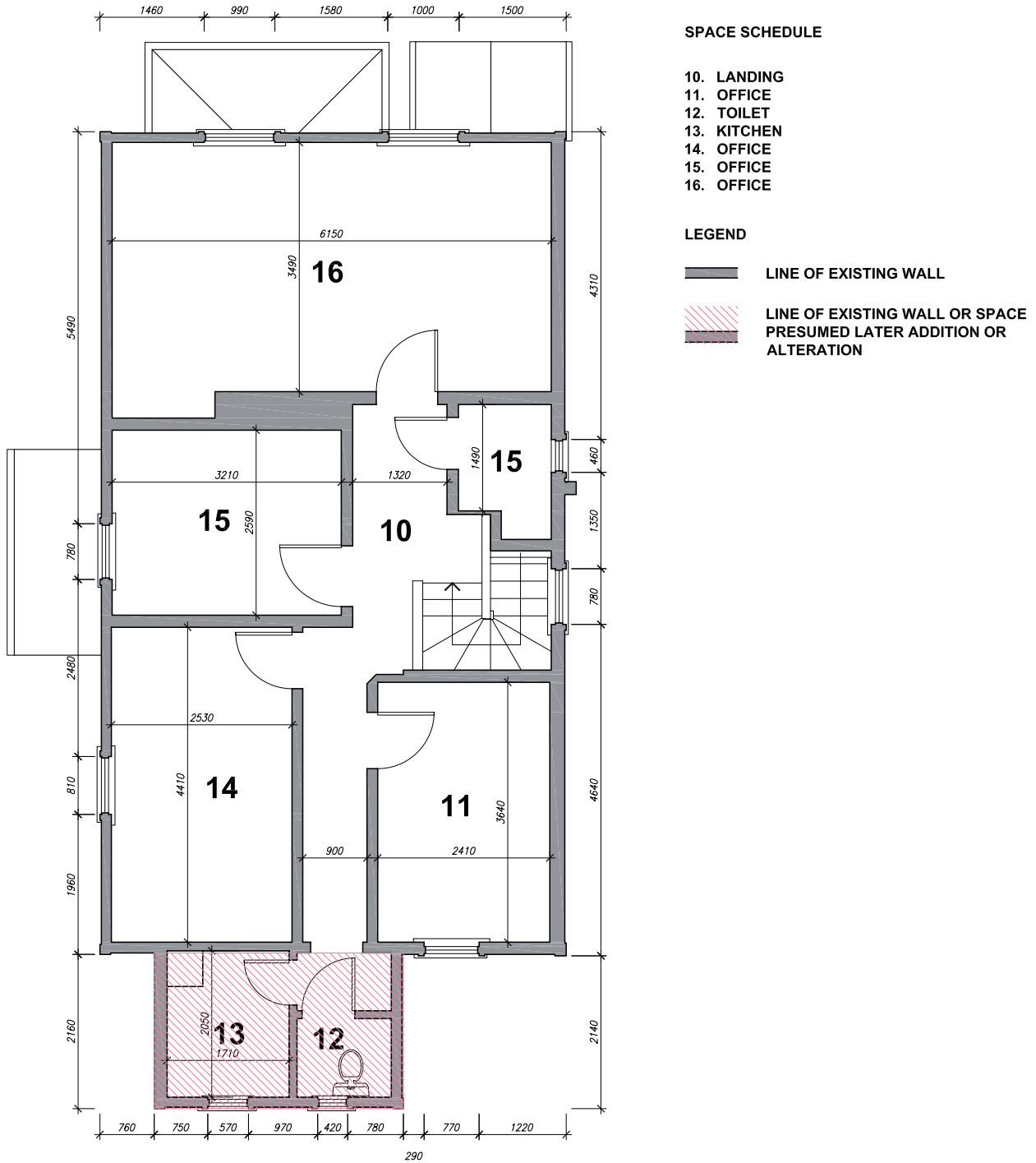
SPACE SCHEDULE

1. ENTRY
2. LOBBY
3. LUNCH ROOM
4. TOILET
5. KITCHEN
6. STORE
7. STORE
8. OFFICE
9. OFFICE

LEGEND

-  LINE OF EXISTING WALL
-  LINE OF EXISTING WALL OR SPACE
-  PRESUMED LATER ADDITION OR ALTERATION

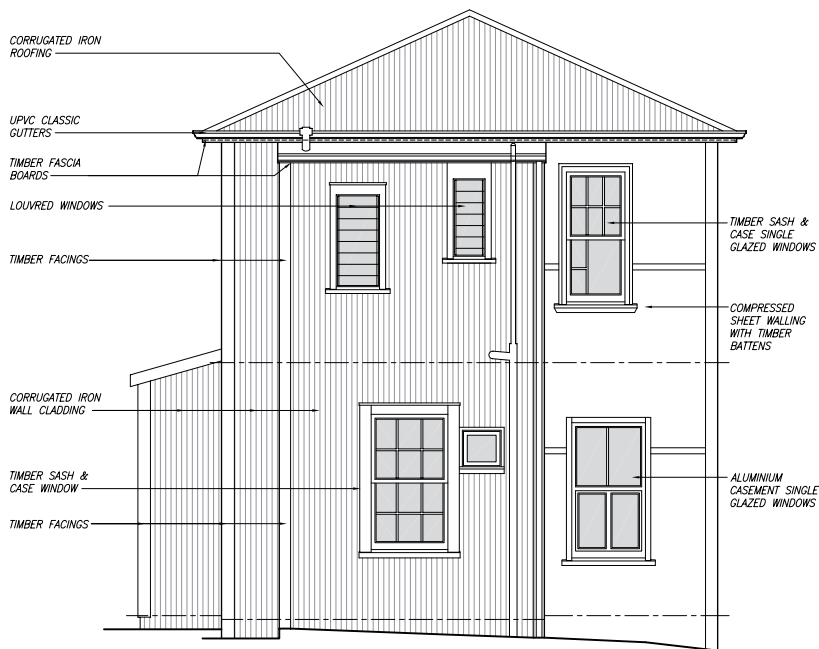
4.22. Ground floor plan of 15 Pipitea Street (Arcad).



4.23. First floor plan of 15 Pipitea Street (Arcad).



PIPITEA STREET ELEVATION (NORTH)



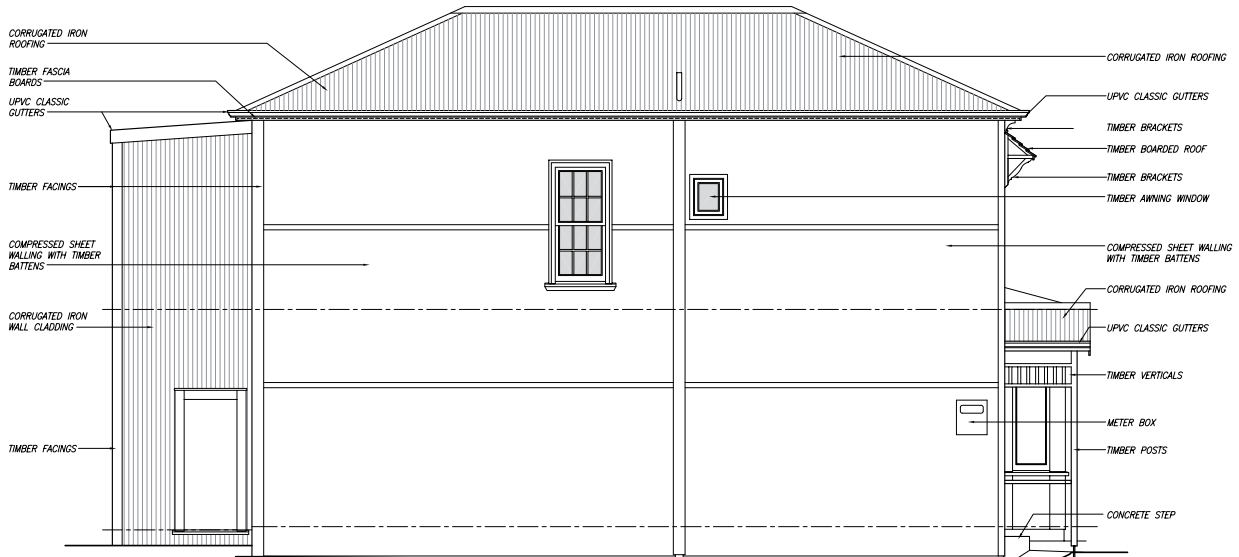
SOUTH ELEVATION

4.24. North and south elevations of 15 Pipitea Street (Arcad).

Pipitea St
4 Standing buildings



○ WEST ELEVATION



○ EAST ELEVATION

4.25. East and west elevations of 15 Pipitea Street (Arcad).

5 ARCHAEOLOGY

MATTHEW CAMPBELL AND BEATRICE HUDSON

Method

The research design and basic investigation method are set out in Chapter 1. Features were fully excavated by hand and digitally recorded. Digital photographs were taken to illustrate features and areas.

All artefactual material from the 19th century was retained for analysis except for non-diagnostic bottle glass. Early 20th century rubbish pits were also evident and material from these was also retained for analysis since they cut earlier features and demonstrated continuity of use. The House on 9 Pipitea St was built in 1936 and any pits within the house footprint will date to before the house. We took 1936 as the cut-off date for analysis though in practice we can't date features outside the house so finely – generally we analysed material that probably predated World War II. Material from the later 20th century features, i.e., where modern plastics were evident, was described on site and discarded.

Faunal material (mostly bone) associated with 19th or early 20th century features was retained, except where it was too fragile to excavate and became too fragmented for analysis. This was usually due to the presence of acidic coal ash or in situ burning of rubbish, though soil conditions will also have contributed to bone degradation. While this was not uncommon, some bone was able to be retained from all features that contained it.

Because the excavation was undertaken in June, weather conditions were often unfavourable and heavy rain continually obscured surface evidence and filled excavated features which, being cut into clay, did not drain before the next down-pour (Figure 5.1). Light conditions were poor and photography was difficult.

Because of the changing boundaries between Town Acres 543 and 544, which cover the properties, we refer to the areas investigated by street address rather than by Town Acre or Lot number. East to west, the street numbers were 1, 5, 7, 11, 13 and 15. Numbers 3 and 9 were located at the back of the investigation area and were accessed by rights-of-way off Pipitea Street. This numbering is shown in Figure 5.2. During excavation it became clear that the lots could be further divided into areas based on the features they contained. Excavation did not proceed by these areas but they are used to analyse and describe the archaeology and finds. They are shown in Figure 5.2. Three of these, Area 3 House, Area 3/9 Rear and Area 9 Front, were further divided by phase.

Stratigraphy

Below the building and demolition rubble over the south of the site, Area 3/9 Rear, was a brown soil layer (Feature 96) containing gravel and occasional fragments of glass and ceramics that had clearly built up in historic times. Much of its development

5.1. Excavated features in Area 3 Rear after a deluge on 24 June. The water did not drain away before the excavation was completed.



5.2 (opposite). The full excavation area divided into analytical areas.

was probably due to levelling for the house at 3 Pipitea Street. Numerous features, particularly rubbish pits, were cut into this layer, which was up to 300 mm thick.

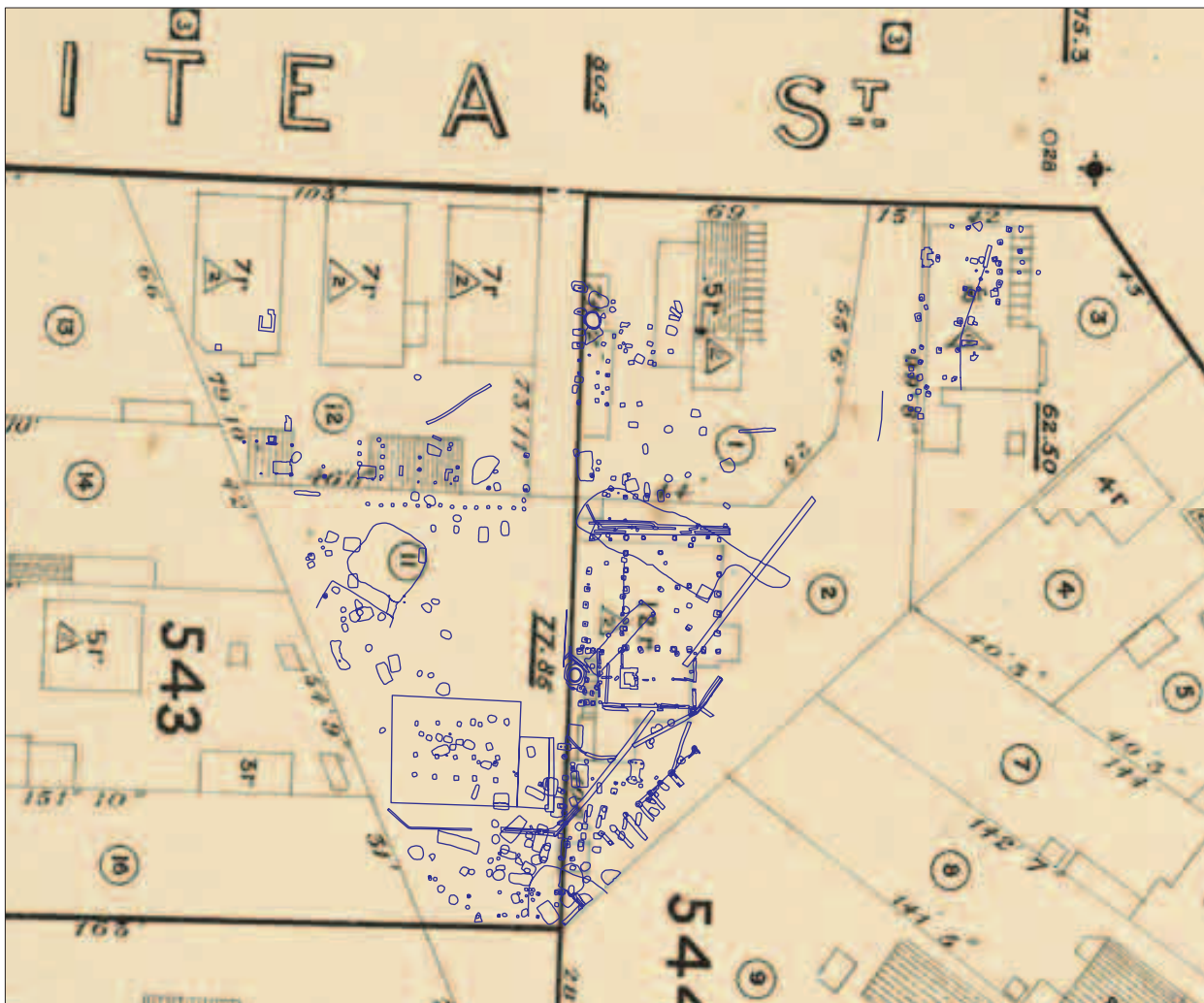
Two other small layers were identified within it: one was a dark artefact-filled lens up to 300 mm thick covering part of the south western corner of the site, thinning out in the east; the other was a mottled yellow lens up to 180 mm thick covering a small part of the south east corner of the site.

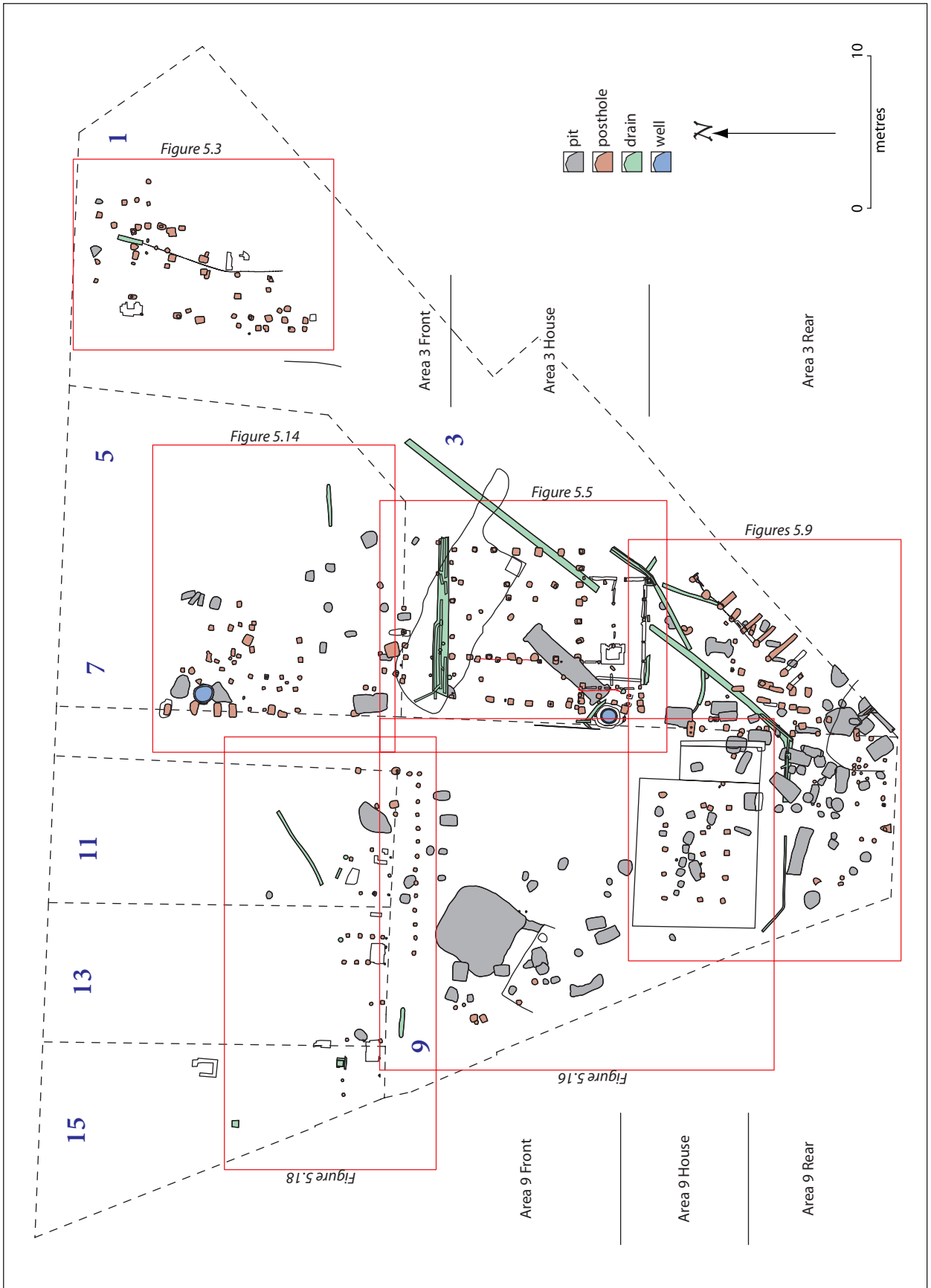
Once this was removed, the natural subsoil was revealed and more features could be seen that clearly predated the fill. Apart from these general layers of fill there was no further stratigraphy other than intercutting features. All the features in the subsoil became visible at the same level.

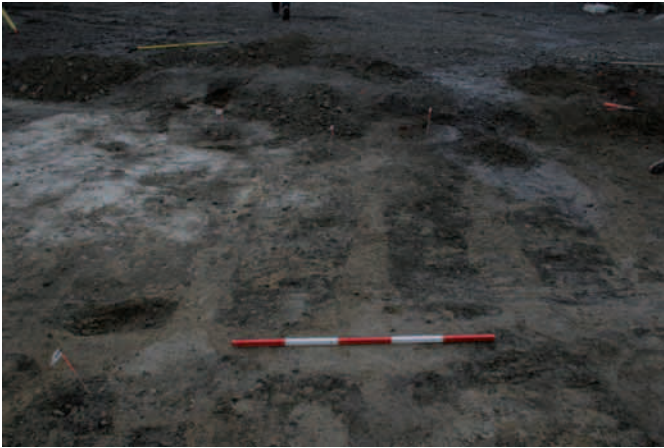
1 Pipitea St

Although rates books record that the Lord Bishop owned part of Town Acre 544 in 1863, it is listed as unoccupied and there is no other historical evidence for a house at that stage. Better records become available in 1871 when the land was brought under the land transfer system and documents list it as issued to the Bishop Charles John Abraham. He subsequently sold the property to James Holt in 1875, who on sold it months later to Salvatore Cemino, who was the first likely occupier. Cemino is listed as having one house on the property until 1882, after which he

5.3. Plan of features at 1-15 Pipitea St, overlain on the 1891 Ward map.







5.4. Postholes in 1 Pipitea Street were cut through a series of shallow mottled rectangular marks, which can just be made out in this photo. The light conditions were poor and features do not show up well. Facing west, scale 1 m.

is listed as having two houses. This second house is probably the one built on 1 Pipitea Street.

Cemino's house was demolished in the 1970s as the bank on which it stands was cut away to make room for the electrical substation on the coastal flat below. The house is shown on the 1891 Thomas Ward survey map and excavation revealed the foundations of the western part of the house as indicated by Ward still in situ – the eastern part was cut away with the bank.

Features in this area were exposed and recorded but were not excavated. These were mostly postholes, many containing the remains of wooden posts. These posts did not make neat, clear alignments in the way that those of the 3 Pipitea Street did (see below), but when the excavation plan is overlain on the 1891 Ward map it can be seen that two rows are in approximate alignment with the western edge of the house and the western side of the stairwell (Figure 5.3).

The postholes had been dug through mottled rectangular features that were shallow areas of disturbed soil (Figure 5.4). It is unclear what these were – they were probably associated with house construction, or perhaps construction of the Bishop's house on the adjacent 5 Pipitea St by at least 1871.

Remains of three brick foundations were also found. Two were on the western side of the house towards the front and back of the house and may have been the remains of outside steps. Another, now on the edge of the bank, would have been roughly in the centre of the house and so was probably the foundation of a chimney.

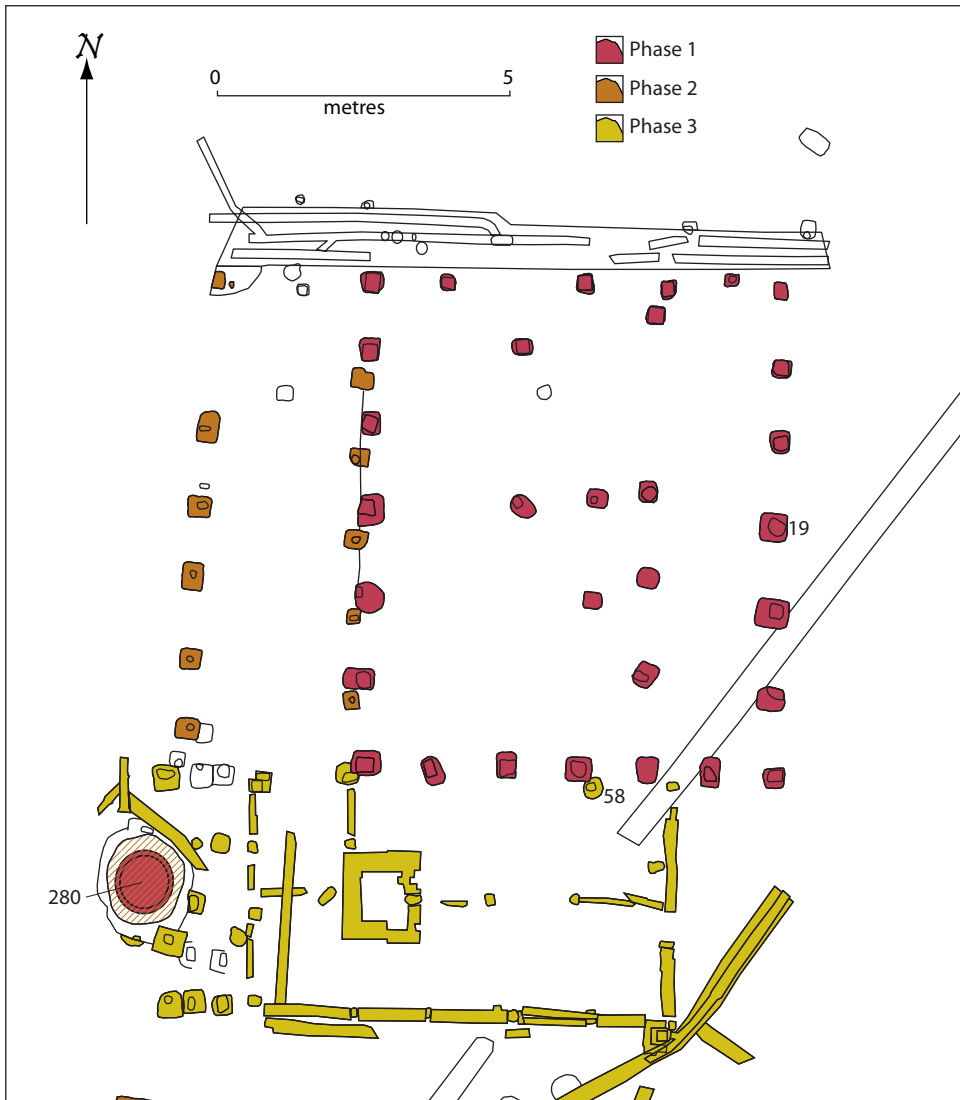
3 Pipitea St Area 3 House

This was the property of John Elisha Smith, mentioned in the rating books of 1863 as having a dwelling on it. A house is shown in the 1891 Ward map (Figure 5.3) and Wellington City archives record that it became the Reardon Guest House by the mid 20th century and was demolished in the late 1960s. Excavation revealed house foundations where the Ward map indicated. Three phases of construction can be clearly made out, though there is no evidence for how soon each phase occurred after the previous one.

Phase 1

The first phase of construction was clearly outlined by a square (7 x 8.3 m) of heavy foundations, with postholes generally 450 x 450 mm containing wooden piles 300 x 300 mm (12 x 12"). Within this were two lines of postholes running north–south. These postholes and the posts in them were smaller than the outside postholes, generally 350 x 350 mm with wooden piles 250 x 250 mm. A post from one of the postholes on the east side of the house, Feature 19, was analysed by Dr Rod Wallace of the Anthropology Department, University of Auckland and found to be totara.

3.5 m south west of this structure was a brick-lined well (Feature 280) 1 m (3') wide and capped with concrete (Figure 5.6). When the cap was removed a 13.5 m deep structure was revealed with 8 m of water in it. The underside of the concrete



5.5. Phases of house construction at 3 Pipitea St, also showing features in Area 3 Front. Features mentioned in the text are numbered.

5.6. The well at 3 Pipitea Street once the concrete cap had been removed. Facing north east, scale 1 m.

cap bore the impressions of wooden planks, showing that planks had been lain over the well to cover it before the concrete was poured on. The construction contractors, Naylor Love, pumped about 5 m of water out of the well to test how fast it refilled (which was very slowly). Looking down the well two wooden beams could be seen incorporated into the wall on the south west side, the highest just above the initial water level and the lowest below it. Another beam of wood lay across the middle of the well, though it is not clear whether this was simply lodged there as the water drained. These presumably served some function during the digging of the well. One brick





5.7. Looking down into the well at 3 Pipitea Street as it was being drained. Two large beams can be seen in the wall of the well and another beam of wood, possibly just lodged there, lies across the middle.

5.8. Topdown composite photo of the Phase 3 extension to the back of 3 Pipitea Street, showing the collapsed subfloor framing.



was sampled from the well and was red in colour, measuring 230 x 110 mm x 70 mm thick, with a narrow rectangular frog. This well is assigned to Phase 1 as it would have been required from the beginning of occupation. It is very close to the later phases and was probably covered over before these were built.

Phase 2

The next phase of the house was a 3 x 8.3 m wide extension to the west, running up to the property boundary. These postholes were generally 350 x 350 mm and the posts were 180 x 130 mm, distinctly smaller than those of Phase 1. Along the western border of the Phase 1 house the ground surface stepped up by 100 mm, which would have

been the edge of the Phase 1 construction levelling. Phase 2 postholes had been added in between the Phase 1 postholes of this westernmost row (Figure 5.5).

Phase 3

The final phase was a 4 x 7.2 m extension on the south end of the house (Figure 5.5). It had brick wall outer foundations and wooden internal piles. Some of the wooden joists and bearers lay where they had collapsed into the floor during demolition (Figure 5.8). Beneath this rubble was a well preserved underfloor deposit of ceramic, glass and bone pressed into the clay. In the centre was the square brick foundation for a fireplace. The bricks had narrow, squared frogs and some were partially glazed. Wood from one of the internal piles (Feature 58) was analysed and found to be totara.

A number of ceramic drains were connected to this part of the building. On the south eastern corner of the building was a brick and metal gulley trap that connected to a drain running south west–north east across the site. Another drain running to the same corner contained only broken fragments of ceramic drain

pipe. On the western side of this part of the house was another, round gully trap with a metal grille. This would have once connected to a disturbed pipe running to the north west. All these drains would have eventually led out to Pipitea Street, but the general pattern of drainage across the entire site was quite disturbed.

All phases showed levelling of the ground surface before construction, and material from the levelling would have been the origin of at least some of the fill layer at the rear of the site. The first two phases of the house sat directly on the clay subsoil, while Phase 3 partly overlay the fill layer.

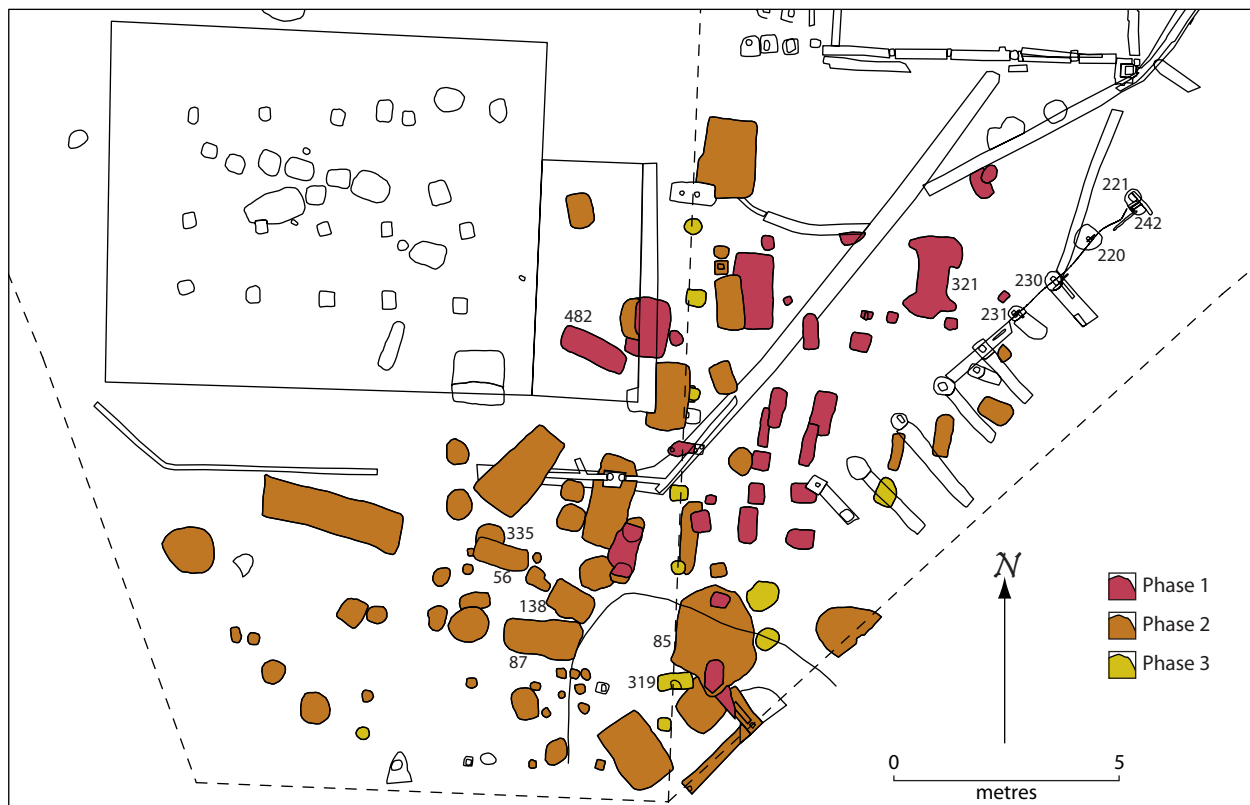
Area 3 Rear and Area 9 Rear

It is clear that the occupants of 3 Pipitea St used the back yard of 9 Pipitea St, a vacant lot up until 1936, for rubbish pits. John Smith had a lease on both properties up to at least 1900 and gardened 9 Pipitea St (Chapter 2). Some of the pits in Area 9 Rear may relate to the occupations of 11–15 Pipitea St after 1881, but most are essentially the same as in Area 3 Rear, with the contents clearly indicating pre-1881 dates. The two areas are discussed here together.

Phase 1

Once the fill overlying the rear of 3 and 9 Pipitea St, derived from the earlier phases of house construction, was removed, the partial remains of an earlier structure were revealed along with several postholes and pits. This is probably the earliest European structure on the site, but it is not complete and it is not clear what it might have been. Two rows of features form rough parallel alignments 600 mm apart, though they are not uniform or regularly spaced. Two of these were rectangular postholes side by side, each with round postmoulds in them and each then

5.9. Phasing of features at Area 3/9 Rear. Features mentioned in the text are numbered.



cut in its south west corner by a narrow trench on the same orientation. At the south of the alignments was another rectangular posthole of a similar size, this time with a square postmould. Other postholes between these were square with flat bases, one with a postmould in the base. These rows of postholes are aligned on neither the street nor the bank.

There was a scatter of other postholes of similar size to the south of this group, as well as a rough alignment of five small square postholes to the north. These formed no clear patterns. There were also four rectangular pits, three of which were clearly rubbish pits, while the other contained no artefacts and was simply a shallow (150 mm) rectangular pit containing mixed, mottled fill.

One pit contained material dating to the 1920s and so cannot have dated to Phase 1. It seems probable that the upper half of the pit was disturbed by gardening or construction of some sort and so did not show up until a lower level was reached. This, firstly, demonstrates the difficulty of phasing in this area and, secondly, that some of the 'fill' may in fact be reworked deposits – removing it with a hydraulic excavator precluded a fine-grained examination.

One unusual feature (Feature 321) probably supported a frame of some sort. Two large, oval postholes were set 850 mm apart in the same 520 mm deep U-shaped trench. Each posthole contained three posts or postmoulds: one central upright with two angled struts supporting it on either side (Figure 5.10). Together they probably supported a freestanding frame, perhaps for a child's swing, or a butcher's gibbet with the pit used for catching blood and offal. Given the lack of clear patterns and alignments in this phase of occupation, it is quite possible that many of the postholes, particularly the apparent alignments discussed above, represent a series of similar frames and supports that would have had specific functions rather than the foundations of buildings. Certainly there seemed to be no substantial structures on site in Phase 1.



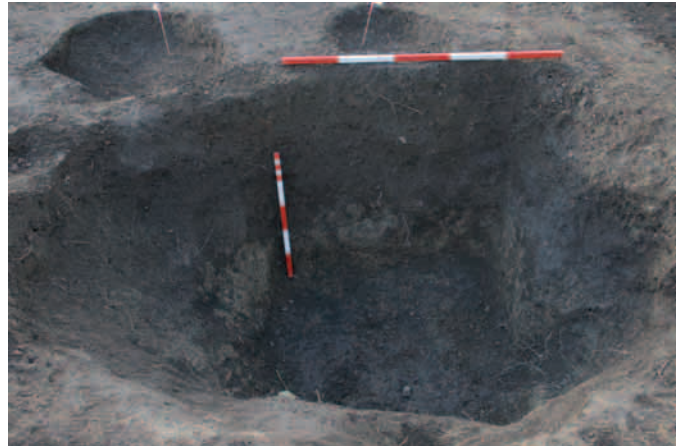
5.10. Frame supports in a U-shaped trench during excavation. Facing south, scales 1 m, 0.5 m (vertical).

Phase 2

The great majority of features in Area 3/9 Rear were cut into the overlying fill (Feature 96). Several features only showed up part way through the fill. Feature 482, which only showed up at the base of the fill, contained material dating c. 1900–1910, indicating that these lower features were not necessarily earlier – the fill had clearly been reworked in places, whether by construction, gardening or tree growth, so that features were truncated.

Two pits, Features 85 and 87, were larger and deeper than any others and might have been longdrops. Feature 85 was 750 mm deep, with a dark, soft fill containing a range of domestic artefacts. It also had an irregular top measuring 2010 x 1710 mm tapering to a regular

square base measuring 900 x 800 mm. If it was a long drop it has been truncated by later activity. Feature 87 measured 1800 x 750 mm and belled out into a round chamber measuring 1070 x 1030 across its circular base. It was 1200 mm deep, which again is not particularly deep for a long drop. The fill was loose, soft, very dark soil containing a small number of late 19th century artefacts. A lot of corroded metal items such as cans were found on the base. Neither pit had any evidence of a surrounding structure, so their identification as longdrops remains uncertain, but certainly they were the only two features that might qualify.



5.11. Feature 85, a possible longdrop and the largest and deepest pit in Area 3 Rear. Facing east, scales 1 m, 0.5 m (vertical).

The other pits were varied in size, contents and fill. Some were no larger than postholes but, containing artefacts but no post or postmould, would seem to be pits deliberately dug to dispose of rubbish. Several contained significant quantities of coal ash as well as bone and artefacts. The acidity of the ash had affected the bone which was quite degraded and much of it could not be recovered for analysis. In the case of Feature 138 rubbish had clearly been burnt in situ, but most of the ash in pits had been dumped there. Feature 335 was a hāngi pit with a layer of stones on the base in a black, charcoal stained soil (Figure 5.12). It was overlain by Feature 56, another rubbish pit. In several other places pits were cut into or overlay other pits, though still cut into the fill layer, indicating the length of time the area had been used for rubbish dumping. In the south west corner of the excavation this fill was up to 300 mm thick and contained several lenses of dumped artefacts.

A group of small postholes, none bigger than 250 x 250 mm, and most containing postmoulds, was found at the back of 9 Pipitea St forming a rough rectangle about 2.8 x 1.8 m. This may be the foundations of a garden shed or similar feature.

A series of seven large, deep postholes formed a line running parallel to the cliff edge and 2–3 m from it (Figure 5.13). Each posthole was at the head of a narrow trench running towards the cliff face, containing horizontal beams up to 300 mm across and the corroded remains of large bolts attaching the beams to the posts. The postholes were linked to each other by another trench, or in some places simply the rotted remains of a board. This fence is associated with the cliff edge, though why it needed to be so strongly built is unclear. It does not seem to have functioned as retaining wall for the cliff as it did not reach that far and anyway the wooden beams in the trenches would have been in tension, and hence had very little strength, if they had been retaining the cliff top.

5.12. Feature 335, a hāngi pit. Facing west, scale 0.5 m.



Phase 3

Although the two backyards were clearly used as a single space for rubbish disposal, there was a fenceline between them which lines up with the lot boundary. Most of the postholes were generally 300–400 mm on a side but Feature 319 measured 800 x 380



5.13. Features (foreground to background) 231, 230, 220, 242 and 221 are aligned on the cliff. Facing north, scale 1 m.

mm and had the mould of a horizontal beam in the base which would have acted as a footer. This fence is a late feature, perhaps as late as the construction of 9 Pipitea St in 1936. Several postholes from this fence cut other features, and none were cut into by later ones.

Three features contained modern material, particularly plastics and AA batteries. While the artefacts from the pits were not retained for analysis, they do demonstrate a continuity of use from the 1860s to the 2000s.

Area 3 Front

In front of 3 Pipitea St was a trench containing three ceramic drains and a gas pipeline. (Figure 3.2). The first of these served the house, with downpipes connecting on the north west corner of the Phase 1 structure. Two drains joined this from 9 Pipitea St, one running parallel for a distance before joining in, the other coming in diagonally from the north. Various episodes of inspection (by breaking a hole in the pipe) and repair are evident. The last drain seems to have replaced these and was not collared. These drains were excavated as they cut the Maori garden soil (Chapter 3), other drains on site were not always examined to the same degree. Along the boundary with 5 and 7 Pipitea St was part of a fenceline.

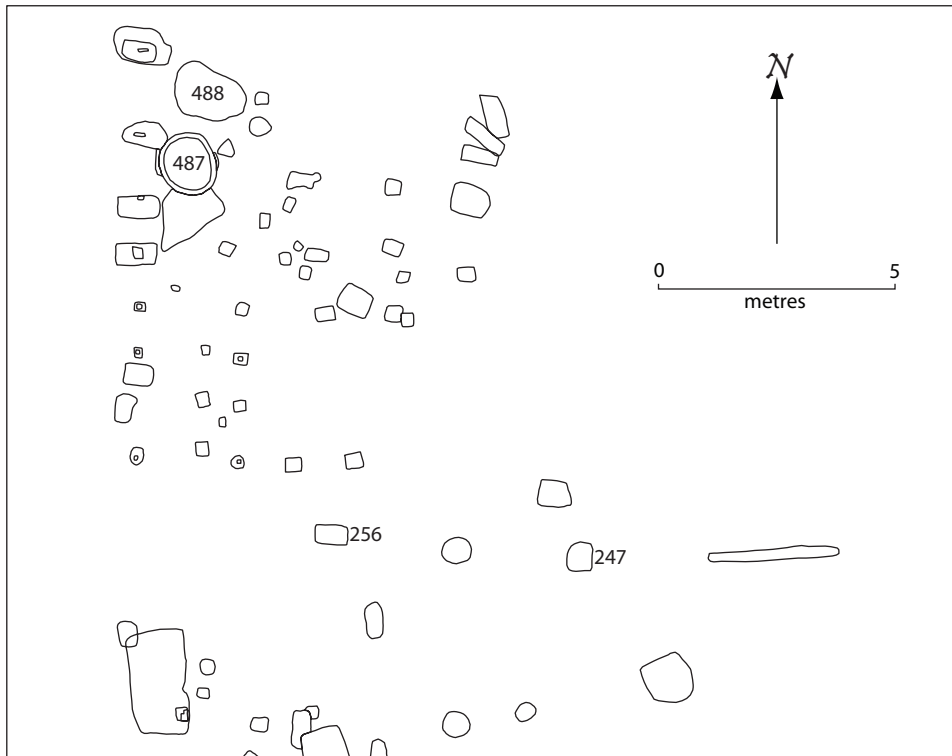
5 and 7 Pipitea Street

The 1863 rating books indicate that Bishop Charles John Abraham, Bishop of the adjacent pro-Cathedral of St Paul's (now Old St Paul's), owned a house on 5 and/or 7 Pipitea Street and that it was occupied by the Reverend J. Thatcher. By 1865 the bishop himself was listed as occupier but this changed in the early 1870s, when it is recorded as leased to other occupiers, one of whom, Sewell, bought the property in 1873.

The area was truncated following the demolition of 7 Pipitea St, which had occurred by at least 1945, as an aerial photo of that date shows an empty lot. The construction of the house on 5 Pipitea St in 1896 indicates that demolition probably occurred before then, perhaps soon after Bishop's Court was built on nearby Mulgrave Street in 1879 for Bishop Octavius Hadfield. Truncation of features would have occurred as the site was levelled for car parking and access ways in the late 20th century. As a result, no clear patterns were observed that could be related to the early house.

Another brick-lined well (Feature 487) similar to that at 3 Pipitea Street had been filled in, and was excavated to a depth of 900 mm. It had been filled with what appeared to have been the underfloor deposit of the former structure, incorporating 1860s–70s ceramics and glass, faunal material but also modern plastics. This fill is presumed to be a result of the levelling that truncated the other features in this area. The 14 courses of bricks that were exposed narrowed at the top and it appeared that the well had been domed or corbelled so that the opening at the top would have been significantly narrower than the main barrel of the well – presumably this would have made it easier to cover.

A line of four large, rectangular postholes marked a fence on the western lot boundary, one of which was excavated. It contained the remains of two posts, one upright, the other angled to form a supporting strut. This showed that these were not foundations, but more likely a fence. One of these fence postholes cut the well.



5.14. Excavated features at 5 and 7 Pipitea St. Features mentioned in the text are numbered.

Of the scattered features in this area, a few shallow truncated pits were excavated. While some contained a small amount of late 19th century material (for example Feature 256 and 247), others such as Feature 488 contained machine-made glass dating from 1930 onwards.

In 1896 a house was built at 5 Pipitea Street for James Ames. This house was removed in 2008 just prior to archaeological investigation. It had heavy concrete foundations. The area where this house had stood was not investigated.

9 Pipitea Street

No house was built on 9 Pipitea Street until 1936 when an Art Deco style house was built for Messrs J.A. and K.S. Ames. This house was demolished in 2008 just prior to archaeological investigation, though the concrete foundation footings remained in situ. The interior wooden piles were also still visible; these were plotted but only one was excavated where it intercut with an earlier feature. Area 9 Rear has already been described with Area 3 rear, as these two areas both contained similar rubbish pits predating the house at 9 Pipitea St, which are presumed to relate to the 19th century occupation of 3 Pipitea St of John Smith.

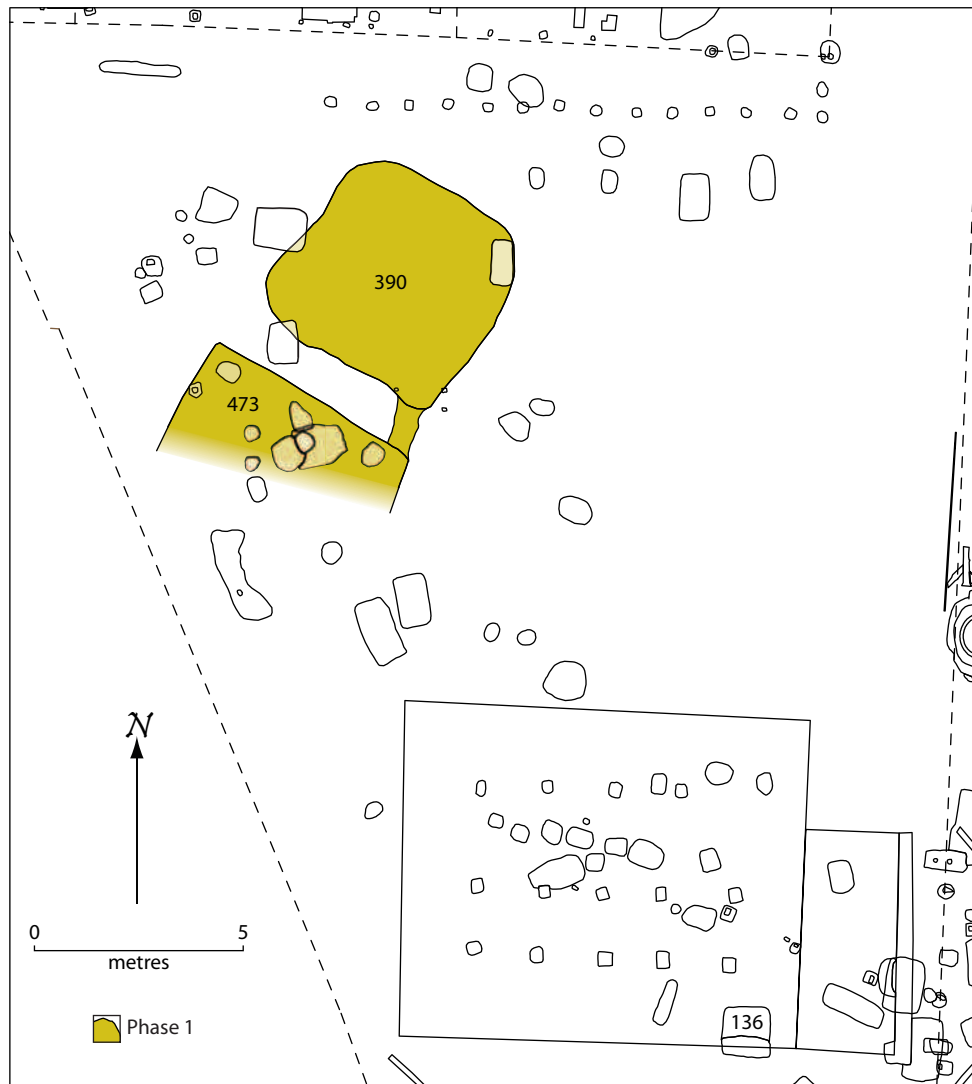
Area 9 House

Underneath the house were 14 rubbish pits containing predominantly early 20th cen-

5.15. The brick-lined well at 7 Pipitea St showing the corbelled structure narrowing as it rises. Scale 1 m.



5.16. Area 9 house and Area 9 front. Features mentioned in the text are numbered.



ture material. The excavated contents were retained for analysis. Several of these formed a rough alignment and were of similar size, shape and contents. They contained household material and three of them each had two amber Bovril jars. These were probably dug successively.

Feature 136 contained very different material. For the top 200 mm it was packed with corroded metal items and layers of charcoal and clay. Beneath this were a large number of pharmaceutical bottles along with parts of a coal range stove (Figure 5.17). The footing for the house partly overlay this pit.

The contents of these rubbish pits were notably later than the majority of nearby pits in Area 9 Rear, but the fact that the house was later built over them is only coincidental.

Area 9 Front

The front of the section also contained a series of rubbish pits, this time with the material appearing to date from the late 19th or early 20th century. These probably relate to the 1881 houses on 11–15 Pipitea St, and show that legal boundaries were largely ignored while 9 Pipitea St remained a vacant lot.

Two large amorphous pits (Features 390 and 473) contained large quantities of material dating to the 1850s and 60s (Chapter 6) and so probably predate any other features in this area – they were cut by several smaller pits containing later material. These have been assigned to Phase 1. Many of the ceramic patterns had no match from other pits and so this material probably did not come from the 3 Pipitea St occupation and it appears to predate the occupation of 11–15 Pipitea St. They do not seem to have originally been dug as rubbish pits and it is not clear how they were filled or what the origin of the material was – it is as likely to have been from 17 Pipitea St next door as anywhere else. Feature 380 also contained the remains of two dogs. The other similar pit was only partially excavated. The two appeared to be joined by a trench but its function was unclear.



5.17. Pharmaceutical bottles in Feature 136. Facing south, scales 0.5 m, 0.25 m (vertical).

A fenceline of 15 postholes 1.5 m inside 9 Pipitea St, generally about 250 mm square and evenly spaced at about 900 mm, shows the owners or residents of 11 and 13 Pipitea St (it wasn't traced as far as 15 Pipitea St) making a semi-formal claim to the vacant land. This fenceline seems to clearly separate the features to either side of it, so this informal division may have lasted for some time.

11–15 Pipitea Street

These three houses were built in 1881 for Henry Barber and he and his family rented them out for at least the remainder of the 19th century (Chapter 4). They were relocated off site in 2008 just prior to our investigation. The footprint of the houses was not investigated and the area immediately behind them was clearly badly disturbed by modern service trenches and car parking – this area was not investigated either.

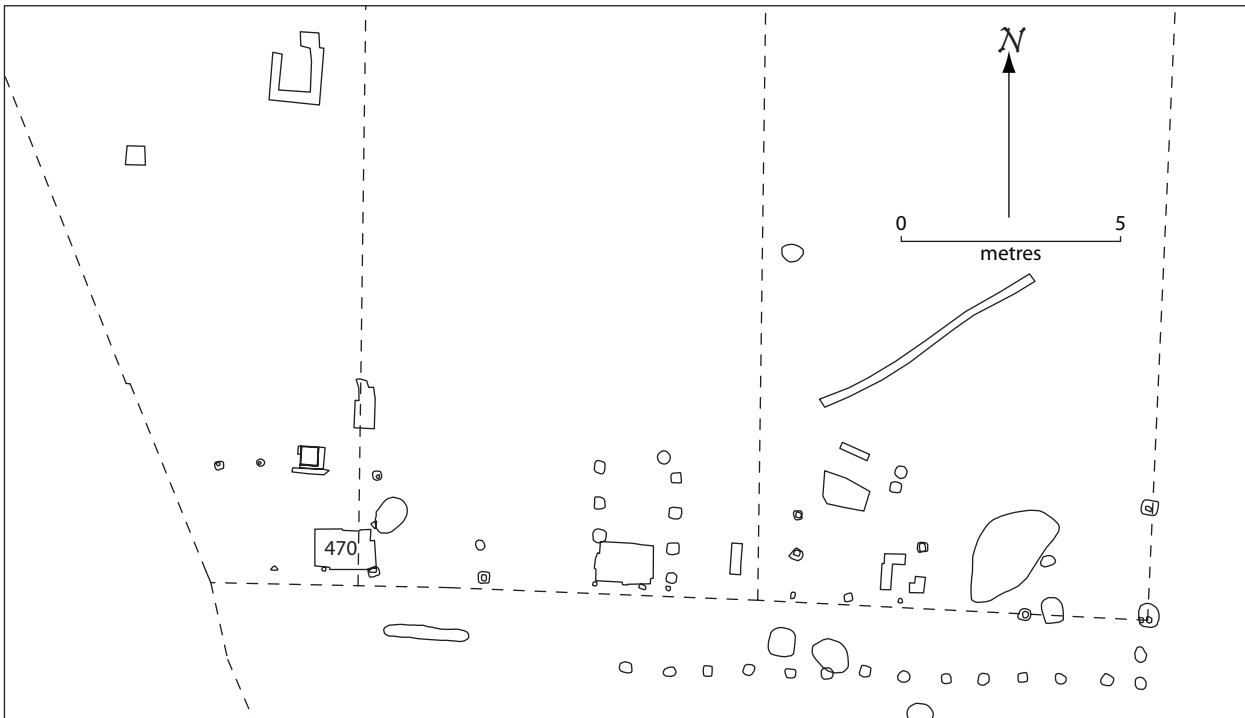
At the back of each property was a section of brick foundation. At 13 and 15 Pipitea St these were rectangular brick pads each measuring 1400 x 930 mm (Figure 5.19). A similar feature behind 1 Pipitea St more closely resembled a small fireplace foundation, with bricks arranged in a square with bare earth in the middle. These features were all regularly aligned within the sections and would have been washhouse copper bases. The washhouse at 11 Pipitea St was partly outlined by postholes and measured at least 3 x 1.9 m, and at 13 Pipitea St at least 3 x 1.7 m. The 1891 Ward map shows outbuildings on these properties, but these do not line up with the archaeological evidence as neatly as the houses do.

Each washhouse had a remnant drainage system. 15 Pipitea St had a square gully trap made of brick and ceramic with a metal grille, damaged but similar to the 'HILL.../ WELLINGTON' gully trap outside the house. The washhouses at 11 and 13 Pipitea St both had matching, but damaged, ceramic gully traps located at the north east corner of each building.

There were few other postholes in this area and none formed regular patterns other than two postholes on the eastern boundary of 11 Pipitea St.

These structures were built on layers of clean fill. Removal of these layers over a 3 x 3 m area revealed a clean clay subsoil beneath them with no features cut into it though it isn't clear if this can be generalised to the whole area.

The south east corner of the yard of 11 Pipitea St appears to have been used as a dump area for ash and refuse, as this material sat in a large scoop – apparently



5.18. 11–15 Pipitea St.
Features mentioned in
the text are numbered.

without a cut – covering an area of 1.5 x 2.6 m. The ceramic and glassware artefacts from this feature dated to the late 19th century.

Pipitea redoubt

Although there is a historic record indicating that Pipitea redoubt should have been located on these properties, probably along the sea cliff edge of 1 Pipitea Street, it was not discovered. It is described by John Waters, who as a boy helped build it and played on it (Chapter 2), as:

5.19. Feature 470,
the brick foundation
within the outline of
an outbuilding behind
15 Pipitea St. Facing
south, scale 1 m.

very close to the cliff above Pipitea ... three sides of an oblong, the longer side facing the sea, the flanks extending back a short distance westward ... the redoubt ditch was 5 feet in depth and the same in width...

Such a structure would have been unmissable archaeologically. Two explanations are possible: either the redoubt was destroyed when the sea cliff was cut away in the 1970s for the electrical substation on the flat below; or, more likely, it was not located on the properties we investigated. Waters' recollection was probably recorded quite a few years later and his memory may not have been accurate. The redoubt is probably in the general area, somewhere along the sea cliff, but it was not where we looked for it.



6 MATERIAL CULTURE

JADEN HARRIS

A large assemblage of artefactual material was collected dating from the early 1860s through to the mid 20th century. All artefacts were catalogued in a separate table in the excavation database (included on the CD that accompanies this report). Methodologies for cataloguing and analysing specific categories of artefacts are discussed under the appropriate section.

CERAMICS

In total 8564 ceramic sherds representing a minimum number of 1351 vessels and objects (excluding bricks and drainpipes) were recovered (Table 6.1). All ceramic sherds were retained from excavated features and units and analysed by form, function, fabric and decoration. For calculating minimum numbers, secure contexts were treated as single assemblages and for other features, sherds were checked with vessels of similar form and decoration to ensure that objects were not counted twice. To assist this process, refitting of vessels was undertaken for all major features.

Vessel form

During analysis ceramic vessels were assigned to both broad functional categories and to individual forms or shapes. Where this was not possible fragments were assigned to more general types, such as cup/bowl.

Tableware

Tableware includes vessels used in the serving and consumption of food and drinks at the table. The most common forms were plates, accounting for 19% of the total ceramic assemblage (258 vessels), cups with just under 19% (255 vessels) and saucers with 15% (204 vessels). Serving vessels are also well represented with 6% (85 vessels) but due to the degree of fragmentation of most vessels few specific forms other than deep sided serving dishes and serving platters could be identified. Most of the jugs have been classified as tableware but many of these could have served equally well in the kitchen, bathroom or bedroom as at the table.

Kitchen/utilitarian

Vessels used in the kitchen for food preparation and other utilitarian tasks tend to be plainer in both form and decoration. Items such as mixing bowls are also of necessity thicker and heavier than bowls designed for use at the table.

Food storage

Vessels used to store and preserve food tend to be undecorated and are almost exclusively jars. Most of the jars are of plain whiteware and typically have a groove below the rim for securing a top or cover. Stoneware jars which most likely contained preserved foods also form a significant minority of food storage vessels. The

Vessel form	Whiteware	Dyed-body	Buff-body	Yellow-body	Red-body	Semi-vitreous	Porcelain	Stoneware	Terracotta	Other	Total
Tableware											
Plate	235					23					258
Cup	127	2				119	7				255
Saucer	91					107	6				204
Bowl	35		1			6					42
Serving vessel	85										85
Mug	26					1	1				28
Eggcup	2					14					16
Teapot	5		13		6						24
Jug	30	4				6	1				41
Drainer	1										1
Plate/saucer	6										6
Plate/serving vessel	2										2
Cup/bowl	18										18
Cup/jug	2						1				3
Bowl/dish	6										6
Bowl/jug	9										9
Mug/jug	5										5
Unidentified	4										4
subtotal											1007
Kitchen/utilitarian											
Bowl	13		3	3		1					20
Baking dish	2			1				1			4
Bowl/dish	9			1							10
Strainer	1										1
Jug			1								1
Lid	1										1
subtotal											37
Food storage											
Jar	19							7			26
Ginger jar										3	3
subtotal											29
Bed/bathroom											
Chamber pot	33										33
Ointment pot	7										7
Ointment/toothpaste pot	11										11
Candlestick	3					1				1	5
Dish	5										5
Jug/ewer	3										3
Wash basin	2										2
Bedpan	1										1
Chamber pot/wash basin	5										5
Chamber pot/jug	1										1
subtotal											73

Table 6.1. Summary of vessel form and fabric, all contexts (minimum numbers) (excludes doll parts and miscellany).

Vessel form	Whiteware	Dyed-body	Buff-body	Yellow-body	Red-body	Semi-vitreous	Porcelain	Stoneware	Terracotta	Other	Total
Other											
Bowl/chamber pot	12				1						13
Bowl/basin					1						1
Bottle								147			147
Miniature teaware							14				14
Lid	2						2	4			8
Vase	1						1				2
Water filter								1			1
Flower pot									12		12
Unidentified	4						2	1			7
subtotal											205
Total	824	6	18	5	8	278	35	161	12	4	1351

Table 6.1. Continued.

three ginger jars were most likely made in China and have a coarse vitrified body and are glazed on the outside.

Bedroom/bathroom

The bedroom and bathroom category includes sanitary wares such as chamber pots and bedpans, as well as ointment and toothpaste pots and other items such as candlesticks used in the private domain of the household.

Other

All other vessel forms are included in this category. The majority of the objects are stoneware bottles which were used for a wide range of products from ginger beer to household cleaning products. Doll parts and feeding bottle tops are not included but are discussed separately below.

Vessel fabric

The methodology for identifying fabrics followed Brooks (2005: 26–35). The majority of the assemblage consists of earthenwares, which are predominantly whiteware. Other refined earthenware bodies are identified as these are often specific to certain forms and functions. Red-body earthenware fabrics, for instance, are most commonly found as teapots, as is the case from Pipitea St. Dyed-body fabrics are also refined earthenwares, although these are often more highly vitrified than whitewares. Semi-vitreous or ‘bone china’ vessels most commonly occur in the form of teawares. True porcelain has a fully vitrified body where there is no discernible break between the glaze and the body of the vessel. Porcelain vessels are rare in the assemblage and almost half (14 of 35 vessels) consist of toy miniature teawares. Stoneware is an opaque fully vitrified fabric which most often occurs in utilitarian forms such as bottles and jars.

Decorative techniques

Transfer printing is the most common decorative technique in the assemblage (Table 6.2). A range of other common 19th century decorative techniques are also represented and a brief description of these is given below. The transfer prints are described and illustrated in Appendix A, which also lists the manufacturers represented on site.

To ensure that all decorative designs were recorded each unique pattern or design which did not have a formal pattern name was given a pattern code, for example PS 001 (for Pipitea Street unidentified pattern 001). Photographs of each pattern or design were taken for reference. This methodology will allow for the Pipitea Street ceramic assemblage to be more fully comparable with other historic assemblages from New Zealand and will aid in the future identification of transfer printed and other designs. Ceramics that were clearly of post-1900 manufacture were assigned pattern codes but were not analysed further.

Edgebanded

This decoration consists primarily of an underglaze coloured band painted around the rim of the vessel. Usually the edgebanding is accompanied by one or more narrow hairlines of the same colour below the rim. Edgebanding is commonly found in New Zealand sites dating from the 1860s through to the end of the 19th century.

Decorative technique	Tableware	Kitchen/utilitarian	Food storage	Bed/bathroom	Total
Transfer printed	541	1		38	580
Edgebanded	67	4		5	76
Gold hairlined*	176			3	179
Sprigged	10				10
Shell edge	3				3
Handpainted	27				27
Dyed body	3				3
Dyed body and relief moulding	4				4
Relief moulding	42	2			44
Slipped/colour glazed	27	8	7		42
Sponged/painted	8			1	9
Printed	18			1	19
Undecorated	81	22	22	25	150
Total	1007	37	29	73	1146

* Includes Tealeaf designs ('other' vessel forms not included).

Table 6.2. Summary of decorative technique by function, all contexts (minimum numbers).

Gold hairlined

Designs incorporating gold or gilt hairlines are found almost exclusively on tea-ware forms, mainly in semi-vitreous or bone china fabrics. Decoration of this type is normally in the form of bands and hairlines but occasionally these are coupled with a decorative motif in the base of the cup or saucer. The most common of these is the Tealeaf design, introduced by Staffordshire potter Anthony Shaw in the 1850s (Kowalsky and Kowalsky 1999: 15). Gold hairlined and Tealeaf china became popular in New Zealand in the 1860s and was widely available from this date (Plowman 2000: 60). The gold hairlines and designs are painted over the glaze, known as enamelling, and due to this technique the designs are prone to wearing off through use as well as post-deposition processes.

Sprigged

Sprigged decoration consists of small blue or purple applied moulded sprigs of forget-me-nots, thistles, grapes and other designs (Brooks 2005: 42). Just ten sprigged vessels are present in the form of semi-vitreous cups, saucers and side plates.

Shell edge

Shell edge decoration is most common on plates and typically consists of an impressed and painted rim. Three Shell edge decorated plate sherds were found from three features. The sherd from Feature 184 (Area 3/2) has impressed curved lines on a scalloped rim and the sherds from Feature 100 and 390 are neither impressed nor scalloped. All three are painted in underglaze blue. While early Shell edge styles were produced from the late 18th century, plainer styles with no impressed design continued to be produced to the end of the 19th century.

Handpainted

Handpainting covers a wide range of decorative styles from minimalist edged designs in single colours to elaborate all over designs in multiple colours. The earliest handpainted pieces in the assemblage are a cup and saucer from Feature 330 (Figure A.21f). Simple underglaze floral designs such as this were produced up to about 1860.

Dyed-body ware

Dyed-body ware refers to the fabric of the vessel and is also a decorative technique in itself. In mid 19th century contexts the most common forms for this fabric are jugs. Four such jugs were recovered, all combining a dyed-body with a relief moulded design. The difference between glazes used on dyed-body ware can be seen between the jug from Feature 258 (Figure A.23a) and the jug from Feature 330 (Figure A.23d). The PS 141 jug has a smear glaze which is produced by smearing the inside of the saggar, rather than the vessel, with the glazing preparation, which vaporizes during firing and settles on the body of the vessel. This produces a very thin clear glaze and “thus works very well with the highly moulded jugs because the glaze does not obscure the detail of the moulding” (Miller 2004). The UCOL 253 jug, a design previously recorded from the Wanganui Hotel site has a clear glaze applied directly to the body, which partially fills in the relief moulded design. The jug from the Wanganui Hotel site had an embossed registration diamond on the base for the date 19 May 1860, which matches a known registration for Lockett,

Baguley and Cooper, 1855–60 (Kowalsky and Kowalsky 1999: 624; Godden 1991: 393). Three of the dyed-body jugs from Pipitea Street were found in early features: Feature 258 (3 Rear/1), Feature 330 (3 Rear/2), and Feature 390 (9 Front/1).

Relief moulding

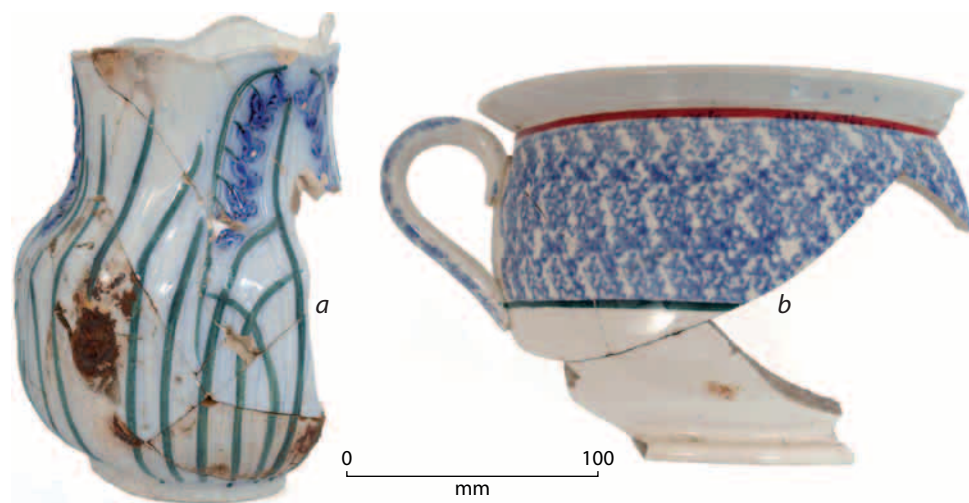
Relief moulding is one of the cheapest forms of decoration as the design is imparted at the same time the vessel is formed. Relief moulding can range from simple designs around the edge of a vessel to all-over patterns. Often moulded elements are found in combination with other decorative techniques, such as on a jug from Area 3 Rear/2 (Feature 330) which uses handpainted underglaze colour to highlight the moulded elements (Figure 6.1a).

Industrial slip and glazed

The most common slipped decoration in mid–late 19th century historic sites in New Zealand is annular decoration. This is where the vessel is decorated with horizontal bands of coloured slip to produce a banded effect. Mocha is also a form of slip decoration. One buff-body bowl from Feature 204 has blue Mocha decoration on a wide white band.

Sponged and painted

Only a handful of vessels in the assemblage are hand decorated with sponged and painted designs. Decoration described as sponged can be applied either by dabbing on colour with a sponge or by stamping with a piece of hard sponge cut to a specific design. Fragments of a chamber pot, PS 057, found in Feature 85 and 72, has a wide blue band around the body created by dabbing on colour in blue, bordered by a red handpainted band at the top and a green band at the bottom (Figure 6.1b). A cup from Feature 390, PS 125, has an abstract design dabbed on with a sponge in blue but without any other handpainted elements. A cup from Feature 330, PS 109, has a cut-sponged design in red and green with a handpainted edgeband in blue.



6.1. a, PS 105 relief moulded and hand-painted jug; b, PS 057 sponged and hand-painted chamberpot.

Printed

Printed is a term used here to distinguish between transfer printed designs and other printed techniques such as lithographic printing. These later printed designs all date from the early 20th century onwards.

Undecorated

Decoration is closely allied to function and vessels such as mixing bowls and jars are commonly left plain. A significant proportion of tableware items are also recorded as undecorated (81 of 1007 vessels, or 8%). Most of these vessels consist of plates, saucers and cups, although some of these may have originally had overglaze decoration which has worn off. Much of the plain tableware also comes from contexts dating to the very late 19th century and more commonly to the 20th century. Undecorated tableware from secure contexts dating to around the middle of the 19th century from New Zealand archaeological sites is rare.

Transfer printed

Transfer printing occurs on 596 vessels from Pipitea Street and accounts for over half the assemblage. In turn, the majority of transfer prints occur on tableware (541 vessels). From the transfer printed vessels a total of 183 individual patterns or designs were identified. Of these 47 were able to be assigned a formal pattern name.

Transfer printing essentially involves the transfer of a design engraved on a copper plate to a bisque fired piece of pottery by means of tissue paper. The pottery is then glazed and given its final firing. For a full discussion of the transfer printing technique see, for instance, Copeland (1980). The most common colour for underglaze printing is blue but by 1828 the technology to produce green, red, brown, purple and black prints had been developed (Brooks 2005: 43). Around the mid 1830s a new technique was introduced where a chemical was added during the firing process which “caused the printed colour to flow outside the original pattern lines and produce a soft, halo-like effect” (Samford 2000: 79). The most common colour for these flown patterns is blue, but black and mulberry were also used.

Children’s ware

Several patterns and vessels in the assemblage were identified in the assemblage as having been specifically designed for children. Plates and mugs designed for children are typically smaller than adult wares and are decorated with childlike scenes often accompanied by a printed title, rhyme or instructional saying. All of the children’s ware from Pipitea Street comes from earlier features, dating to the 1860s and 1870s. The only item of children’s ware not from features at the back of Area 3/9 Rear, relating to the Smith household occupation of 3 Pipitea St, is fragments of a plate from Area 9 Front/1. The children’s wares are described and illustrated in Appendix A.

Pots and potlids

While most commonly employed on tablewares, transfer printing was also used to print labels on toothpaste pot lids, ointment pots and other products. Pots and potlids are described and illustrated in Appendix A.

One Holloway’s ointment pot was found in Area 9 Front/1; two potlids, one for John Gosnell & Co toothpaste and one for Patey & Co Bears Grease, were found

in Feature 258 (Area 3/9 Rear/1); while another Gosnell potlid was found in Area 3/9 Rear/2.

Feeding bottle tops

In the 19th century glass feeding bottles used to nurse infants had removal ceramic tops so that they could be cleaned more efficiently. Most of these bottles were designed by pharmaceutical companies and the tops are often printed with the name of the company. Four feeding bottle tops were found representing two companies (S. Maw Son and Thompson, and Mather's), three from the fill layer in Area 9 Rear and one from Area 3 House.

Dolls

Fragments from several small ceramic dolls were found in contexts across the site (Table C.1). Most of the dolls are rag dolls where the body of the doll would have been made of cloth and stuffed, with only the porcelain head, arms and legs surviving. Other dolls had ceramic bodies, with hinged arm and leg parts. No single context contained all of the parts from a complete doll. Feature 204 has the most parts with one leg and two arms, but all appear to be from different dolls. All of the doll parts are of porcelain apart from one larger whiteware leg from fill at the back of 9 Pipitea Street.

Stoneware

Stoneware is functionally quite different from earthenware and consists almost entirely of utilitarian vessels and containers. Stoneware is a tough, durable, fully vitrified fabric and vessels could be repeatedly reused without deteriorating. A minimum number of 161 stoneware vessels were recorded with over 90% of these (147) being bottles. Stoneware bottles were used for a wide variety of products including beer, ginger beer, spirits, ink and cleaning products. A large number (88) of the stoneware bottles were represented by top and base fragments only and so could not be ascribed to specific functions. Manufacturer marks on stoneware vessels are discussed in Appendix A.

Alcohol bottles

A total of around 20 stoneware bottles were identified that probably originally contained beer. None were recovered complete. Some of the better preserved examples were found in Feature 390 (Area 9 Front/1) which contained a large number of stoneware bottles. Stout bottles were found in two sizes with the larger having bases 85–90 mm in diameter and the smaller 70 mm in diameter. The larger sized bottles were approximately 240 mm high and the smaller size 195 mm. Fragments of porter style beer bottles were also present.

Ginger beer

At least a dozen bottles in the assemblage were positively identified as having contained ginger beer and many more were likely used for the same purpose. All are of the form known as a 'dumpy' with straight sides, a distinct break at the shoulder and squat neck, and a blob top for a cork closure. The only whole example recovered was from fill at the back of 13 Pipitea Street. The bottle is impressed with the

name and trade mark of Wellington aerated water manufacturer George Dixon of Cuba Street (see Appendix B). The bottle stands 172 mm high with a base diameter of 72 mm and dates to around the late 1870s.

Ink bottles

Stoneware ink bottles come in a variety of shapes and sizes. In total 13 bottles were identified that would have contained ink. The most common are small 'penny inks' with seven bottles. Penny inks range in length from 44–55 mm (Table C.2). One of the ink bottles from Feature 136 has a slightly more unusual conical shape. Two bottles from this feature also have partial paper labels with one reading '...LACK [INK]' and the other '... BLACK/... INK/... J. MEE... MANUFA...' (Figure 6.2c). This label is from the firm of W.J. Meek who moved from London to New Zealand in 1886 and by 1887 was manufacturing ink from his business in Dunedin (Tasker 1989: 85). Stoneware bottles were replaced by glass in the 1920s.

Blacking bottles

The most common stoneware bottle type identified was blacking bottles with a minimum of 44 represented. Blacking bottles contained products such as stove blacking and boot polish. Size ranges for whole blacking bottles ranged from small bottles 100 mm in length to large sizes up to 190 mm in length (Table C.3). One small bottle from Feature 136 even has part of the paper label intact and reads 'DIRECTIONS FOR USE/APPLY WITH A PIECE/OF WOOL... THEN/WITH ANOTHER/CLOTH...' (with a further five lines below this illegible) (Figure 6.2d).

Jars

Eight stoneware jars are represented in the assemblage and most of these are probably associated with food storage or preserved foods. The two most notable examples are a large J. T. Morton jar and a smaller Crosse and Blackwell jar from Feature 85 (3 Rear/2). The Morton jar stands 345 mm high with a base diameter of 205 mm. The jar is decorated with a two-tone bristol glaze with a cream body and a tan top. At the top the jar is impressed 'J.T. MORTON/Provision Merchant/107, 108 & 109 Leadenhall St/LONDON.' To the side is another impressed mark for the maker 'POWELL BRISTOL' and a registration date for March 1849. At the bottom of the jar is part of the original paper label. The label is red with white lettering edged in black and measures approximately 110 mm high by 75 mm wide. At the top is the name 'J.T.MORTO[N]' then 'PRIZE MED[AL]/LONDON 18../PRESERV...' followed by his London address (Figure 6.2a). Exactly what type of foodstuff this jar may have contained is not known. The Crosse and Blackwell jar stands 135 mm high with a base diameter 100 mm and is decorated with a cream coloured Bristol glaze. Near the base the jar is impressed with a royal coat of arms device then 'CROSSE & BLACKWELL/PURVEYORS TO THE QUEEN/LONDON' (Figure 6.2b). The rim of the jar is flat and it probably had a matching stoneware lid. Both of these jars most likely date to the 1860s or early 1870s.

The only complete jar was found in fill in the footprint of the house at 3 Pipitea Street. The jar has a two-tone Bristol glaze and stands 125 mm high with a base diameter 83 mm. Near the base the jar is impressed 'PRICE/BRISTOL'. Like the jars from Feature 85 this example may also have once contained preserved foods.

6.2. Stoneware vessels:
a, J. T. Morton stone-
ware jar with partially
preserved paper label;
b, Crosse & Blackwell
stoneware jar.



Miscellany

One other item of note is fragments of a stoneware water filter recovered from the underfloor context of 11 Pipitea Street. Water filters became more popular in the late 19th century with the growing awareness of water borne diseases. The water filter carries the partial embossing '[STI]FF's/[PATE]NT FILTER/HIGH STREET/LAMBETH' and probably dates to the late 19th century.

Other

Fragments of terracotta flower pots are found in most historic sites but rarely provide any information relevant to the site. From fill at the back of 9 Pipitea Street a fragment from the side of a flower pot was found impressed 'H. C. GIBBONS & Co.,/NURSERYMEN/WELLINGTON.' A seed merchant of this name was established in Lambton Quay by the early 1890s but the establishment of a nursery probably came at a later date (*Evening Post*: paperspast.natlib.govt.nz).

Discussion

Out of the assemblage of 1351 vessels recovered around half are from Area 3/9 Rear, relating directly to the occupation of 3 Pipitea St by the Smith household

from the 1860s to at least 1900. A significant collection of 258 vessels also came from the large pits, Features 390 and 473 (Area 9 Front/1). A much smaller number of ceramics were found at the back of 11–15 Pipitea St, and none that can be related to an individual household. All of the ceramics from this area post-dated the building of the houses on sections 11–15 Pipitea St in 1881, with material dating up to the early–mid 20th century. Even less was found in relation to either 1, 5, or 7 Pipitea St.

The earliest ceramics date from the 1860s and continue into the 1870s, which coincides with the beginning of John Smith's occupation. While Smith's house may have been located on 3 Pipitea St, the archaeology confirms that Smith was utilising the adjacent land on 9 Pipitea St, where he had the leasehold, for rubbish disposal as well as gardening.

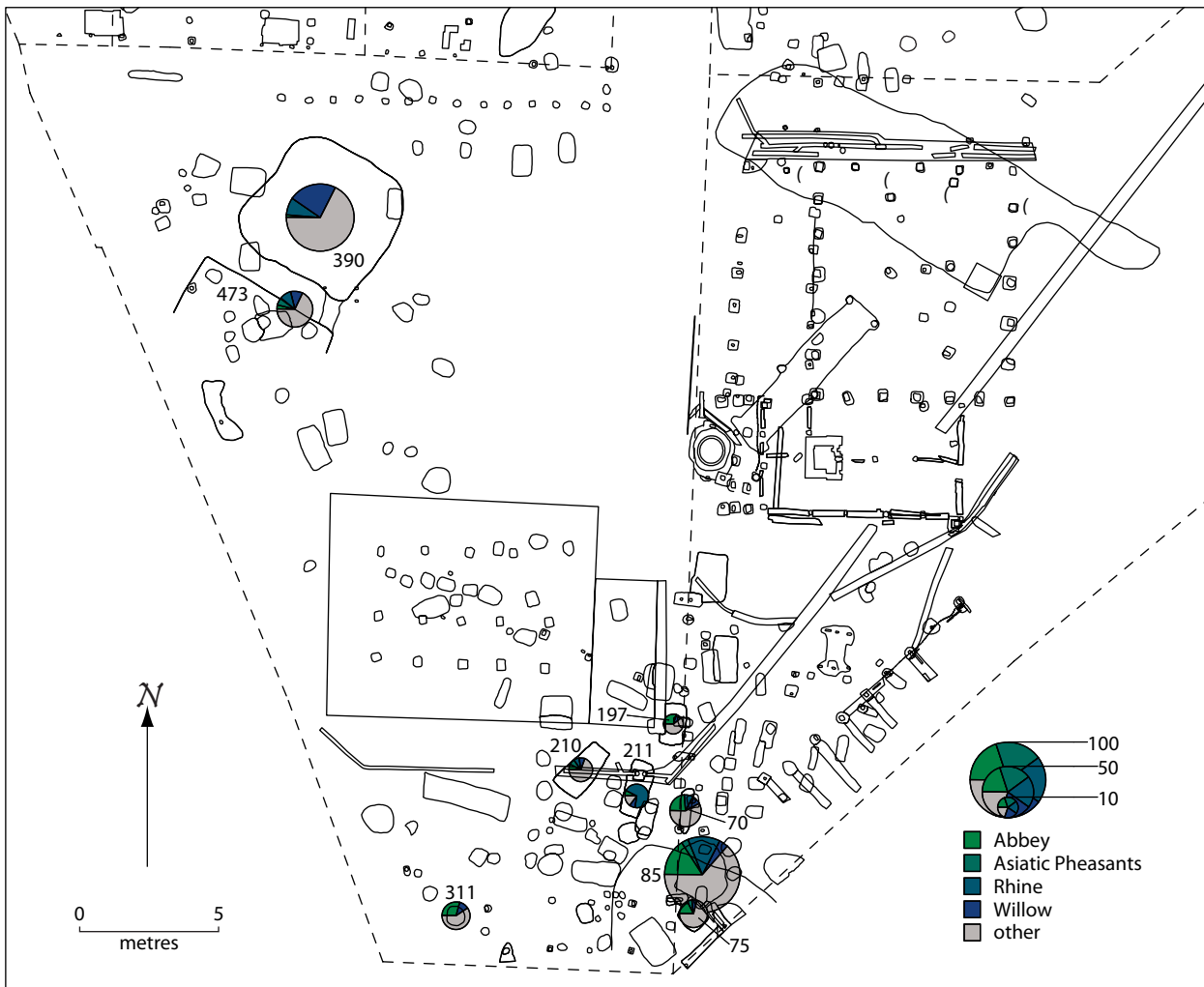
Willow (MNI = 65) and Rhine (49) are the most common patterns overall, followed by Abbey (45) and Asiatic Pheasants (24). All of the 42 Abbey vessels in grey come from contexts in Area 3 Rear/2 (Figure 6.4, distributions of these patterns are tabulated in Appendix A). Feature 85 has the most Abbey vessels with 16, followed by Feature 330 (6) and Feature 70 (5). All of the vessels are in the same design, by an unknown maker, and a full range of tableware from serving vessels to plates is represented. Abbey, then, would appear to have been purchased as a set by the Smith household in the late 1850s or early 1860s. Rhine was probably also in service during the early years of the household with 13 vessels from Feature 85 and 9 from Feature 210. However this was unlikely to have been purchased all at one time, as differences in the quality of the prints and backmarks suggest that three or more manufacturers are represented. The Rhine vessels also include different forms, such as deep sided serving dishes, which are not found among the Abbey vessels.

Other early ceramics are also represented by multiple vessels, implying the purchase of small sets (all relating to Area 3 Rear/2). Three Geneva side plates, all by the same unidentified maker, were found: three cups and three saucers in Rouen (A); three cups and three saucers in Star; and two plates and a serving bowl in Swiss Cottage. Interestingly while the Star cups and saucers are all printed in blue, the Rouen (A) cups and saucers are in blue and purple, with two blue and one purple cup and two purple and one blue saucer. All of these small sets date from the 1860s.

A large ceramic assemblage such as this is clearly related to a domestic household, but while John Smith is identified in the historic record, there is little infor-



6.3. Stiff and Sons
stoneware water filter.



6.4. Distribution of main transfer print patterns, where $NISP \geq 10$.

mation available regarding his household. We know he married Lilia McHardy in Wellington in 1858, but little else. The presence of a number of items of tableware specifically designed for children shows that he and Lilia had a family. Three children's plates and five children's mugs were found in four Area 3 Rear/2 pits. These items date to the 1860s suggesting that if they did not already have children by 1863, they did soon after. Doll parts from several features relating to Smith's occupancy also indicate the presence of children (Table C.1).

Two cross-joins between features were noted during analysis, confirming the relationship between rubbish pits across the back of 3 and 9 Pipitea St. One example is a Livesley, Powell and Co blue Abbey saucer, with one half found in Feature 85 and the other in Feature 311 (the features are 9 m apart). Another was a child's mug printed with one of Dr Franklin's Maxims, recovered from Features 85 and 180. Many of the other ceramics were quite fragmented making the identification of possible cross-joins difficult. For example, out of the minimum number of 42 grey Abbey vessels none were able to be fully reassembled or any joins made between features. Even so, the recovery of the same patterns across the back of both 3 and 9 Pipitea St indicates continuity of occupation.

A few small rubbish pits with material dating from the early 20th century onwards in this area show that occupants of 3 Pipitea St after John Smith's death in 1900 continued to dispose of rubbish in the backyard (his wife survived him, but

we have not traced the 20th century occupation of 1–15 Pipitea St in any detail). This may account for some of the disturbance to earlier rubbish pits.

In the area at the front of 9 Pipitea St the largest collection of ceramics came from two large, irregular pits (Feature 390 and 473, Area 9 Front/1). Feature 390 was fully excavated with a minimum number of 210 ceramic items. Of these 128 vessels were whiteware, 73 stoneware bottles and jars, six semi-vitreous vessels, one porcelain item and three refined earthenware vessels. Feature 473 was a similar sized feature but was only partially excavated with the recovery of 47 ceramic items.

These two features do not seem to be related to the Smith occupation of 3 Pipitea St or of the sections fronting onto Pipitea Street. The pattern of rubbish dumping is similar to the fill in Area 3/9 Rear, but different to every other feature on the site and the majority of the material appears to be relatively early, dating to no later than the 1860s. A good illustration of this difference is that a number of transfer printed patterns are unique to these two features. Nightingale and Patras are present in both Feature 390 and 473, while Milan and Antique only come from Feature 390. Of the unidentified transfer printed patterns recorded from Pipitea Street, 40 are only found in Features 390 and 473. Most of these patterns are represented by fragments, with just one vessel, a chamberpot (PS 001), able to be reassembled. The stoneware bottles also show a high degree of fragmentation, with just a few of over 70 individual vessels able to be reassembled. The only stoneware item recovered whole was a penny ink. The glassware from Feature 390 was also very smashed up, with even robust black beer tops and bases broken in to multiple fragments.

The dates for the ceramics suggest that most of the rubbish accumulated in these features around the 1860s or 1870s at the latest. There are no securely dated artefacts dating to before or after this date. If the pits had been open in the 1850s it would be expected that earlier styles of ceramic, such as shell edge, would be present in greater numbers. Just one fragment of shell edge plate was recovered from Feature 390. The majority of the ceramics and other artefacts from Feature 390 were found in a thin layer at the base of the pit with largely sterile fill over the top, suggesting that dumping of rubbish occurred over a short period.

During the 1860s most of 1–15 Pipitea St was bare land and so it is not likely that the rubbish originated from this source. One possibility is that the rubbish may have been dumped in these features from adjoining households and businesses towards Mulgrave Street. Research into the history of these sections was not conducted as part of the present project and anyway would be unlikely to pinpoint the source of this material.

In the rest of 9 Pipitea St and along the back of 11–15 Pipitea St a number of ceramic artefacts were recovered from small rubbish pits and fill contexts. In Area 9 House several small rubbish pits were excavated containing ceramics and other artefacts dating from the first decade of the 20th century right up to the time the house was built in 1936. For example Feature 83 contained a Crown Devon 'Royal George' vase that could not have been made until 1924 (Figure A.22i). Many of these rubbish pits may have been related to the same household as vessels in the transfer printed pattern Phoebe were found in several features in this area. Phoebe was produced around 1900–1910 and is most likely related to households at 11–15 Pipitea St. None of the rubbish pits in 9 Front or at the back of 11–15 Pipitea St contained a great deal of ceramics. The dates for ceramics ranged from the late 19th century through to the 1930s and beyond. All of the artefacts from these later features post-date the building of houses at 11–15 Pipitea St in 1881.

A small quantity of ceramics collected from the underfloor contexts of 11–15 Pipitea St shortly before the houses were shifted shows a similar picture. A few fragments of late 19th century material such as Willow and Asiatic Pheasants transfer

printed sherds were recovered but also 20th century material. A John Maddock and Sons mug from the underfloor context of 13 Pipitea St dates from the 1920s.

Even less in the way of ceramics or other artefacts was recovered from 1, 5, and 7 Pipitea St. A few small rubbish pits were excavated at the back of 5 and 7 Pipitea St, with none containing significant numbers of artefacts. The most complete vessels were a whole (albeit broken) George Jones Medici pattern bowl from Feature 259 and a red edged banded saucer from Feature 256. Fragments of Willow and Asiatic Pheasants patterned ceramics from other features suggest that the rubbish from these features dates from the 1860s to the late 19th century. Apart from modern building materials there is no evidence that domestic rubbish was dumped in this area after the construction of the house at 5 Pipitea St in 1896.

GLASSWARE

A minimum number of 1297 items of glassware is represented in the Pipitea Street assemblage. Diagnostic glass was collected and retained from fill layers during machine stripping and from all excavated secure contexts. Diagnostic glass includes the tops and bases of vessels as well as any embossed glass. Items which were clearly of 20th century manufacture were recorded in the field and discarded. All retained glassware was transported to Auckland for detailed laboratory analysis. Glassware was catalogued according to form and function, with details of embossing or information on vessel manufacture also recorded. Glassware from fill layers across the site was catalogued but is not discussed further unless no other examples were found from fixed contexts. Window glass was retained from secure contexts only and was weighed and discarded.

A small amount of labelled glass and whole bottles was also recovered. Where this was encountered the artefacts were conserved immediately. Cleaning involved removing as much dirt as possible with a soft brush and water, without compromising the integrity of the surviving label. Artefacts were then left to dry and the labelled portion sprayed with a matt finish fixative lacquer to prevent the label from drying out and flaking off. At least three coats of lacquer were applied to each label. All labelled bottles and fragments were photographed after cataloguing for reference.

Alcohol

Alcohol bottles typically make up the greater proportion of historic glassware assemblages in New Zealand. Bottles that contained alcohol are easy to identify and alcohol was consumed at all levels of society. The occupants of Pipitea Street were no exception with alcohol bottles found in most features.

Black beers

Black beers are the most common alcohol bottle in the assemblage with a minimum number of 316. Black beers are made of dark olive coloured glass, which when held up to the light appears almost black. Most black beers would have been imported into New Zealand from Britain containing beer, but occasionally they were used for other products as well. From the Wanganui Hotel site in Wanganui, fragments of two black beer bottles were recovered with 'Lemon Syrup' labels (CFG Heritage report in preparation). Once empty, such bottles could also have been reused domestically for any number of purposes. The large numbers of them that are found discarded, however, suggests that recycling was not particularly common and bottles used for anything other than beer represent a very small minority.

Category	Type	MNV	Total
Alcohol			
	black beer	316	
	case gin	75	
	champagne	30	
	cognac	23	
	ring-seal	70	
	spirit	28	
	crown-seal beer	1	
	other	17	
	subtotal		560
Condiments			
	salad oil	34	
	pickle	18	
	sauce	48	
	vinegar	2	
	coffee and chicory	8	
	aqua glass	20	
	clear glass	8	
	brown glass	14	
	subtotal		152
Pharmaceutical			
	castor oil	9	
	vial	30	
	perfume	10	
	sarsaparilla	5	
	schnapps	2	
	aqua glass	88	
	clear glass	54	
	brown glass	3	
	blue glass	2	
	cobalt blue	3	
	subtotal		206
Aerated Water			
	aqua glass	7	
	Codd patent	16	
	Hamilton patent	14	
	Maugham patent	4	
	crown-seal	5	
	subtotal		46
Miscellaneous			
	jar	14	
	ink	12	
	aqua glass	119	
	brown glass	6	
	clear glass	77	
	green glass	11	
	blue glass	4	
	milk-glass	4	
	window glass	(1597 g)	
	subtotal		248

Table 6.3. Summary of glassware from Pipitea Street (all contexts).

Category	Type	MNV	Total
Table Glass			
	tumbler	48	
	stemmed glass	24	
	glass	5	
	bowl	2	
	miscellaneous	7	
	subtotal		86
	total		1297

Table 6.3. Continued.

Apart from their distinctive colour, black beers come in two basic shapes in both quart and pint sizes. The only large bottles recovered whole were of the squat variety, which have relatively large base diameters proportionate to their height. The two squat quarts from Feature 390 stand 253 mm tall with base diameters of 90 mm (ratio 1:2.8). The only complete example of the taller version, a pint from Feature 63, stands 248 mm high with a base diameter of 65 mm (ratio 1:3.8). Both of these common black beer types have rounded shoulders, with a bulge neck and hand finished tops (Figure 6.5).

6.5 Black beer bottles.



Bottle manufacture attributes can be used to help date black beers and other bottles. Using Feature 390 (Area 9 Front/1) as an example, which had a minimum number of 158 black beers, 104 of the 142 bottle bases were produced with a pontil. The other bases were either moulded or were too fragmentary for manufacturing technique to be determined. A pontil was an iron rod which was forced up into the base of the bottle to hold it while the top was being finished. The most common form of pontil mark is a conical indentation in the base of the bottle. From the 1850s onwards new technology was developed which held the bottle around the body and so the base profile from bottles produced by this method is formed in the bottle mould. New technology did not replace the old overnight however, and bottles with potentially early attributes can be found in contexts right through to the end of the 19th century. Even so, this suggests that Feature 390 is a relatively early feature, which is reinforced by its archaeology and ceramic assemblage.

Embossed black beers

Occasionally black beers are found embossed on the base with the name of the bottle manufacturer. Many of these manufacturer's marks remain unidentified but

the history of some companies is well documented allowing bottles to be securely dated. All identified marks on black beer bottles from New Zealand sites have been related to British glassworks. Information on embossings found on black beer bottles from Pipitea Street is included in Appendix B.

Case gin

Case gin bottles, with their distinctive square shape and tapering bodies, were developed by the Dutch for exporting gin around the world. Dutch gin was advertised and marketed in New Zealand as 'Geneva' or 'Jeneva' (Tasker 1989: 47). Like black beers the glass colour is usually a dark olive and the tops of the bottles are hand finished. Earlier case gins have distinctive flared out tops referred to as 'pigsnout' gins. Bottles with this type of top were produced up to about 1875 (Tasker 1989: 48). From around the mid 19th century another type of top was introduced which has a conical shape. Of the 48 case gin tops recovered, 15 are of the pigsnout variety and the rest conical. Only two case gin bottles in the assemblage were found complete, both with conical tops. One from Feature 63 is 252 mm tall with a base 63 mm wide and the other from Feature 292 stands 270 mm tall with a base 67 mm wide. None of the case gin bases have pontil marks and all were produced in a mould. Two brands of Dutch gin were identified from embossed bottle fragments: Hoytema & Co; and John de Kuyper and Son (Appendix C).

6.6. Alcohol bottles (b-d ring-seal bottles):
a, case gin bottle;
b, champagne style bottle;
c, cognac bottle;
d, small champagne bottle.



Ring-seal bottles

Ring-seal bottles are so called due to the ring of glass applied just below the top which forms an anchor point for the cork to be wired down. Ring-seals are typically tall cylindrical bottles which have a deep indentation in the base with a small central dome or mamelon. Bottles with this form come in three main styles: Champagne, Cognac or Bordeaux, and Hock. Tops and bases which could not be attributed to one of these shapes were simply recorded as ring-seals.

Champagne

Champagne bottles are made of green glass and come in both large and small sizes. Examples are illustrated in Figure 6.6b and d, with the large bottle standing 303 mm tall with a base diameter 93 mm and the smaller bottle 255 mm tall with a base diameter 73 mm. While originally designed for champagne in France, this type of bottle was also used for beer and other products from the late 19th century.

Cognac

Bottles that most likely contained cognac are quite different from champagne bottles and come in the Bordeaux shape. The example in Figure 6.6c, from Feature 311, stands 300 mm high with a base 77 mm in diameter. The colouring of the glass is generally much lighter and thinner than for champagne style bottles and the tops are more crudely finished. Bottles in the Bordeaux shape in aqua coloured glass were also used for other spirits.

Hock

Hocks are tall narrow ring-seals which have a small base diameter proportionate to their height. They were first developed in Germany around 1830 for sparkling wine. Just one 19th century example was found, a brown glass top from 9 Pipitea St. One 20th century machine-made hock in aqua glass was found complete during machine stripping of 3 Pipitea St. The bottle stands 370 mm high with a base diameter of 73 mm. Both of these bottles could have held wine or other alcohol.

Spirits

Tall aqua glass bottles normally contained spirits such as gin or whisky. Two seals from such bottles confirm that at least some of the bottles from Pipitea Street did contain gin. The seals are embossed 'BOOTH & CO/SUPERIOR/No 1/GIN/55 COW CROSS' (Figure 6.7h). Both were found in early features (Features 258 and 390) and this brand has been dated from the Casselden Place site in Melbourne to the period 1850–1860 (Davies 2006). Whisky could also come in aqua glass bottles as shown by an aqua glass stopper from Feature 390 embossed 'J. GILLON/LEITH'. A dark olive glass base 90 mm in diameter from Feature 136 embossed 'P.DAWSON/DUFF TOWN GLENLIVET' is also from a whisky bottle.

Condiments

Condiment bottles contained food, flavourings and oils. In the middle of the 19th century fresh foods such as meat and vegetables could be procured locally but

many of the pickles, salad oils and sauces were imported from Britain. All of the 19th century bottles are in aqua glass and hand finished.

Salad Oil

Salad oil was essentially olive oil used as a dressing at the table. Salad oil bottles are typically tall slender bottles often with some form of moulded decoration. The most common decorative type in the assemblage is the 'twirly' style bottle such as the example from Feature 197 (Area 9 Rear/2) illustrated in Figure 6.7c. The bottle stands 290 mm high with a base 59 mm in diameter. Smaller size bottles are more common, such as one 240 mm tall with a base 43 mm in diameter, with a part label, from Feature 136 (Figure 6.11d). Most of the 'twirly' salad oil bottles in the assemblage would have come from the London condiments manufacturer J. T. Morton, but it was not unknown for competitors to copy or closely match bottle styles to cash in on the success of established brands.

Nine other salad oil bottles are decorated with vertical flutes or ribbing down their sides. All of these bottles come from early features in Area 9 Front/1 or 3 Rear/2. Six of these bottles have an embossed registration diamond on the base, which does not appear to represent an actual registration mark. It is possible, as mentioned above, that the condiments manufacturer who had these bottles made may have been copying a design already established by another company. The one whole example from Feature 330 stands 205 mm tall with a base 50 mm in diameter (Figure 6.7a). Two other fragmentary salad oil bottles from Feature 390 are of the bell or genie type. Both fluted and bell/genie types are more common around the middle of the 19th century.

Pickles

Pickles and chutneys were widely consumed in Victorian times to accompany meals. Pickle bottles and jars have wide tops, usually around 40–60 mm in diameter, to accommodate a wide range of preserved foods. No pickle bottles were found complete. The most common form for pickles in the assemblage is a bottle with a square base and a wide round top with a hand finished band or rolled rim. Fragments of two such bottles were recovered from the fill in Area 3 Rear and three from Feature 390.

Sauces

In the 19th century sauces like pickles played an essential role in adding flavour to meat dishes. Meat played a large part in mid-late 19th century diets and it is no surprise that people wished to add a little sauce to things. Lee and Perrin's Worcestershire sauce, Holbrook's, and Mellor's are all represented (Appendix B).

Vinegar

Vinegar bottles are similar in style to salad oil bottles but are much larger and consequently of heavier construction. Fragments of just two bottles which may have held vinegar were recovered. The most complete is from Feature 473 (Area 9 Front/1) which has just the top missing. The bottle has a base 70 mm in diameter and if complete would stand 300 mm tall. The bottle is decorated with vertical flutes down the neck and shoulder and has small vertical ridges around the base of the body. One other fragment from a large bottle with an octagonal base from Feature 63 is also probably from a vinegar bottle.

6.7. Glass bottles: a, miscellaneous condiment; b–d, salad oil; e, Hawthaway's Peerless Gloss shoe polish; f, John Gosnell and Co toiletry bottle; g, The Phoenix Aerated Water Co Codd; h, Booth and Co seal from a gin bottle; i, ink bottle with registration mark for 17 January 1872; j, octagonal penny ink with burst/shear lip.



Coffee and chicory

Coffee and chicory was a liquid essence used from the mid 19th century through to the 20th century as a means to produce instant coffee. Chicory was derived from the roots of a plant native to Europe, *Cichorium intybus*, which when roasted and ground was used to strengthen the flavour and bulk of coffee. From the 1860s both imported and locally produced brands of coffee and chicory were available. Feature 136 had the remains of six coffee and chicory bottles from two different brands. The bottles all have square bases between 50 and 53 mm and hand finished tops. Five of the bottles were from the British firm of Thomas Symington and Co. All of the bottle fragments have part of the usual embossing found on this brand which if complete would read 'SYMINGTON & Co//ESS COFFEE & CHICORY//EDINBURGH.' One other bottle is from a Wellington manufacturer. The preserved embossing reads 'CREASE'S COFFEE/ESSENCE//...INGTON NZ.' Edwin Crease established a coffee and spice works in Old Customhouse Street, Wellington, in 1867 (Tasker 1989: 98). All coffee and chicory bottles date to the late 19th or early 20th century.

Miscellaneous condiments

Several other condiment bottles in the assemblage were able to be identified to a particular product or brand. The remains of five bottles in a bright aqua green glass most probably contained capers. The most complete example from Feature 63 had a base 50 mm in diameter and a top approximately 32 mm in diameter. Bottles of this type are known to have contained capers as shown by a labelled example found at the Blomfield House site in Russell, from manufacturer J. T. Morton (personal observation); and another labelled example from the Wellington Inner City Bypass investigation (CFG Heritage report in preparation). The bottle from Blomfield House was 172 mm high with a base diameter of 48 mm and rim diameter of 32 mm.

The only brown glass condiment bottles identified were fourteen Bovril bottles from Areas 9 House and 9 Front. Bottles were found in two sizes, two ounce and four ounce. All are machine-made and are embossed on the sides with the size and 'BOVRIL/LIMITED.' Six bottles are embossed on the base UGB which was a glassworks conglomerate formed in Britain in 1913 (Toulouse 1971: 510). Bovril was a beef based meat extract marketed worldwide by the Bovril Company established in 1889 (www.unilever.ie/ourbrands/foods/bovril.asp). By 1892 it was already available from Wellington grocers (*Evening Post* 9 May 1892: paperspast.natlib.govt.nz).

Pharmaceutical

Pharmaceutical bottles can come in all shapes and sizes but many share common attributes such as the type of top and neck finish and certain types of product were more likely to come in particular shaped bottles. These characteristics and common types are well described by, for instance, Fike (1987: 7–17) and Tasker (1989: 3–34, 71–83). Typically, pharmaceutical bottles are small to medium sized containers in aqua or clear glass with carefully finished tops. Many of the medicinal bottles found are plain generic containers, where the original contents or producer can only be guessed at. Most of these would once have had paper labels but in most archaeological contexts these do not survive. Bottles with remnant paper labels are discussed separately below.

The more informative bottles are those which carry embossing on either the body or the base that conveys information about either the manufacturer of the



bottle or the product it contained. Of particular interest to this site are bottles from local Wellington chemists and pharmacies. Glass containers were recovered representing five local Wellington chemists dating from the late 19th–early 20th century.

H BRITTAIN/CHEMIST/WELLINGTON

One aqua glass base 50 x 26 mm from Feature 136 carries this embossing down the front. Henry Brittain established his pharmacy on Lambton Quay next to the Supreme Court in January 1875 (*Evening Post* 7 January 1875). Chemists at this time had a much wider role than they do today, including providing dental services and veterinary supplies. By 1915 Brittain was still in business and advertising from a Manners Street address.

... MEE/...HE GOVERNOR/...NGTON

George Mee took over the pharmacy business of E. Plummer in 1880. One fragment of an aqua blue glass panel bottle with this incomplete embossing was found in Feature 387. The bottle fragment also has embossed marks down the side for measuring out the correct dosage. George Mee advertised himself as ‘chemist to his Excellency the Governor’ (Figure 6.9). He was still running a chemist on Lambton Quay in March 1914 (*Evening Post* 27 March 1914).

PLUMMER/CHEMIST/[WEL]LINGTON NZ

One aqua base 60 x 35 mm with this embossing on the front was found in Feature 210. The chemist of E. Plummer was on Lambton Quay opposite the government buildings and was established at least by November 1877 (*Evening Post* 1 November 1877). A notice in the newspaper in October 1880 announced that George Mee had just taken over the business of Mr. E. Plummer, chemist, Lambton Quay (*Evening Post* 13 October 1880). In another notice published in the same month E. Plummer thanks the ladies and gentlemen who have patronised his business over the previous four years (*Evening Post* 21 October 1880).

W. SALEK/CHEMIST/WELLINGTON

William Salek established his business at the Glen-Ara Pharmacy in Willis Street, Wellington, in June 1900 (*Evening Post* 9 June 1900). One clear glass bottle, 140 mm high with a base 42 x 21 mm, was found in Feature 136 (Figure 6.8b). On the base of the bottle is a manufacturers mark ‘W.T. & Co/U.S.A.’ This stands for Whitall-Tatum and Co, a company established in 1857 and the mark was used up to 1935 (Toulouse 1971: 544). Another more fragmentary example was found in the same feature. Salek was still in business in August 1912, but no references could be found after this date (*Evening Post* 7 August 1912).

6.8 (opposite).
Pharmaceutical
Bottles: a, Dunbar
Sloane, Wellington; b,
W. Salek, Wellington;
c, partial Kempthorne
and Prosser label; d,
Partial George Wilton,
Wellington, label; e,
Langton Bros cod liver
oil; f, Eno’s Fruit Salt; g,
Barry’s Tricopherous; h,
lemon essence bottles
with part Kempthorne
& Prosser labels; i,
lemon essence with
part label; j, plain
pharmaceutical bottle;
k, Kruse’s Magnesia
with part label.

6.9. George Mee
advertisement, 1881
(*Evening Post* 10
January 1881)

GEORGE MEE
(Late E. PLUMMER),
CHEMIST TO HIS EXCELLENCY THE GOVERNOR
LAMBTON QUAY, WELLINGTON.

PARTICULAR attention paid to the Dispensing Department. All prescriptions and Family Recipes carefully prepared. The prescriptions all systematically copied, numbered, and returned.

The Extensive Stock is of a Superior Description, being imported direct from the most celebrated houses in the trade.

HOMOEOPATHIC MEDICINES,
GUARANTEED GENUINE.

A large assortment of these Popular Medicines just to hand, ex Khedive, direct from Messrs. Leath and Toss, including Family and Pocket Cases; also, the latest works on the subject.

AMERICAN HERBAL REMEDIES AND BOTANIC DRUGS.
Five cases of the above, ex Ingeburg, from New York, in splendid condition; all this season's gathering. Lists on application.

India Rubber, Air, and Water Cushions, Hot-water Bottles, Ice Bags, Enema and other Syringas, Breast Pumps and Relievers, Feeding Cups, Bed Pans, &c., for the use of invalids.

Trusses, Elastic Stockings, Knee-caps and Anklets, Riding Belts, Abdominal Supports and Chest Expanders.

PERFUMERY, TOILET BRUSHWARE AND COMBS.—The finest stock of any retail house in the colonies. Elegant and useful presents. Inspection invited.

All the leading English, American, Colonial, and Continental Patent Medicines, &c. Ships Medicines Chests Re-fitted on the Shortest Notice.

Leeches and Sponges. Agent for Cooper's Sheep Dipping Composition.

Orders per Post or Telegraph forwarded without delay, securely packed.

ADDRESS:— **GEORGE MEE, Late Plummer,**
Opposite Government Buildings, Lambton Quay, Wellington.

**IF YOU ARE RUN DOWN
THROUGH OVER-WORK OR
SUFFERING FROM BRAIN-FAG
TAKE A FEW DOSES OF**

**SLOANE'S COMPOUND SYRUP
OF HYPOPHOSPHITES.**

... IT WILL MAKE A NEW MAN OF YOU.

In Bottles, 2/6 and 4/6.

//////

PREPARED ONLY BY

DUNBAR SLOANE,
DISPENSING CHEMIST,
215, Lambton Quay, Wellington.

6.10. Sloane's compound syrup of hypophosphites advertisement (New Zealand Free Lance 16 April 1904: paperspast.natlib.govt.nz).

*DUNBAR SLOANE/DISPENSING/
CHEMIST/THORNDON/PHARMACY/
WELLINGTON/N.Z.*

One near complete clear glass bottle, 150 mm high with a base 61 x 37 mm, with this embossing was found in fill in the area of 9 Pipitea St (Figure 6.8a) and a more fragmentary example from Feature 136 on the same property. Dunbar Sloane was issued a certificate to operate as a pharmaceutical chemist in Wellington in June 1901 (*Evening Post* 12 June 1901: paperspast.natlib.govt.nz). Sloane's 'Thorndon Pharmacy' was located on Lambton Quay opposite the government buildings. One of his personally concocted products was 'Sloane's compound syrup of hypophosphites' (Figure 6.10).

Perfume and Toiletry Bottles

Perfume bottles are typically small clear glass containers that are carefully finished. Several embossed examples were recovered, mainly from 20th century contexts. The only perfume or toiletry bottles that relate to 19th century occupation are two John Gosnell and Co bottles from Feature 330 (the fill of Area 3 Rear). Information on individual companies is included in Appendix C.

Other Embossed Pharmaceutical Bottles

Various other embossed glass containers were found from contexts across the sites and are discussed in Appendix C. Like the perfume bottles, few of these relate to the early occupation of 3 Pipitea Street.

Aerated water

Several local Wellington aerated water manufacturers are represented in the assemblage mainly through embossed Codd patent bottles, but most date from the 20th century and none are from particularly secure contexts. The earliest aerated water bottles are likely to be the imported Hamilton and Maugham patent bottles.

Codd patents

The Codd Patent was introduced in 1872 and quickly came to dominate the aerated water bottle market (Tasker 1989: 60). Codd Patents had a specially designed neck which contained a glass marble which was forced up against a rubber ring by internal gas pressure when the bottle was filled. The success of this new patent meant that the older Hamilton and Maugham bottles were largely superseded by the 1880s. Codd's were in turn replaced by crown-seal bottles in the 1920s.

Hamilton patents

The Hamilton Patent was an early 19th century response to the problem of corks in aerated water bottles drying out allowing the pressurised gas to escape. The result

is the distinctive 'torpedo' shaped bottle which has to be stored on its side, ensuring that the cork remains moist and provides a tight seal until opened. The broken remains of fourteen Hamilton bottles were found with eleven from Feature 390.

Maugham patents

Fragments of three Maugham Patent bottles were recovered from Feature 390. The Maugham Patent has a rounded end and, like the Hamilton Patent, was designed to lie on its side to keep the cork moist.

Table glass

Glass tableware is usually made of clear glass and includes everyday items such as drinking tumblers and stemmed glasses as well as decorative bowls and dishes. In total 49 glass tumblers were found with all but four having fluted sides. Feature 85 had the most with 13 and Feature 210 was next with seven. Relatively plain pressed tumblers such as these were produced from 1830 and through into the 20th century (Jones 2000: 225). The stemmed glassware showed more variation among the 24 examples found. Standard wine glasses with plain bowls were present along with more fancy glasses, some with patterned bowls, others with tall narrow bowls for sparkling wines. Feature 390 had the most stemmed glasses with six, representing five slightly different styles of glass.

Fragments of several bowls and dishes were also recovered, although the exact form of most vessels was not able to be reconstructed due to examples being very fragmentary. Feature 85 yielded the remains of one bowl, one covered dish, one dish or lid and dish or bowl. One bowl apiece was found in Features 70 and 390.

Miscellaneous

Various other glass bottles and containers were recorded which do not fall into the main categories above.

Ink

Ink came in both stoneware and glass containers of which there are a wide variety of forms. Glass ink bottles tend to have more variation as this medium lends itself better to more intricate designs. In total 12 glass ink bottles were identified. The most common glass inks are small bottles which can be round, square, rectangular or octagonal. These small bottles typically have a burst or shear lip, created either by a bubble being blown in the glass and burst to detach the bottle from the blow-pipe or by cutting the glass with a pair of shears. This produces a rough rim which to the untrained eye may look as though the top is broken but is in fact how the bottle was originally finished. One small clear glass bottle, 75 mm high and 48 mm in diameter, from Feature 136 (Area 9 House) is embossed around the shoulder 'WINDSOR & NEWTON LONDON ENGLAND.' One smaller clear glass bottle, 42 mm high by 38 mm in diameter, with the same embossing was found in fill in the same area. The Windsor and Newton ink bottles have neat hand finished cork closures rather than shear or burst lips. Windsor and Newton products were advertised in New Zealand from at least the 1870s but these examples probably date from the early 20th century.

A more unusual bottle was an aqua glass example, 100 mm high with a base 77 mm square, found in Feature 70. Like smaller inks the top is a burst or shear lip and there are plenty of bubbles in the glass which indicate hand manufacture. On one side of the bottle is an embossed registration diamond for the date 17 January

1872 (Figure 6.7 – I). This means that the unique design of this bottle was registered to prevent it from being copied. The bottle would have been produced at sometime shortly after this date.

Poison

Three bottles in the assemblage have warning against ingesting the contents embossed on the body. These bottles could have contained poisonous cleaning products or pharmaceutical products designed for external use only. One whole cobalt blue bottle, 107 mm high with a hexagonal base 34 mm wide, from fill overlying the edge of Feature 390 has ‘NOT TO BE TAKEN’ embossed down the side. The panels to either side of this warning are also vertically ribbed to provide a warning to anyone picking up the bottle in the dark. The base is embossed ‘MADE IN JAPAN.’ The bottle is hand finished and probably dates to around 1900. A brown glass bottle, 128 mm high with a hexagonal base 45 mm wide, from Feature 101 is embossed the same with ribbed panels to either side of the warning. Another brown glass bottle, 113 mm high with a base 46 x 26 mm, from fill at the back of 15 Pipitea St, is similarly embossed ‘NOT TO BE TAKEN’ down the front. The brown glass bottles are both machine-made and probably date from the 1930s or later.

Other Embossed Glass Containers

Several other products were identified from embossed containers and are described in Appendix B. Products range from household cleaners, to shoe polish and sewing machine oil.

Bottle labels

Most glass containers would have originally had paper labels proclaiming details of the contents and the manufacturer or distributor. A total of 19 glass bottles from Pipitea Street carried remnants of the original paper label. Fifteen examples came from Feature 136, three from Feature 482 and one from Feature 74. A large J. T. Morton stoneware jar from Feature 85 and four stoneware bottles from Feature 136 also had partially preserved paper labels. None of the labels are well preserved but the presence of a great deal of ferrous metal in the fill of Features 136 and 482 may have aided in the preservation of the labels.

From Feature 136 four small clear glass bottles 80 mm high by 40 mm in diameter carried partial ‘ESSENCE OF LEMON’ labels (Figure 6.8j). At the bottom of the label the manufacturer ‘Kempthorne Prosser and Co, New Zealand Drug Company Ltd’ can be identified. Kempthorne, Prosser and Company was formed in Dunedin in 1870 and in 1879 they established the New Zealand Drug Company Ltd (www.dnzb.govt.nz/DNZB/alt_essayBody.asp?essayID=1K8). Two other items relate to this company. One is a whole rectangular clear glass bottle 127 mm high with a base 45 x 25 mm has a part label ‘...MPHORN PRO.../NEW ZEALAND/DRUG COMP...’ and the other is a fragment of clear middle glass with ‘...LAND/...PANY LTD’ (Figure 6.8c and Figure 6.11j). The base of another clear glass bottle 65 x 38 mm has part of a label from a local Wellington chemist. Little of the label can be made out but the name is George Wilton and at the base is ‘CUBA’ and ‘WELLINGTON’ (Figure 6.8d). George Wilton was advertising from Cuba Street premises in 1900 (Evening Post 30 May 1900: paperspast.natlib.govt.nz).

Two of the other labels are on Worcestershire sauce bottles. One, on an aqua base 60 mm in diameter, is for Holbrook’s and the other on a whole aqua bottle 185 mm high with a diameter of 53 mm is for Lea and Perrins (Figure 6.11a and c). One



0 100
mm

6.11. Bottle labels (a–c, Worcestershire sauce): a, Holbrook's with part label; b, Mellor's with part label; c, Lea & Perrins with part label; d, salad oil with part label; e, Jeye's Fluid with part label; f, ink with part label; g, George Dixon ginger beer bottle; h, blacking bottle with part label; i, ink with part label; j, bottle with part label; k, bottle fragment with part Kempthorne and Prosser label.

other nearly complete 'twirly' salad oil bottle 240 mm high with a diameter of 43 mm has a poorly preserved label which cannot be identified (Figure 6.11d).

Two other bottles have remnants of label of which little can be made out but can be identified to brand through embossing on the body. One of these is a brown glass bottle 157 mm high with a base 61 x 30 mm embossed down the side 'JEYES FLUID' (Figure 6.11e) and the other is an aqua base 70 x 40 mm embossed 'KRUSES/PRIZE MEDAL/MAGNESIA' on the opposite side from the label (Figure 6.8i). Three other miscellaneous small aqua glass bottles 67 mm high by 32 mm in diameter have fragments of label. The best preserved example has a figure in a blue jacket and red and white striped trousers standing to one side, but no lettering can be made out (Figure 6.11g).

From Feature 482 one whole aqua glass Worcestershire sauce bottle 190 mm high by 53 mm in diameter was recovered embossed with the name 'MELLOR & CO WORCESTOR' as well as part of the original label (Figure 6.11b). An aqua base 58 mm in diameter also had part of the embossing and label from Holbrook and Co. Three other middle fragments from Worcestershire sauce bottles were recovered from this feature with remnants of label. The only other labelled bottle was a small clear glass bottle 84 mm high by 37 mm in diameter with the wording 'ESSENCE OF LEMON.' The label is different to the Kempthorne Prosser and Company examples described above. At the bottom of the label the place of manufacture is identified as Dunedin but the name of the firm is not preserved.

Despite the relatively poor condition of most of the bottle labels from Pipitea Street a few general points can be made. The first is that all of the labels seem to represent the original contents of the bottle. For example the names of the firms embossed on the Worcestershire sauce bottles all match the fragments of label. Another example is with small clear glass bottles like those in Figure 6.8j, which are known to have contained essence products and five such bottles from Pipitea Street have labels confirming the contents as lemon essence. There is no evidence of any recycling of competitors bottles such as from the Halfway House Hotel site, Cromwell Gorge, where a sauce bottle embossed 'Mellor & Co' was found with a label from the Dunedin firm 'Fraser and Coping' (Bedford 1986: 41). In another example two black beer bottles from the Wanganui Hotel site, Wanganui, were found with 'Superior Lemon Syrup' labels, which is clearly not what the bottles were originally manufactured for (CFG Heritage report in preparation).

Window Glass

Fragments of window glass were recorded from most features across the site but were not systematically collected. From features where window glass was collected this was weighed and discarded. In total 1507 grams of window glass were recorded.

Discussion

As with the ceramics the glassware assemblage can be separated out into items from features relating to the Smith household occupation of 3 Pipitea St (Area 3/9 Rear/2); the early pit features (Area 9 Front/1); and later items relating to the properties fronting onto Pipitea Street (Areas 1, 5, 7, 11, 13 and 15).

The glassware associated with the Smith household comes from the same features as the ceramics. Virtually all of these features relate to Area 3/9 Rear/2. From most of these features there are notably fewer items of glassware than ceramics. For example Feature 85 has MNVs of 236 for ceramics and 92 for glassware; Feature 311, 33 for ceramics and 19 for glassware; and Feature 330, 90 items of ceramics and 59 of glassware. The proportions of different types of bottles are also interest-

ing, with alcohol being the most common followed by condiments, then pharmaceuticals. The percentage of alcohol bottles overall however is not high, with alcohol only making up more than fifty percent of glassware from one feature. This was Feature 63 which had a glassware MNV of 20 with alcohol making up 65% (13), condiments 30% (6) and miscellaneous 5% (1). Nine of the alcohol bottles were case gins (including one pig-snout dating prior to 1875) and the other four were black beers. This pit would appear to date to the early phase of Smith's occupation. For other features the proportion of alcohol is much lower. From Feature 85 (MNV 92) alcohol accounts for 49% (45) and condiments 8.7% (6). From Feature 330 (MNV 59) alcohol accounts for even less at 40.7% (24) and condiments 25.4% (15).

These figures for alcohol are lower than is commonly recovered from domestic households from this period. The pattern of bottle types changes after John Smith's death in 1900. Feature 482, which dates 1900–1910, had a glassware MNV of 69. Of these 29% were pharmaceutical (20), 27.5% condiments (19), and just 11.6% alcohol (8). Putting the contents of this pit in perspective with the early features relating to the house at 3 Pipitea St, it seems that while alcohol consumption was not very heavy during the 1860s and 1870s, from the 1900s even less was consumed.

From the early Area 9 Front/1 Features, 390 and 473, an entirely different pattern of consumption is evident when looking at the glassware. Feature 390 contained a total of 282 items of glassware and Feature 473 contained 38. For Feature 390 alcohol dominates the glassware accounting for 78.7% (222), followed by aerated water 5.7% (16), condiments 3.5% (10), and pharmaceutical 2.8% (8). The proportion of alcohol to other products is more in line from what one would expect from a commercial establishment such as a hotel, rather than a domestic context. For example from the Victoria Hotel site, Auckland, alcohol made up 80% of glassware (Brassey and Macready 1994). From the Wanganui Hotel site, Wanganui, alcohol made up 76% of glassware (CFG Heritage report in preparation). Many of the 73 stoneware bottles from Feature 390 may also have originally contained beer or other alcohol.

The manner in which the glassware and ceramics have been disposed of in these pits is also suggestive of a commercial dumping event. The bottles are smashed to pieces and were concentrated in a layer at the base of the pit, with clean fill containing few artefacts over the top. Despite the degree of fragmentation it seems clear that most of the bottles at least were whole before they were thrown into the pit – the disparity between the number of black beer tops (158) and bases (142) is only 16, which is not significant.

Like the ceramics, the glassware suggests a date for this event sometime in the 1860s or early 1870s at the very latest. Of the 26 case gin bottles represented nine are of the pig-snout variety, more common in mid 19th century contexts. Manufacturing evidence from black beers also points more towards a mid 19th century date. The same is true of the glass aerated water bottles which consist of 13 Hamilton Patent and three Maugham Patent bottles. The only other early glass aerated water bottle found in a fixed context was the base of a Maugham Patent from Feature 211 (Area 9 Rear/2). The most telling point is that no later style aerated water bottles, such as the Codd Patent introduced in 1872, were found in features from Area 9 Front/1. Many of the stoneware bottles, which date to the mid 19th century, would also have contained aerated water products such as ginger beer. Another early marker, fragments of a 'black horse' embossed black beer, which was a design registered in the 1850s, was found in Feature 506 a trench associated with the 9 Front/1 features.

Glassware from other features around Area 9 House and at the back of 11–15 Pipitea St all post-date 1881 through to the 20th century. Like the ceramics, glassware from this area cannot be attributed to any particular occupation, but there are similarities between several of the features. Several features contain small brown

or amber machine-made Bovril bottles, all dating from 1910 onwards (Areas 9 House and 9 Front). Three of these features also contain Phoebe transfer printed ceramics, which as noted in the discussion of ceramics above, indicates the rubbish has originated from a single household.

Feature 136 (9 House) has a slightly different composition among the 109 items of glassware recovered. Pharmaceutical products are the most common with 45.9% (50), then household and miscellaneous 26.6% (29), condiments 16.5% (18) and lastly alcohol 11% (12). The majority of the glass bottles date to the period 1900–1910. The only other rubbish pit which has a similar proportion of pharmaceutical products is Feature 12, which was a small pit dating to the 1930s on 11 Pipitea St. These two features are quite different from the earlier 1860s and 1870s rubbish pits associated with John Smith's house and Area 9 Front/1.

Even less in the way of glassware was found in association with 5 and 7 Pipitea St than for ceramics. The few items recovered from small rubbish pits and features at the back of these properties indicate domestic refuse from the 1860s to the late 19th century. Early items include the top of a Hamilton Patent aerated water bottle found in Feature 256. In Feature 13, which was a drain made from black beer bottles, the presence of a C. W. Brodie Codd Patent bottle (dating from 1888) indicates that activity continued in this area almost right up to the construction of a new house at 5 Pipitea St in 1896.

CLOTHING HARDWARE

Clothing hardware is here used to describe all fastenings and fittings associated with clothing and footwear. This can also include the pieces of clothing and material themselves, but these rarely survive in archaeological sites and were not recovered from Pipitea St.

Buttons

A small collection of just 19 buttons were found in secure contexts (Table C.4). Mass produced buttons in all of the materials represented in the assemblage were available from the middle of the 19th century. The ceramic buttons are all of porcelain and more technically known as 'Prosser' buttons. Richard Prosser patented a process for producing high quality ceramic buttons in 1840 (Sprague 2002: 111). Two composite buttons are largely made of brass with a shank at the back and a dome of milk-glass set into the front. All of the other buttons are either 4-hole or less commonly 2-hole sew-through varieties.

Eleven of the buttons came from Area 9 Front/1 (Feature 390). Five brass buttons are of a size likely to have been used on trousers or other general clothing, two bone and one shell button on lighter clothing such as shirts, and three Prosser buttons most likely come from underclothing.

Buckles

Only one buckle that was most likely used on clothing was found in Feature 390. The buckle is a single framed brass buckle with an iron tang and is quite narrow measuring 44 mm in length and just 13 mm wide.

Footwear

The recovery of organic materials such as leather footwear is variable from site to site and from Pipitea Street the preservation of such items is best described as poor.

Most boots and shoes are represented only by fragments from the more heavily constructed portions of the footwear such as the heel and sole. The distribution of footwear from secure contexts based on the minimum number of pairs is outlined in Table C.6. The determination on whether a pair of footwear belonged to a child or adult is based mainly on size, with estimated sizes below 180 mm deemed to have belonged to children. In cases where the length cannot be measured or estimated the width can be used for the same purpose. Although some of the footwear may have consisted of shoes the fragments that survive point to most having been boots.

Where size can be determined 21 of 30 pairs of footwear belonged to adults, four to children and five could not be identified. The small sample and the poor preservation mean that little of meaning can be taken out of the distribution of footwear. Manufacturing evidence is likewise obscured by most parts of the shoe not surviving. Where heels are present all are constructed from four to five lifts of leather joined with iron and copper nails. Copper nails are more prevalent in sole fragments than iron nails. Leather footwear could have been imported from Britain or from the mid 19th century may have been produced locally.

PERSONAL

The most common items recovered in the personal category are objects used everyday such as clay pipes. Other more expensive items may become incorporated into the archaeological record when they are either no longer serviceable or through being lost.

Smoking

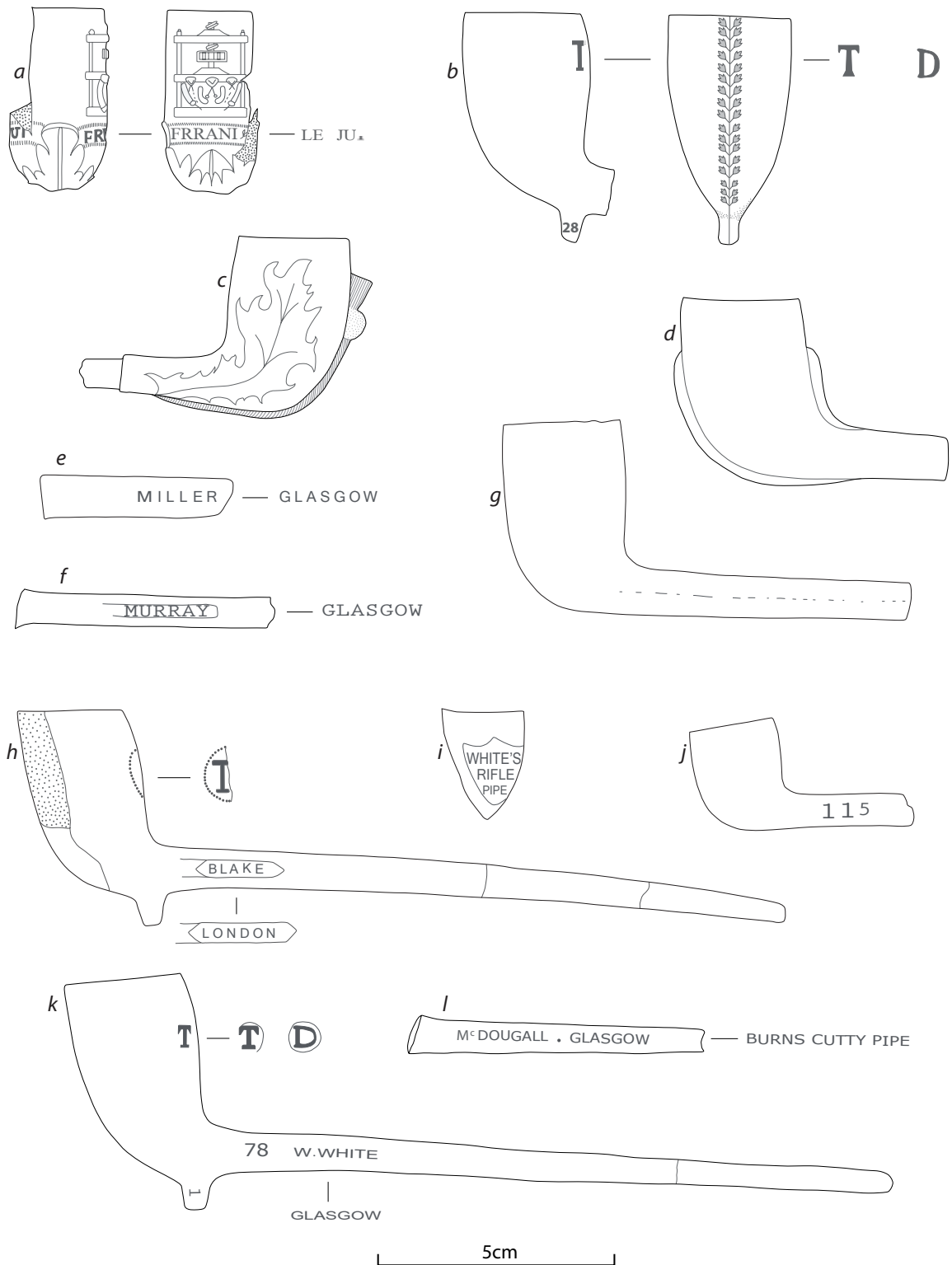
The most common evidence for the smoking of tobacco encountered in the archaeological record is in the form of broken or discarded clay pipes. Clay pipes were relatively cheap and so were readily discarded when they broke. Clay pipes were not the only means by which tobacco was smoked and it should be remembered that cigars were widely available and smoked by all classes in Victorian times. Advertisements for cigars in Wellington newspapers can be found from the very first year of the New Zealand Company settlement in 1840 (*New Zealand Gazette and Wellington Spectator* 18 April 1840: paperspast.natlib.govt.nz). Smoking pipes made from other materials were also used and typically came in the form of composite pipes which had a bowl made from one material and a bite and stem portions made of other materials. Typically only the bite portions of such pipes are recovered.

Clay tobacco pipes

In total a minimum of 48 clay pipes were calculated from a total of 81 fragments of clay pipe. Clay pipes are more common from mid 19th century contexts and this is the case for this assemblage with very few pipes recovered from the area of the 1880s houses at 11–15 Pipitea Street. Clay pipe manufacturers are listed in Appendix A.

Decorated pipes

Most of the pipe fragments are relatively plain but a few bowls have relief moulded decoration. One whole bowl and stem portion from Feature 204 is moulded with a Scotch thistle design. One unusual pipe from Feature 390 has relief moulded deco-



6.12. Clay pipes: a, decorated pipe bowl with unidentified marking; b, decorated 'T. D.' style pipe bowl; c, pipe bowl with Scotch thistle design; d, decorated pipe bowl; e, Miller, Glasgow, pipe stem; f, Murray, Glasgow, pipe stem; g, undecorated pipe bowl; h, Blake, London, 'T. D.' style pipe; i, White's Rifle Pipe, bowl fragment; j, pipe bowl with mould number; k, William White, Glasgow, 'T. D.' style pipe; l, McDougall, Glasgow, Burns Cutty pipe.

ration and is glazed in green and brown. Four fragments of this pipe were recovered. Fragments of a bowl from Feature 390 have lettering on the sides of the bowl in relief 'FRRANI//LE JU...' which has not been identified. The bowl also has relief moulded decoration. Three 'T D' style pipes are also present in the assemblage. One of the most common forms of decoration on clay pipes during the nineteenth-century was a 'T D' marked on the back of the bowl, which is thought to have originally represented a British maker who manufactured quality pipes (Bradley 2000: 116). One whole bowl was found in Feature 197, with 'T D' in serif relief lettering on the back of the bowl, and one complete 'T D' pipe made by William White (discussed below) and one bowl fragment with just the 'D' preserved came from Feature 100.

Composite smoking pipes

Just two bites from composite smoking pipes were recovered. One from fill at the back of 11–15 Pipitea Street is black and may be made from vulcanite or a similar material. Another amber coloured bite 60 mm long in a synthetic material was found in Feature 168. Both of these bites probably date to the 20th century.

Beads and jewellery

Only a few items of jewellery or beads were recovered. One small brass or similar non-ferrous metal cross was found in Feature 390, which would have once been worn on a chain around the neck. The cross measures 34 mm long and 22 mm wide. On the front it has the letters 'NR', originally 'INRI', and a depiction of Jesus crucified on the cross.

Two glass beads were found in fill at the back of 15 Pipitea St. Both are made of glass with one being white and 6 mm in diameter, and the other teal and 8 mm in diameter. One other teal glass bead, 9 mm in diameter, was found in Feature 501.

Marbles

Fourteen marbles that were most likely children's toys were found across the site, but of these only three came from secure contexts. Two marbles were found in Feature 125 and one in Feature 166, both of these features date from the 1930s or later. All of the marbles probably date to the 20th century as none of those recovered from fill contexts show any evidence of 19th century manufacture.

Hygiene

By the late 19th century people were becoming more aware of issues of personal hygiene. This is shown in the assemblage mainly through bone toothbrushes and the associated ceramic toothpaste pots. In total 13 bone toothbrushes were found in secure contexts (Table C.7). In most cases only the handle or head of the toothbrush was preserved. Many are marked on the handles by stamping or incising into the bone.

The company G. B. Kent and Co is of British origin and still operates today as G.B. Kent and Sons. The other identified marks are all from Wellington chemists. It is unlikely that the chemists were producing the toothbrushes themselves, but rather that they were having them made for them. The handle marked '...MMER WELLINGTON' is from E. Plummer who had a chemist shop on Lambton Quay between 1877 and 1880. George Mee took over the business of E. Plummer in 1880 and was still trading in 1914. C. D. Barraud operated a chemist on Lambton Quay from around 1850 and in January 1875 he announced that the business would

henceforth be trading as 'Barraud and Son' (*Evening Post* 7 January 1875: paperspast.natlib.govt.nz). Barraud and Son were still trading in 1915 but had changed premises to a Molesworth Street address (*Evening Post* 30 October 1915: paperspast.natlib.govt.nz).

Hairbrush

The handle of a bone hairbrush was found in Feature 85. The handle measures 93 mm long by 23 mm wide and 10 mm thick, and is constructed of two scales joined with copper rivets. On the back the handle is stamped 'LONDON/ALL H...' This mark has not been identified.

HOUSEHOLD

Artefacts in the household category are those which relate to domestic activity around the house or items which were used as part of daily life in the household.

Sewing

Sewing was an important domestic activity in the 19th century that was likely to have been practised in most households. Most often sewing is represented in the archaeological record by items such as pins and thimbles. Parts of four sewing pins and one small brass thimble 15 mm long were found in Feature 390. One brass thimble 18 mm long with a maximum diameter of 15 mm was also found in Feature 210. One more unusual item was a needle case, 46 mm long by 22 mm wide and 6 mm thick, from Feature 197. On the front the case is embossed 'THE/NILSSON/ NEEDLE CASE/PATENTED/...OWELL & Co/LONDON'. One other item which may also be related to sewing is a pair of scissors 120 mm long from Feature 503.

Table cutlery

Nine items of table cutlery were recovered from secure contexts (Table C.5). Most of the knife handles are of bone and are quite fragmentary. One whole handle from Feature 197 is rectangular in section and measures 100 mm long by 18 mm wide and 10 mm thick. The handle still has part of the iron rat-tail tang inside by which the blade would have been joined to the handle. One other whole bone handle from Feature 311 measures 74 mm long by 14 mm wide and 9 mm thick. A fragment of handle from Feature 390 is of a different type where two scales are attached to a flat tang to join the handle and blade. The only material other than bone is an iron handle from Feature 210 which measures 90 mm long by 18 mm wide and 12 mm thick. All of the table knives represented by these handles and fragments are of typical mid-late 19th century manufacture.

The table fork from Feature 167 measures 170 mm long and dates to the early 20th century. The teaspoon handle from Feature 353 and the spoon fragment from Feature 390 are both made of non-ferrous metal and date to the mid-late 19th century.

Writing

Fragments of 21 slate pencils and three writing slates were recovered from secure contexts (Table C.8). All of the slate pencils are round sectioned and 5 mm in

diameter. The fragment of writing slate from Feature 311 has lines 20 mm apart on one side and a grid on the other with lines approximately 15 mm apart. The intervals between the lines are not very even. The fragments of slate from Feature 390 have lines at even intervals of 15 mm. The slate from Feature 197 is not lined.

Household miscellany

Two flat irons for ironing clothes were found in Feature 136. The more complete example, 130 mm long by 100 mm wide and 60 mm in thickness, still has part of the handle attached. The other is missing the handle completely and measures 170 mm long by 90 mm wide and 55 mm in thickness. Flat irons such as these were heated on the kitchen range and used to iron clothes prior to the electric clothes iron. One other item which would have been employed in domestic tasks around the house is a fragmented wooden scrubbing brush 40 mm wide from Feature 85.

METAL

Historic sites routinely produce significant amounts of metal which is both time consuming to deal with and often yields little useful information. For the Pipitea Street excavation the methodology for dealing with metal was focused on identifiable artefacts rather than on fragments and waste material. Miscellaneous metal such as fragments of sheeting, wire and so on were recorded in the field and discarded. Large metal items such as fragments of cast iron stove were photographed in the field and discarded. Only artefacts which required further analysis were retained.

Fastenings

Fastenings consisted mainly of wire and cut nails, with a few heavier fastenings such as spikes and bolts recovered. No early features contained any significant amount of nails or spikes. Two spikes from Feature 390 measured 150 and 165 mm in length and had rectangular sectioned shanks. None of the fastenings could be related to any particular building other than those directly associated with the surviving remnants of Phase 3 of the house at 3 Pipitea St.

Hardware

Very few items of metal hardware other than miscellaneous fragments of bar and sheeting were found. The only identifiable items were fragments of a padlock from Feature 180 and a small brass hook from Feature 197.

Horse tack

In pre-1900 society horses played a major role in everyday business and items of horse tack are commonly found in mid-late 19th century sites. Much of 1-15 Pipitea St was bare land until the 1880s and the historical record (Chapter 2) shows some of the front sections (probably 11-15 Pipitea St) were used to graze horses. Three horseshoes were recovered from secure contexts (Features 327, 390 and 482). The largest has a maximum length of 170 mm by 180 mm wide (Feature 482); the next measures 140 x 140 mm (Feature 390) and the smallest 120 x 125 mm (Feature 327).

Tools

Two files were the only tools identified. Both were flat sectioned with fragments of one coming from fill at the back of 15 Pipitea St and one whole file 160 x 25 mm coming from Feature 311.

Cans and containers

The remains of 31 cans that most likely contained foods were recovered from a variety of contexts (Table C.9). The items of greatest interest are the 'hole-and-cap' and 'hole-in-cap' styles which were used from the mid-late 19th century. One of these was found in the underfloor context of 15 Pipitea St and two in a small rubbish hole at the back of 9 Pipitea St (Feature 292). Other metal cans and containers recovered probably contained non-food products.

Matchboxes

Six matchboxes were recovered from Features 85, 196, 204, 211 and 327. Those from Feature 85 were fragmentary but measured approximately 75 x 40 x 23 mm. Whole examples measured: 77 x 40 x 25 mm (Feature 204); 75 x 45 x 23 mm (Feature 211); and 73 x 41 x 25 mm (Feature 327). None of the matchboxes had any preserved embossing or other distinguishing markings.

Metal miscellany

Fragments of coal ranges or stoves were recovered from Features 136 and 537, both of which date from the early 20th century. The ranges themselves probably date from the late 19th century – such items had a long use-life. Fragments of an enamelled bucket, approximately 280 mm high, were also found in Feature 136. Other items include a coal shovel from Feature 85, found along various other pieces of sheet metal.

MISCELLANEOUS ARTEFACTS

Coins and tokens

Coins and tokens are potentially useful for dating although coins may have been in circulation for decades before being lost or discarded. In total, just nine coins and tokens were recovered. The only 19th century coin was a 1875 Queen Victoria penny found in fill at the back of 11–15 Pipitea St. Other coins were a 1945 penny found in disturbed fill over Feature 85; a 1946 penny and 1912 halfpenny from fill at the back of 15 Pipitea St; a 1962 halfpenny from fill in the building footprint of the house at 3 Pipitea St; and a 1940 halfpenny in Feature 166.

The more interesting items are three trade tokens, two of which were found in secure contexts. Trade tokens were issued by merchants in New Zealand between the years 1857 and 1881 in response to a critical shortage of imperial coinage in the colonies. Tokens continued in use until 1897 when they were decried by legislation (Sutherland 1939). Most tokens were issued between 1857 and the 1860s. One penny token from the Taranaki firm of Brown and Duthie was found in Feature 210. The token is 31 mm in diameter and is marked 'BROWN AND DUTHIE/BROUGHAM STREET/WHOLESALE/& RETAIL/IRONMONGERS//TARANAKI/1866.' Brown and Duthie took over the business of O. Silcock in February 1866 (*Taranaki Herald* 10 February 1866: paperspast.natlib.govt.nz). By September 1870 Brown and Duthie were out of business (*Taranaki Herald* 24 September 1870: paperspast.

natlib.govt.nz). One penny token from Feature 504 is badly corroded but the writing 'CONFECTIONERS BAKERS GROCERS/ESTABLISHED 1855' can just be made out around the outside. This matches tokens known to have been used by J. Hurley and Co of Wanganui. The other token was found in the fill of a gully trap (Feature 169) and is from the Dunedin firm of Day and Mieville. The penny token is slightly larger than the other two at 35 mm in diameter and is marked 'DAY & MIEVILLE/MERCHANTS/DUNEDIN/OTAGO//NEW ZEALAND/1857.' From December 1858 the business of Walter Day became known as 'Day and Mieville' with Frederick Mieville having become a partner sometime in 1857 (*Otago Witness* 4 December 1858: paperspast.natlib.govt.nz). The business of Day and Mieville does not appear to have survived past the mid 1860s (*Otago Witness* 27 February 1864: paperspast.natlib.govt.nz).

Munitions

Just two items of munitions were found with only one related to 19th century occupation of the site. This was a gunflint found in fill at the back of the house at 3 Pipitea St. It is brown in colour and measures 25 mm long by 20 mm wide, with a maximum thickness of 6 mm, prismatic in shape and is most likely to be of English manufacture. Flintlock rifle technology had largely been superseded by the middle of the 19th century. The only other item of munitions was a modern bullet 33 mm long and 8 mm in diameter recovered from 20th century fill above Feature 85.

7 FAUNAL REMAINS

STUART HAWKINS¹ AND BEATRICE HUDSON

This chapter deals with the faunal remains, which include animal bones and shellfish, that were recovered during the Pipitea St excavations.

Methodology

Faunal remains were recovered from within the fill of a number of features, mostly pits and less frequently postholes, as well as from layers of fill without any discrete feature association from particular areas around the site. Only faunal remains from discrete contexts was analysed. All mammal and bird bone from these contexts was recorded.

Identification

Identifications were made to the lowest taxonomic level possible: family, genus or species. The most fragmented bone which could not be assigned to a taxonomic class was put into a broad mammal or bird category.

The faunal remains were identified by comparison with a variety of resources. The mammal bone was compared to a private reference collection of archaeological material previously identified using the Auckland University Anthropology Department collection, while mammal bone which could not be identified by this means was taken directly to the Anthropology Department reference collection. Published resource materials (Hillson 1992; Payne 1985; Prummel and Frisch 1986; Schmidt 1972; Sisson 1930) were also used as guides to identification. Shell fish remains were identified by comparison with the University of Auckland reference collection with the aid of Parkinson (1999). Bird remains were identified by comparison with the Auckland War Memorial Museum ornithology collection.

Quantification

Quantifications that are applied, as appropriate, include number of identified specimens present (NISP), the minimum number of elements (MNE), the minimum number of individuals (MNI), the minimum animal unit (MAU) (Grayson 1984) and the minimum number of butchery cuts (MNBC) (Watson 2000). MNE, MNI, and MNBC values are aggregated by feature. Percentage of MAU values are based on MNE values aggregated by feature and summed together for the entire assemblage.

Taphonomy

Mammal skeletal element representation was calculated using percentage of minimal animal unit (%MAU) which takes into account the number of each element per animal – some elements which have higher proportions than others per animal are not over represented. The NISP/MNE ratio was used to quantify rates of bone fragmentation where the higher the value the higher the level of fragmentation.

Modifications such as burning, carnivore gnawing, rodent gnawing and weathering were recorded as present/absent on each individual bone. Only weathering

¹ Australian National University

at stage 3 or greater (Behrensmeyer 1978) were recorded. Anything lower was disregarded so as to reduce the amount of data collected considering time constraints while still gaining some information on higher degrees of bone weathering. A distinction was made between two types of burning – calcination and carbonisation – which indicates the temperature at which the bones were burnt. Carbonized bones appear black/dark brown and represent bones that have been burnt at medium to low temperatures. Bones which have been calcined appear white/blue/grey and usually represent bones that have been burnt at higher temperatures, often in the absence of oxygen.

Butchery modifications such as cut marks, fresh fractures (indicating chopping) and saw marks were recorded. These indicate dismemberment of skeletal elements into butchered units using saws and cleavers, while cut marks indicate skinning and removal of meat using a knife.

Butchery cut definitions follow Watson (2000: Figure 3.3) for pork, beef and mutton, and Schulz and Gust (1983: Figure 1) for beef. Bones were assigned to butchery cuts to the limits possible with the available reference collections. Some elements such as ribs and thoracic vertebrae are difficult to assign to a butchery cut because they can come from more than one cut and are difficult to identify to a specific location along the axial skeleton.

Animal age and sex estimation

Animal age at time of death is estimated based on rates of epiphyseal fusion and timetables for tooth eruption (Silver 1969; Bull and Payne 1982; Grant 1982) and is expressed as age ranges in years for MNI. In some cases the age ranges were broad and generally unhelpful for example when only unfused late fusing elements were recovered such as unfused cattle vertebrae which gave an age range of 0–7/8 years for many individuals. An indication of the sex of some pigs was determined from the morphology of the canines where closed root canines are female and open root canines are male (Schmid 1972). Juvenile and adult birds could be identified based on whether the epiphysis of long bones were fused or not. The sex of chicken and turkeys was assessed by the presence or absence of spurs on tarsometatarsal bones.

Results

Of the 66 secure contexts from which faunal remains were recovered, 44 were associated with the Smith family occupation of 3 Pipitea St. The tables and figures given here summarise these features only. Faunal material was also recovered from features 390 and 472, the Area 9 Front/1 pits, as well as from later features in Area 9 Front and from features at 5 Pipitea St and 11 Pipitea St.

Taxa diversity and richness

Domesticated ungulates (sheep and cattle) were most commonly consumed on the site with sheep by far being the most frequent followed by cattle. Pigs and poultry had only a minor subsistence role (Table 7.1). Poultry included mostly chicken and duck – small quantities of goose and turkey were recovered from later features in Area 9/Front. The duck remains appear much larger than the native wild duck species and probably are those of domesticated duck. Local wild resources including rabbit and shellfish were also eaten infrequently. The single sea mammal bone probably does not represent food waste.

Fish remains were not recovered. While it is quite possible that fish was not consumed in the Smith household the soil conditions did not lend themselves to

	NISP
cat	11
cattle	575
cf cattle	20
dog	54
mammal	350
pig	26
rabbit	3
sheep	2426
cf sheep/pig	131
sea mammal	1
chicken	23
duck	2

Table 7.1. Identified taxa from features associated with the Smith occupation of 3 Pipitea St (NISP).

the preservation of fragile bone like fish. Fish consumption, then, may be under-represented. Few shellfish were recovered with nearly half of them, by NISP, being oysters from Feature 24 in Area 3/9 Rear/2.

Taphonomy

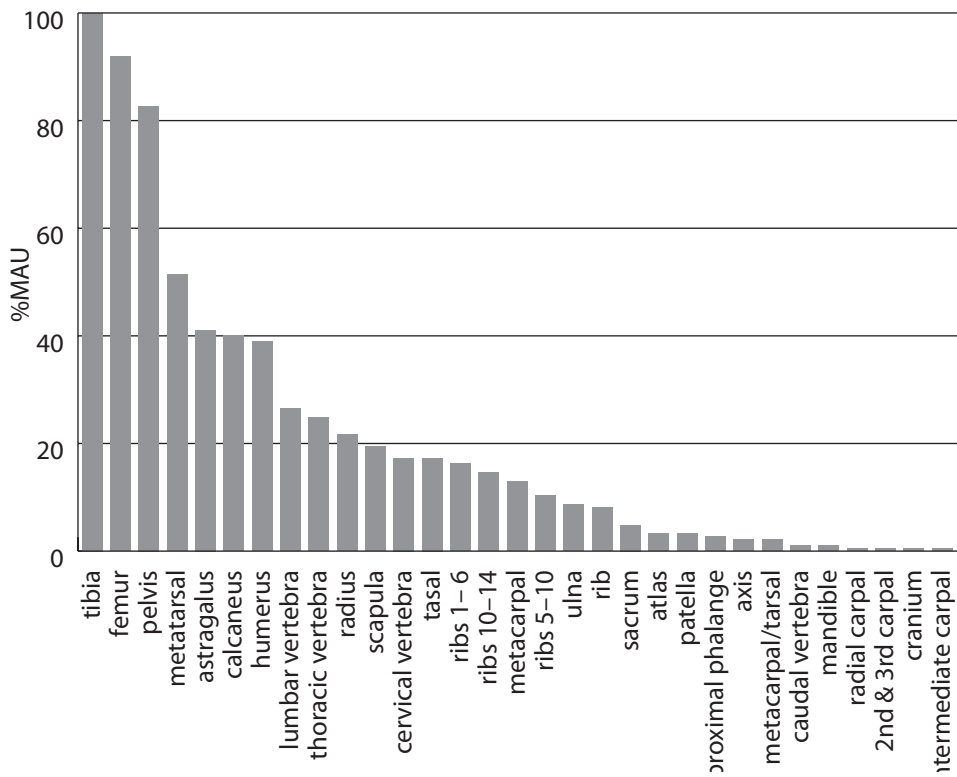
The sheep and cattle bones had high rates of butchery and relatively low rates of non-cultural modification such as weathering, carnivore gnawing, burning and rat gnawing. Many of the sheep bones in particular had been reduced by sawing or chopping to small retail cuts such as lamb or mutton chops, especially the leg cuts which, with hind foot cuts, represented by far the most common sheep butchery cuts (Figure 7.3). Cut marks were concentrated on femur shafts suggesting also carving of roast mutton or lamb legs. For cattle, hind leg and short loin beef cuts were most frequent the latter being the highest of quality cut and the former one of the lowest while the heavily reduced butchering of these cuts indicates they were used as steaks and roasts (Figure 7.4). Cranial elements from sheep, cattle, and pigs were also very rare indicating that they were brought already butchered from somewhere else rather than bought whole and butchered on site.

Conclusion

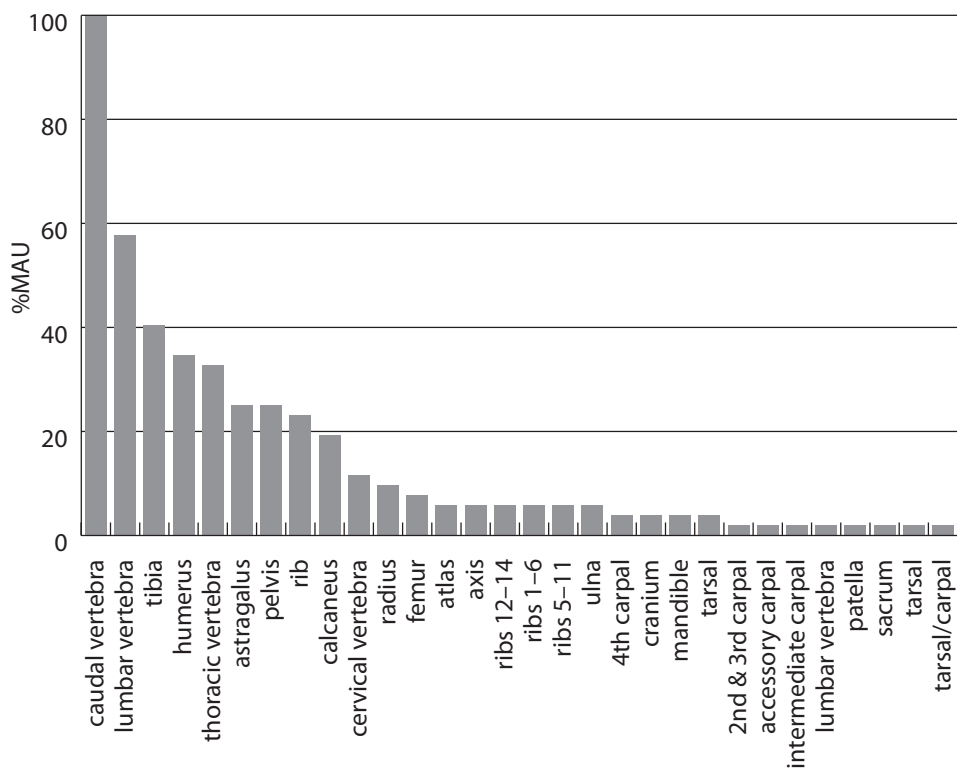
It is most likely that specialized meat suppliers supplied the inhabitants with lamb, hogget and mutton, although most of the sheep were killed less than 3.5 years old including a number killed between 0–1 and 1–2 years. A wide range of cattle ages at time of death was observed although many were killed at a mature age and many were killed under 2.5 years of age indicating both cows and steers were being utilized. Almost all of the pigs were killed under 2 years old.

Some of the rabbit remains had clearly been butchered as indicated by some of the bones displaying smooth fractures and cut marks while all the long bones epiphysis were fused indicating the selection of adults.

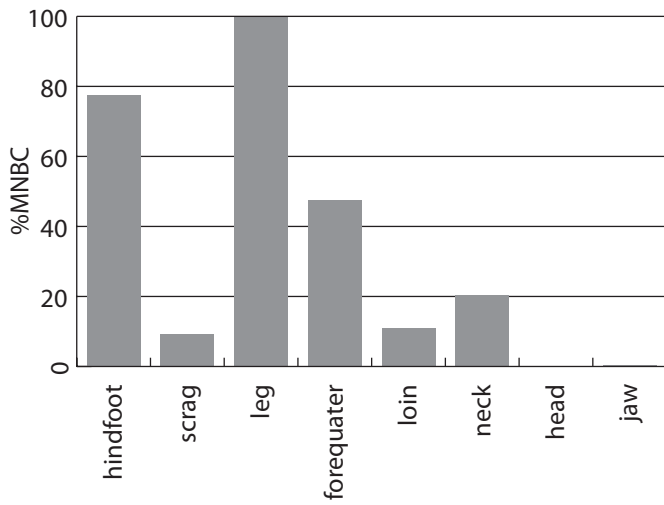
In addition to food remains there were a number of cat and dog remains which are unlikely to have been the remains of food. Two dog burials were evident one in feature 390 and one in feature 219 as partially complete skeletons were recovered. The dog in feature 219 was skeletally mature and older than 15 months while the



7.1. Sheep %MAU from features associated with the Smith occupation of 3 Pipitea St.

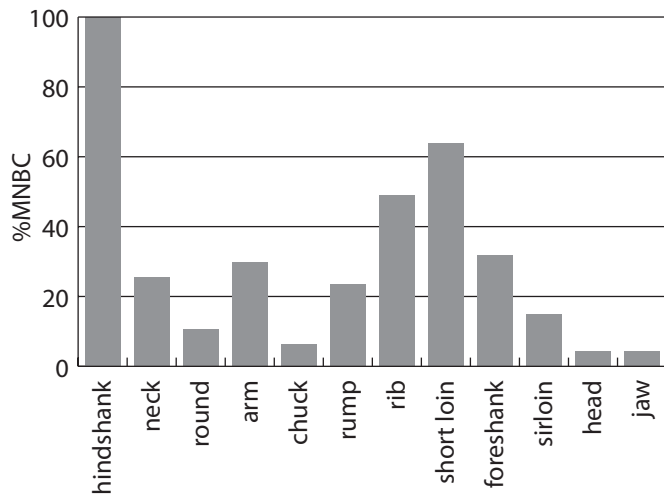


7.2. Cattle %MAU from features associated with the Smith occupation of 3 Pipitea St.



dog in feature 390 was very small and of a size similar to a terrier and a sub-adult 8–15 months of age. The cat remains on the other hand were dispersed through a number of features and only a few bones were recovered from each context. This may be because they may not be as robust as dog bones and maybe less likely to survive post deposition or excavation.

7.3. Sheep %MNBC from features associated with the Smith occupation of 3 Pipitea St.



7.4. Cattle %MNBC from features associated with the Smith occupation of 3 Pipitea St.

8 CONCLUSION

MATTHEW CAMPBELL

There are two very distinct and essentially unrelated occupations at 1–15 Pipitea St. One is the 19th century occupation, which dominated the archaeology and for which we have strong corroborating historic evidence that sets the archaeology in context. The other is the pre-1840 Maori evidence which lacks such supporting documentary evidence. Because these features are rather unusual their interpretation is more tentative, but not a great deal more so.

19th century occupation

The Pipitea St excavations largely concentrated on John Elisha Smith's house at 3 Pipitea St, built in 1863 and demolished in the late 1960s. The areas fronting on to Pipitea St itself, 1, 5, 7, 11, 13 and 15 Pipitea St, were, to varying degrees, disturbed by events such as the construction of the substation on the beach flat below the Moore St steps in the 1970s, which cut away much of the 1 Pipitea St section, or demolition, levelling for car parking and utilities installation in more recent times. 9 Pipitea St was not built on until 1936. We treated all archaeological evidence up to this time on a par with the pre-1900 evidence – 1900 is an arbitrary cut-off date for heritage significance that has little relevance to what is in the ground. Smith himself died in that year and we did not trace the historical record into the 20th century in any depth, but the archaeology demonstrates a continuity of use and occupation.

Another thing the archaeology demonstrates, and which is also emphasised in the history, is that there was little respect for the legal boundaries of unused land. Smith had a lease on both 3 and 9 Pipitea St, and while he built his house right up to the boundary with 9 Pipitea St, this boundary was not fenced until late, probably when the 1936 house was built on 9 Pipitea St. The use of the back of both sections was largely identical; there are numerous rubbish pits, all containing much the same material, dating from the beginning of the Smith family occupation. To the south west corner of Area 9 Rear there are more pits containing coal ash and animal bone, and rubbish pits were progressively dug further towards the front of Area 9 during the 20th century, so that some of the material beneath the 1936 house is not a great deal earlier than that date. Despite these minor spatial variations, the pattern of continuity is clear: Smith, and his early 20th century successors, treated 3 and 9 Pipitea St as essentially a single lot.

Even more tellingly, the back boundary fence of 11 and 13 Pipitea St, and probably 15 Pipitea St (though we were unable to trace it so far) was built 1.5 m into the front of 9 Pipitea St. These houses were built in 1881 and so the fence probably dates to this period. Prior to this Area 9 Front was used to dump rubbish that was almost certainly not from the Smith household. The contents of Feature 390 and 473 (Area 9 Front/1) were quite distinctive, though they are from a similar date as the Features in Area 3/9 Rear. Someone other than Smith was using land on which he had a lease to dump

quite large quantities of rubbish, we don't know who. Bishop Charles John Abraham built a house at 5 Pipitea St (a part of which we found along with the well) and had a lease on 11–15 Pipitea St where he paddocked horses. From the early 1870s this leasehold passed through several hands until Henry Barber built the houses in 1881. Like 9 Pipitea St, this was essentially bare land for a long time and was used by all and sundry. Even in 1918 the Property Inspector described 9 Pipitea St as “a mess at present with this land, in the centre of several backyards at the rear of Mulgrave and Pipitea Streets ... and is serving on backyards for five neighbours.”

The Smith household

John Smith, we know from the history, married Lilia McHardy in Wellington in 1858. We have not traced his household any further than this but it is clear from the archaeology that he had a family, and a growing one at that. The presence of doll parts and children's wares throughout features in Area 3/9 Rear show that he had children. Also, his house was enlarged on two occasions prior to 1891 (Phases 2 and 3), the date of 1892 Ward map survey, as the excavated footprint matches the Ward map closely, which is an indicator of a growing family.

Groover (2001: 40) noted “the importance of household cycles in understanding the long-term dynamics of family life.” Families cycle through “three simple yet analytically useful divisions consisting of expansion (young), fission (mature), and replacement (old).” In the expansion phase household numbers increase through the addition of children; in the mature phase the children are all adolescent or older and fissioning occurs as older children begin to marry and leave home and household numbers decrease; in the replacement phase all the children have left home and only the parents remain, or one of the married sons or daughters assumes household authority and cares for the aged parents – the cycle then begins again. For the Smith household we have good evidence of the expansion phase though not for beyond. John and Lilia had been married 42 years by the time of his death, so presumably the children had left home during the fission phase. There is no evidence of the replacement phase, i.e., all the children's wares and doll parts are mid 19th century dating to the children's generation, so there is no evidence of grandchildren.

At the Westney Farmstead in Mangere, Auckland, we were able to trace these cycles through three generations of the Westney household from 1854–1936. This was evident in the archaeology of both rubbish disposal and the standing building. Groover's work was undertaken at the Gibbs site which, like the Westney site, was rural, from Knox County, Tennessee. 3 Pipitea St, on the other hand, is an urban site and it seems likely that inter-generational continuity of occupation is more likely in rural than urban settings, that is, son's inherit the farm and stay on to begin the household cycle anew, in contrast to city dwellers who tend to move on. Such a proposition, attractive though it is, would need more testing however – urban house excavations in New Zealand are now not uncommon, but rural excavations remain relatively rare and the Westney situation may be unusual.

Historic period Maori gardening

Maori gardening in the 19th century was significantly altered from pre-European gardening by changes in settlement patterns, economy and society combined with new crops and technologies. Maori grew crops to trade with Europeans, supplying wheat and potatoes to whalers and then the emerging New South Wales and Victoria markets. Some of these gardens were, compared to pre-European gardens, quite large, and marked by ditch and/or bank fences to keep out introduced animals such as pigs, sheep and cattle (Furey 2006). Such sites should be quite visible, but a general lack of archaeological interest in sites from this period (Bedford 1996) means few have been investigated. Cassells and Walton (1992) reported the investigation of banks without ditches but with postholes on or through the banks indicating fences. They were unsure whether these features were Maori or European in origin. Grieg and Walter's (2007) overview of recorded ditch and bank fences in New Zealand indicated that most were European in origin though where historic records are available they could be linked to Maori settlements with more certainty (e.g., Wilkes n.d.).

Anaura Bay on the North Island East Coast was Captain Cook's first landfall in New Zealand in 1769 and the Maori gardens there are very well described in the journals of Joseph Banks. Horrocks et al. (2008) undertook a programme of coring and test pitting to obtain microfossil samples from these gardens. They found pollen and starch evidence of pre-European crops – kumara, taro, yam and paper mulberry – but also European introductions – maize and potato – at depths below the surface indicating that these were also grown by Maori at Anaura Bay in the historic period. Leach (1984: 101) records that potatoes, turnips and cabbages were grown by Maori in the Bay of Islands as early as 1801 and the range of garden vegetables as well as fruit trees increased rapidly in the early 19th century.

Pipitea St

Two features at Pipitea St in particular stood out as being unusual in their form and both predated the house on 3 Pipitea St: these were the gardened soil, Feature 15, and the pit, Feature 77. Both were aligned with the sea cliff rather than the surveyed lot boundaries, as was a line of postholes running perpendicular to the cliff; they were the only features, apart from fences along the cliff face, to do so. Every indication linked them to Pipitea pa, inhabited by Maori in 1840 at the time of the arrival of the New Zealand Company and European settlement, rather than any later European occupation. In order to test this we undertook two analyses of the soils, one a microfossil analysis looking for evidence of crops in the form of pollen or starch grains, the other a grain size analysis of the garden soil to examine the gravels incorporated into it.

The addition of gravel to soils is typical of Maori cultivation practice (Furey 2006: 19, 46). These were added as mulch and/or soil conditioners. Although the gravels at Pipitea St were not those that underlie the local clay soils and their origin could not be determined, they are clear indication of a Maori origin for these soils.

Unfortunately, no microfossils of either Maori or European cultigens was found. The site was part of the core of Pipitea pa, dating it to the early–mid

19th century, so we had hoped to find evidence of introduced crops like white potato or maize along side traditional crops like kumara. The archaeology makes it clear that the soil of Feature 15 was gardened prior to, at least, 1863 and also that the modified soil is typical of Maori gardening practices. Reihana Rewiti gave evidence before the Old Land Claims Commission that he gardened on barker's claim, incorporating most of 1–15 Pipitea St, in 1839 and, while we couldn't say that feature 15 was specifically Rewiti's garden, it is best interpreted as a garden associated with Pipitea pa. The pit, Feature 77, was less easily interpreted but its spatial and temporal relationship to the soil indicated that it was a storage pit. Pre-European storage pits have a line of posts down the centre of the pit to support a ridge pole. Some smaller pre-European pits may not have had postholes but posts were not normally set against pit walls to the exclusion of centre posts – where they are found, posts against pit walls are more often interpreted as retaining walls. Postholes down the sides of the pit indicate the support of a roof-frame. The adoption of this introduced European technology has the obvious advantage of clearing the centre line of the pit and making it easier to move around.

The lack of corroborating microfossil evidence is unfortunate and so the attribution of the soils to Maori gardening can be regarded as robust, but not definitive. Interestingly, if we did not have the scientific test of soil microfossils available to us we would have far less hesitation in accepting that the soil represents historic period Maori gardening. The archaeology tells its own story and we are, perhaps, too reliant on outside techniques to tell us what we already know. As far as we are aware these are the first such features described for early historic period Maori. This is rather surprising, as Maori, in the North Island and upper South Island at least, were horticulturalists; gardening was central to their way of life well into the 20th century. Pre-European garden soils are commonly recorded, especially where they are modified by the addition of gravel mulches and soil conditioners; that is how the soil at Pipitea St was recognised. In combination with the history, which places Maori at the site in the early 19th century, we are able to interpret the soil as a historic period feature. Without the history we may have been quite puzzled by the pit; it is not a 'standard' storage pit and we are left wondering how many similar features have gone unrecognised in the past. It may be that pits like this are a local innovation and not found elsewhere, but they are evidence of Maori readily adapting European technologies to traditional ends and similar, if not necessarily identical, practices would have been widespread. We suspect that archaeological evidence of these practices is simply not recognised as such and that a reassessment of the evidence may yield surprising results.

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APPENDIX A CERAMIC PATTERNS AND MANUFACTURERS

This appendix details the ceramics found on site. The full catalogue of all artefacts analysed, which includes data on distributions, is contained on the CD that accompanies this report. CD data contents can be downloaded from www.cfgheritage.com/2008_72pipiteastreet.zip. Photographs of selected ceramic patterns are given in Figures A.2–A.24 at the end of this appendix.

Transfer Printed Patterns

Abbey

Abbey is the most common pattern in the assemblage after Willow and Rhine with a minimum number of 45 vessels (Figure A.2a). The majority were found in Area 3/9 Rear Phase 2 pits (Table A.1). Two different prints representing two manufacturers are present in the assemblage. The most common print is predominantly in grey with 42 vessels, and two in blue. This print is backmarked with the pattern name 'ABBHEY' in a border, but with no maker's initials. The same Abbey print was recorded from the Wellington Inner City Bypass excavations (CFG Heritage report in preparation). An example of this scene with an identical border illustrated in Williams is marked by Thomas Edwards and dated to c. 1841 (Williams 1978: 173). It is not known who the manufacturer of the present examples is but it was not uncommon for potteries to have purchased copper plates for transfer printed designs from other potters.

Context	Area/Phase	Vessels	Total
70	3/9 Rear/2	4 plates, 1 serving vessel	5
72	3/9 Rear/2	1 serving vessel cover	1
74	3/9 Rear/2	1 plate	1
75	3/9 Rear/2	3 plates	3
85	3/9 Rear/2	9 plates, 4 serving platters, 2 serving vessels, 1 serving vessel cover	16
180	3/9 Rear/2	1 plate	1
182	3/9 Rear/2	1 plate	1
197	3/9 Rear/2	2 plates, 1 serving vessel	3
210	3/9 Rear/2	1 plate	1
211	3/9 Rear/2	1 plate	1
292	3/9 Rear/2	1 serving vessel	1
311	3/9 Rear/2	1 plate, 1 saucer	2
319	3 Rear/3	1 plate	1
330	3/9 Rear/2	3 plates, 1 serving platter, 1 serving vessel, 1 serving vessel cover	6
390	9 Front/1	1 plate	1
473	9 Front/1	1 plate	1
			45

Table A.1. Distribution of Abbey pattern vessels.

The vessel forms are all tableware, consisting of plates and various serving vessels. Unfortunately much of the Abbey assemblage is highly fragmented and in some features in secondary deposition, making the reconstruction of these serving vessel forms difficult. For example, from an Area 3 Rear Phase 2 pit (Feature 70), 188 sherds in the Abbey pattern were recovered which, when analysed, only yielded a minimum number of five vessels. Attempts to reassemble vessels showed that the minimum numbers calculated during analysis were accurate and may actually underestimate the true number of Abbey vessels represented.

The other Abbey print (Figure A.2b) was a single blue printed saucer cross-fitted from two pits 9 m apart in Area 3/9 Rear Phase 2 (Features 85 and 311). The saucer is backmarked by Livesley, Powell and Co (1851–66) and measures 150 mm in diameter and 30 mm in height. This version of Abbey is the more common of the two in historic archaeological sites investigated in New Zealand and where backmarks are present the manufacturer has always been Livesley, Powell and Co.

Alaska

Alaska is a Japanese Aesthetic style design printed in green (Figure A.2c). One nearly complete dinner plate was found in Feature 211 (Area 3/9 Rear Phase 2). The plate measures 265 mm in diameter and is backmarked with the pattern name and the initials of Robert Heron and Son. A fragment of one other smaller plate in a blue/green colour was found in the same feature and a fragment of another green dinner plate in fill from the back of 3 Pipitea Street. This pattern was most likely produced around the 1880s.

Albion

Albion is a romantic pattern printed in blue on tablewares (not illustrated). A minimum number of 12 vessels (3 serving vessels, 1 bowl and 8 plates) were recorded from 10 features in Area 3/9 Rear Phase 2. There was also one saucer from Feature 390. All of the vessels are quite fragmentary, although it should be noted that all of the plates are of a smaller size than dinner plates. The only manufacturer marks were small impressed rosettes on two of the plate fragments, not attributable to a maker. Albion was most popular around the middle of the century and so it is not surprising that it was found predominantly in earlier features (Features 85, 311, 330 and 390).

Alhambra

Alhambra is a Moorish style geometric design named after the royal palace and fortress in Spain (Figure A.14b). Fragments from one saucer printed in blue were recovered from Area 9 Front/1 (Feature 390). Only part of the backmark is preserved but it includes part of the pattern name in a border and an impressed mark over the top attributable to Livesley, Powell and Co.

Asiatic Pheasants

Asiatic Pheasants is a popular 19th century design printed in either blue or grey on tablewares. A minimum number of 24 vessels in this pattern are present in the assemblage. The most common form are plates with 16 vessels (Table A.2). Podmore, Walker and Co, 1834–59, are credited with first introducing the pattern and one dinner plate 260 mm in diameter with their backmark was found in Feature 229 (Figure A.2d). It is notable that the quality of printing on this piece is far superior to most of the later examples. Asiatic Pheasants continued to be popu-

Context	Area/Phase	Vessels	Total
Underfloor of 15 Pipitea Street		1 serving platter	1
11 Pipitea Street Fill		1 plate	1
15 Pipitea Street Fill		1 plate	1
back of 11-15 Pipitea Street Fill		1 plate	2
		1 serving platter	
9 Pipitea Street Fill		1 plate	1
3 Pipitea Street building footprint		1 plate	1
56	3 Rear/2	1 plate	1
75	3 Rear/2	1 serving platter	1
85	3 Rear/2	2 plates	3
		1 serving platter	
101	3 Rear/2	1 plate	1
166 (1940+)	3 Rear	1 miniature saucer	1
211	3 Rear/2	1 plate	1
229	3 Rear/2	1 plate	1
292	3 Rear/2	1 plate	1
327	3 Rear/2	1 serving platter	1
330	3 Rear/2	1 plate	1
438	9 Front/2	1 serving platter	1
473	9 Front/1	1 plate	2
		1 serving platter	
501	9 Front/2	1 plate	1
504	9 Front/1	1 serving platter	1
			24

Table A.2. Distribution of Asiatic Pheasants pattern vessels

lar well into the 20th century as shown by a miniature saucer from Feature 166 with a Pountney and Co backmark and a registration number dating to 1931.

Bouquet

Fragments from two cups were identified in this pattern from 11 Pipitea Street (not illustrated). The cups are printed in purple and this particular Bouquet pattern is known to have been produced by Pinder, Bourne and Co.

Broseley

Broseley is a chinoiserie style pattern similar to Willow printed in light blue on tableware. Fragments from one side plate and one saucer came from Feature 390 (not illustrated).

Cable

Cable is a simple border pattern consisting of a ribbon entwined around a central cable. Fragments from one chamberpot printed in purple were recovered from the for pits in Area 3/9 Rear 2 (not illustrated). One known manufacturer of this pattern is William Fairbairns, producer of the unidentified pattern PS 039 (see below).

Carlton

This pattern is identified from a pattern mark only. The base of a chamber pot from Feature 72 (Area 9 Rear 2) was backmarked in black with 'CARLTON' in a belt style border (Figure A.7c). To the side there is also a small circular impressed mark which cannot be read. Unfortunately none of the patterned pieces of the chamber pot were present either.

Clyde

Clyde is a simple border pattern manufactured by Turner and Tomkinson and previously identified from the Wellington Inner City Bypass excavations. Clyde has also been recovered from the Blomfield House site in Russell, where it was recorded as BLOM 083. Three cups or mugs printed in blue were found with one from each of three pits, two in Area 3 Rear/2 and one from Area 9 House (Figure A.7d). Clyde is known to have been manufactured by Turner and Tomkinson as the design was registered to this company on 7 March 1861 (Kowalsky and Kowalsky 1999: 598). The base of one mug was found with a printed registration diamond for this date in blue. This fragment could not be matched to a rim sherd in this design but it suggests that the Clyde vessels are mugs rather than cups.

Colosseum

Colosseum is a scenic design printed in purple first identified from the Wellington Inner City Bypass excavations (CFG Heritage report in preparation). The only recorded manufacturer of this design is John Goodwin of Seacombe Pottery, Liverpool (Kowalsky and Kowalsky 1999: 420). The one fragment in this pattern from Pipitea Street appears to be from a chamber pot, from Area 9 Front (Figure A.14d).

Coral

One semi-vitreous plate fragment from Area 9 Front is printed in a grey design identified as Coral (Figure A.7e).

Donati

Donati is a simple geometric style border pattern printed in blue. Fragments of one saucer, one cup, and two plates were recovered from four features in Area 3/9 Rear 2. One plate measures 170 mm in diameter and is backmarked 'BBW & M/DONATI' (Figure A.5a). These initials stand for Bates, Brown-Westhead and Moore, operating from 1859 to 1861 (Godden 1991: 59; Kowalsky and Kowalsky 1999: 523).

Etruscan

One serving dish from Area 3/9 Rear 2 printed in green was found backmarked with the pattern title Etruscan (Figure A.2e). The dish is oval and measures 290 x 250 mm and is 65 mm in height. The central scene is comprised of a group of three Etruscan style vases. The backmark has no maker's initials but the horseman above the pattern title has been attributed to Hancock and Whittingham, 1873-79 (Williams 1978: 66; Godden 1991: No. 1938). This date would seem too late for this feature and it is possible that this mark was first employed by their predecessors Hancock, Whittingham and Co, 1863-72 (Godden 1991: 308).

Fibre

Fibre is a common sheet pattern consisting of a repetitive design of fibrous tentacles (not illustrated). One green cup came from 15 Pipitea Street, one grey cup or bowl and one grey chamber pot from Area 3/9 Rear 2, and two blue saucers and two flow blue cups from Area 9 Front/1. Fibre was produced throughout the 19th century but appears here mainly in contexts dating to the 1860s and 1870s.

Forest

One bowl base printed in blue was collected from fill material at 9 Pipitea Street. The bowl is printed in blue and is backmarked with a beehive style mark containing the pattern name and the trade name Florentine China (Figure A.14f). No other fragments in this pattern were identified from elsewhere on the site.

Gem

Gem is a romantic pattern printed in blue (Figure A.14g). Fragments of two plates were recovered from Area 3/9 Rear 2 and one from 11 Pipitea Street.

Geneva

This version of Geneva has been previously recorded from the Wellington Inner City Bypass excavations where it was attributed to the manufacturer John King Knight. One of the plates from Pipitea Street has an impressed backmark, but it is indistinct and cannot be matched to marks known to have been used by John King Knight. This is not surprising as very few marks are recorded for this potter and none for the successive partnership Knight and Wileman in either Godden (1991) or Kowalsky and Kowalsky (1999). All three vessels are side plates printed in grey (Figure A.2f). The Geneva plates all came from Area 3/9 Rear 2 (Features 70, 75 and 330).

Java

Fragments of one cup and one saucer in flow blue were identified in this pattern from Area 3/9 Rear 2 (Feature 330). The saucer measures 170 mm in diameter and is backmarked with the pattern name and a small impressed rosette (Figure A.3a). This pattern has been previously recorded from the Scott House site in Auckland (CFG Heritage report in preparation).

Lattice

Lattice is a simple design found on tablewares (not illustrated). Fragments of two flat based serving vessels (one blue and one grey), one grey serving dish, and one grey plate or serving platter were identified from features in Area 3/9 Rear 2 and one grey plate from Area 5 Pipitea St. Two of the vessels are backmarked 'LATTICE' in a border.

Medici

Medici is a romantic pattern incorporating a large urn in the foreground of the central scene and a border of scrolls and reserves featuring an urn. Fragments of two bowls in blue were recorded from Area 3/9 Rear 2, along with a complete bowl in grey reassembled from sherds found in Area 5 (Feature 259). The bowl stands 95

mm high and has a rim diameter of 177 mm (Figure A.3b). The vessel is marked on the base with the pattern name in a border and below this with the monogram of George Jones and Co dating to the 1860s.

Milan

Milan is a romantic pattern printed in a range of colours on tableware. One small cup in black and one cup in flow blue were found in Area 9 Front/1 (Figure A.7g). Neither of the two vessels is marked but all of the marked examples in this pattern from the Wellington Inner City Bypass excavations were produced by South Wales Pottery.

Morea

Morea is a romantic pattern in blue printed on tablewares (not illustrated). Fragments of one dinner plate 250 mm in diameter were identified from Area 3 Rear/2.

Nightingale

Nightingale is an abstract design in purple printed on cups and saucers. Fragments of two cups and one saucer were found in one feature and one cup and two saucers in another feature in Area 9 Front/1. One saucer fragment from Feature 473 is backmarked with the pattern name in a banner held up by a cherub (Figure A.7h).

Orange

One largely complete chamber pot printed in green was collected from the under-floor deposit of 11 Pipitea Street. The chamber pot measures 230 mm in diameter and stands 135 mm high. On the base is part of a printed registration diamond dating to the period 1868–1883 and below this the pattern name Orange (Figure A.3c).

Patras

Patras is a romantic design identified from a plate from the Wellington Inner City Bypass excavations backmarked with the pattern title. The plate was also marked with the incomplete initials ‘...W & G H’ which has not been identified. From Pipitea Street a single fragment from the base of a green printed serving dish was recovered from Area 9 Front/1 (Figure A.7 i).

Pearl Wreath

Pearl Wreath is a simple border design in purple known to have been registered and produced by George Jones and Co. Eight vessels are present in the assemblage but only a small jug or bowl from Area 3 Rear/2 and a plate from 11 Pipitea (Feature 391) come from secure contexts. Fragments of a large oval serving dish were recovered from the underfloor deposit of 13 Pipitea Street (Figure A.5b), a plate from 11 Pipitea Street, and a plate and serving dish from 13 Pipitea Street.

Phoebe

Phoebe is a turn of the century style pattern which features a transfer printed border in flow blue on a lightly moulded rim, with enamelled gold hairlines added to the design (Figure A.3d). Three plates, one soup plate, and a fragment of serving vessel were recovered from features in Areas 9 Front/2 and 9 House. The dinner plates measure 255 mm in diameter and 28 mm high, and the soup plate 250 mm in diameter and 42 mm high. All four plates are backmarked on the rim with the pattern name and Wedgwood and Co Ltd. The style of the mark dates from 1900 to 1906.

Poppy

Poppy is a simple border pattern popular in the late 19th century and into the 20th century (not illustrated). Fragments of one saucer in green were identified from Area 9 House.

Rhine

Rhine is a popular mid 19th century romantic print with a central scene typically consisting of a river in the foreground with people on boats and a castle in the background, with the whole flanked by trees. A total of 49 vessels in the Rhine pattern were recorded with 44 printed in grey, two in blue, and three in green (Table A.3). Like the Abbey pattern vessels most were very fragmentary with few

Context	Area/Phase	Vessels	Colour	Total
11	5 & 7	1 cup	grey	1
70	3 Rear/2	1 plate, 1 serving dish	grey	2
72	3 Rear/2	2 plates	grey	2
85	3 Rear/2	5 plates, 1 cup/bowl, 1 mug/jug, 1 serving platter, 5 serving vessels	grey	13
86	3 Rear/2	1 plate	grey	1
180	3 Rear/2	1 serving vessel	grey	1
184	3 Rear/2	1 plate	grey	1
188	3 Rear/2	1 mug	grey	1
210	3 Rear/2	6 plates, 3 serving vessels	grey	9
211	3 Rear/2	1 plate	grey	1
240	5 Rear	1 cup	grey	1
287	3 Rear/1	1 plate	grey	1
319	3 Rear/2	1 plate	grey	1
327	3 Rear/2	1 serving vessel	grey	1
330	3 Rear/2	2 plates	grey	2
350	9 Front/2	1 plate	grey	1
385	9 Front/2	1 plate	grey	1
390	9 Front/1	2 cups	blue	6
		2 cups, 1 plate	grey	
		1 saucer	green	
473	9 Front/1	1 cup, 1 saucer	green	3
		1 plate	grey	
				49

Table A.3. Distribution of Rhine pattern vessels

vessel forms able to be reconstructed. Serving vessels were mainly in the form of deep sided dishes or platters. One oval serving dish from Area 3 Rear/2 (Feature 210) measures 63 mm high, 240 mm wide and approximately 285 mm long (Figure A.3e). Fragments of a domed serving vessel lid or cover approximately 60 mm high and 225 mm in diameter were also recovered from the same area (Feature 85).

Several plates are marked with 'Rhine' in a border but only two vessels carry part of the maker's name. Both are from Area 3 Rear/2 (Feature 85), one with the pattern name and '...MMERSLEY' below standing for Ralph Hammersley (1860–84), and the other with the pattern name and '... & SONS' below, which is unidentified.

Rouen

Rouen is a simple border pattern known to have been produced by Pinder, Bourne and Co (not illustrated). Two fragments of saucer printed in brown were collected from the area of 11 Pipitea Street and 3 Rear/2 (Feature 85).

Rouen (A)

This pattern has the same name as the common Pinder, Bourne and Co version but is a different design. Pattern names were often only generic titles and so it is not uncommon for two similarly named patterns to represent differing designs. A minimum number of eight vessels were recorded in the variant Rouen pattern. Parts of a purple bowl were identified from 13 Pipitea Street, and two purple saucers, one blue saucer, one purple cup, and two blue cups from Area 3/9 Rear 2. One of the saucers from Feature 311 and one from Feature 330 are backmarked with the pattern name in a border and the initials 'J.B.' (Figure A.5c). These initials are unfortunately too common to attribute to an individual manufacturer but the style of the pattern dates to the 1860s or 1870s.

Star

Star is a geometric style pattern incorporating a star design repeating around the border (not illustrated). The pattern is recorded as being registered by Turner and Tomkinson on 15 October 1862 (Godden 1999: 188). Four cups and three saucers printed in blue were identified from Area 3/9 Rear 2. A cup base from Feature 180 has part of a printed registration diamond but only the day mark '15' can be made out. Star has been previously recorded from a wide range of sites including the Wellington Inner City Bypass excavation, the Blomfield House site in Russell, the Settlers' Hotel site in Whangarei and the Te Hoe Shore Whaling Station on the Mahia Peninsula (personal observation).

Swiss Cottage

Swiss Cottage is a romantic print in blue found on tablewares. Fragments of two plates and one small serving bowl were recovered from features in Area 3 Rear/2. Both of the plates have partial backmarks with the more complete having the pattern name in a border and below the initials 'J & W. P...' (Figure A.3f). This stands for J. and W. Pratt operating from 1836 to 1859 (www.thepotteries.org).

Syria

Syria is a romantic design printed in blue. A fragment from one plate was found in Area 3 Rear/2 (Figure A.14j).

Tacsonia

Fragments from one wash basin in this pattern were found concentrated around the base of an old fireplace at the back of the house at 11 Pipitea Street. The fireplace and fragments of ceramic were capped by a layer of yellow clay and so probably relate to the earliest phase of this house. The vessel is printed in purple and is backmarked with the pattern name in a garter style mark, with a small impressed mark to the side (Figure A.14k). This impressed mark has not been identified to a maker.

Teddesley

Teddesley is a simple border design in black known to have been produced by Pinder, Bourne and Co. Fragments of one plate were recovered from 11 Pipitea Street and another plate from the back of 13 Pipitea Street, and fragments of a cup from Area 3/9 Rear 2 (Feature 330).

'Venetian'

This pattern has been identified from a backmark only from Area 3/9 Rear 2 (Feature 311). A plate fragment has the partial pattern name '...ENETIAN' printed in purple which most likely read 'Venetian' (Figure A.14l). Alternatively 'Venetian' may only be part of the pattern name as Venetian Meeting, Venetian Scenery and Venetian Temple are all recorded as known pattern names (Kowalsky and Kowalsky 1999: 516).

Whampoa

Whampoa is a chinoiserie style pattern produced on both tableware and toilet wares. Fragments of two chamber pots printed in flow blue were found in Area 3 Rear/2 (Feature 85) backmarked with the pattern name in a border (Figure A.4a). On this basis fragments of one saucer and one plate in blue, and one cup in flow blue, from Area 9 Front/1 (Feature 390) were identified as Whampoa. Whampoa is recorded as having been produced by potters in both Wales at the Cambrian Pottery in Swansea and in the Staffordshire district in England (Coysh and Henrywood 1982: 398; Kowalsky and Kowalsky 1999: 518).

Wicker

Wicker is a simple pattern in the same minimalist style as Lattice. Fragments of one serving platter from Area 3 Rear/2 (Feature 75) are backmarked with 'WICKER' in a border (Figure A.5d).

Wild Rose

Wild Rose is a romantic pattern printed in blue on tablewares popular around the middle of the 19th century (not illustrated). Only five Wild Rose pattern vessels are present in the assemblage but all come from early contexts. Fragments of two plates and a serving vessel or bowl from Area 3/9 Rear 2 and fragments of two plates from Area 9 Front/1.

Willow

Willow is a generic chinoiserie style pattern produced from the early 19th century through to the present day. A minimum number of 65 Willow pattern decorated vessels are present in the assemblage, all printed in blue. Most of these date from the middle years of the 19th century but there are also six semi-vitreous cups and saucers which would have been produced much later.

Again, like the Abbey and Rhine pattern, the Willow pattern assemblage is highly fragmented with few vessel forms able to be reconstructed. One of only two complete vessels is a serving dish 55 mm high, 215 mm wide and 280 mm wide found in Feature 258, Area 3 Rear/1 (Figure A.4c). The dish is unmarked but was probably produced around 1860. Feature 258 was one of the few features on the site where ceramic vessels were found in their place of primary deposition. The other complete vessel was a semi-vitreous saucer from Area 9 Front/2 which dates to the early 20th century. This and the other five semi-vitreous saucers and cups are printed in light blue and have a gold edgeband painted around the rim.

Despite Willow being the most common pattern there are very few manufacturers marks present on Willow vessels. A Hulse, Nixon and Adderley (1853–68) serving vessel from Feature 330 (Area 3/9 Rear 2) is the only positively identified manufacturer for Willow vessels in the assemblage. One plate fragment from Area

Context	Area/Phase	Vessels	Total
1	15	1 cup	1
3	11	1 plate	1
5	11	1 plate, 1 serving platter	2
6	13	1 saucer	1
11	5 & 7	1 plate, 1 serving vessel	2
14	3 House	2 saucers	2
70	3 Rear/2	1 plate, 1 serving vessel	2
75	3 Rear/2	1 serving vessel	1
85	3 Rear/2	1 plate, 1 saucer, 2 serving vessels	4
166	3 Rear (1940+)	1 saucer	1
180	3 Rear/2	1 serving vessel	1
197	3 Rear/2	1 plate	1
210	3 Rear/2	1 bowl	1
211	3 Rear/2	1 serving vessel	1
229	3 Rear/2	1 cup/jug, 1 plate	2
258	3 Rear/1	1 plate, 1 serving vessel	2
287	3 Rear/1	1 serving vessel	1
311	3 Rear/2	1 plate, 1 serving platter	2
319	3 Rear/2	1 serving platter	1
327	3 Rear/2	2 plates	2
330	3 Rear/2	4 plates, 5 serving vessels	9
350	9 Front/2	1 cup, 1 plate	2
390	9 Front/1	12 plates, 1 bowl/dish, 4 serving vessels	17
391	11 Rear	1 serving vessel	1
441	9 Front/2	1 saucer	1
473	9 Front/1	2 plates, 1 serving vessel	3
501	9 Front/2	1 saucer	1
			65

Table A.4. Distribution of Willow pattern vessels.

3/9 Rear 2 (Feature 229) is printed on the back of the rim ‘...STONE CHINA/R’, which has not been identified to a maker.

Woodland

Woodland is a simple border pattern consisting of vegetation trailing around the rim of the vessel (not illustrated). One plate in green was identified from Area 9 Front/2 (Feature 387) with part of a Burslem Pottery Co backmark and pattern name. This plate dates to the very end of the 19th century or early 20th century.

Children’s Patterns

Blindman’s Buff

One small plate from Area 3/9 Rear 2 (Feature 330) is printed in black with a scene showing four children, one of whom is blindfolded. At the bottom of the scene is part of the title ‘...AN’S BUFF’ which would have read ‘Blindman’s Buff’ (Figure A.6a). The plate measures 158 mm in diameter and has a rim decorated with relief moulded flowers and edged with red handpainted bands.

Ducks

A small plate from Area 3/9 Rear 2 (Feature 197), identical in form to the ‘Blindman’s Buff’ plate, is decorated with a scene printed in black showing a pair of ducks with their ducklings and entitled ‘DUCKS’ (Figure A.6c). Again the plate measures 158 mm in diameter and has the same moulding and decoration around the rim.

... [TH]E GROUND

A more fragmentary plate from Area 3/9 Rear 2 (Feature 330) has a scene printed in green showing a man operating a plough drawn by two horses. At the bottom of the scene is the partial title ‘...E GROUND’ which may have read ‘Plough The Ground’ (Figure A.6e). The plate is a similar size to the above examples but has a different design of flowers relief moulded around the rim and no edgebanding.

Buck

One fragmentary mug from Area 3/9 Rear 2 (Feature 229) is printed in black with the title ‘BUCK’ and part of what would have been a buck deer resting on the ground (Figure A.6g). The mug stands 65 mm high and has a base diameter of 65 mm.

Wild Horses

A base fragment from a similar style mug to ‘Buck’ again from Area 3/9 Rear 2 (Feature 75) has the partial title ‘WILD HOR...’ printed in green (Figure A.7k). The fragment of scene still preserved shows the legs of at least two horses, so the title most likely read ‘Wild Horses.’

Dr Franklin’s Maxims

One mug recorded as pattern PS 071, with fragments cross-joined from Features 85 and 180 in Area 3/9 Rear 2 is printed in black with one of Dr Franklin’s maxims (Figure A.6b), originally published in *Poor Richard’s Almanac* by Benjamin Franklin between 1733 and 1758. The vessel is fragmentary but if complete the maxim would read:

Dr FRAN[KL]IN'S [MAXIMS]/Plough [dee]p while [slug-]/gards
sl[ee]p & you sh[all]/have corn to sell & to keep./Work [today] for
you kno[w]/not how much you may be/hindered tomorrow.

On either side of this saying is a farmyard scene, with the more complete showing chickens in the farmyard in the foreground and a man ploughing a field in the background. The mug stands 65 mm high and is the same in diameter.

Other Children's Vessels

Three other vessels in the assemblage were also identified as children's ware. A small plate printed in black from Area 9 Front/1 (Feature 390) is only partially preserved but shows a child in bed with two cherub-like figures hovering above them. Below is the partial wording '... hours of darkness .../... around my bed ...' and part of a title in larger print '...E HO...' (Figure A.6f). The full text comes from a children's bedtime prayer and would have read 'I lay my body down to sleep/May the angels guard my head/And through the hours of darkness keep/Their watch around my bed', one of Isaac Watt's *Divine and Moral Songs for Children*, 1720 (books.google.com). The plate has a border relief moulded with a floral design like the 'Blindman's Buff' and other plates. One mug from Area 3 Rear/2 (Feature 85) recorded as pattern PS 067 has a cat and part of a dog printed in brown on the side (Figure A.6d). The mug stands 66 mm high and has a base diameter of 65 mm. One other design from the same area recorded as PS 070 is also from a children's mug. The design is transfer printed in black with additional underglaze handpainting in green, blue, red and yellow. The scene shows one girl skipping and another girl seated on the ground amidst flowers (Figure A.9l). At the bottom is part of a title in a border 'TH...' Three fragments were found in Feature 75 and two in Feature 85.

Pots and potlids

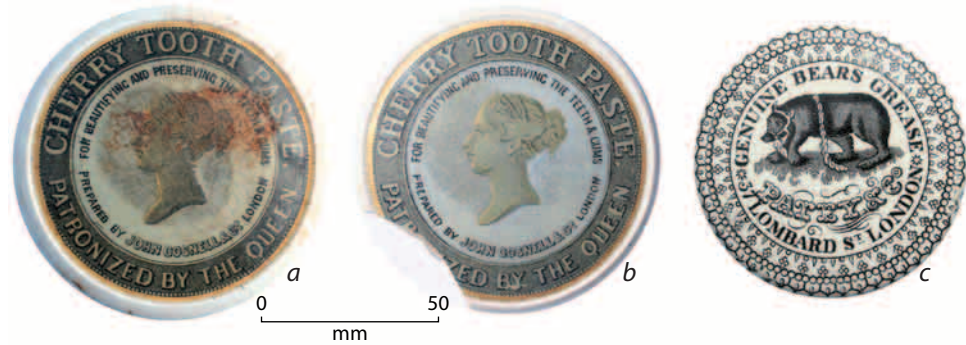
Holloway's Ointment

Thomas Holloway began producing his famous ointment in 1842 and it was still being marketed early in the 20th century. Fragments of one small 'Holloway's Family Ointment' pot printed in black were found in Area 9 Front/1 (Feature 390). The label is incomplete but reads 'HOLLOWAY'S/FAMILY OINTMENT/FOR THE CURE OF/SCROFULOUS & INDOLENT ...' (Figure A.14h) This label was used on pots during the period 1842–67 when Holloway was situated at 244 Strand, London (www.antiquebottles.co.za). Fragments of a lid from a larger sized pot were found in fill in the building footprint of Area 3 House. The lid is 90 mm in diameter and has a pictorial label with a seated lady and child by her side (Figure A.7f). The address on this pot is also from the early period at 244 Strand, London.

John Gosnell & Co

Two toothpaste pot lids were recovered from the London firm of John Gosnell and Co from Area 3/9 Rear 2. Both lids are decorated with a printed label featuring a portrait of Queen Victoria and the wording 'CHERRY TOOTH PASTE./PATRONIZED BY THE QUEEN/FOR BEAUTIFYING AND PRESERVING THE TEETH & GUMS/PREPARED BY JOHN GOSNELL & CO LONDON.' The colouring and the style of the Queen's portrait vary slightly between the two (Figure A.1a, b). John Gosnell and Co was established in 1760 and continues today, but these potlids were most likely produced in the mid–late 19th century.

A.1. Potlids: a, b, John Gosnell and Co tooth-paste; c, Patey and Co Bears Grease.



Patey & Co

One complete black printed potlid from the firm of Patey and Co was found in Area 3 Rear/2 (Feature 258). The lid has an attractive label featuring a bear and the wording ‘*GENUINE BEARS GREASE*/37 LOMBARD St LONDON/PATEY & Co’ (Figure A.1c). Bears grease was a popular product in the mid 19th century mainly for use on the hair but it could also be applied to wounds and for other uses. The history of Patey & Co is not known but this potlid most likely dates to the 1850s or 1860s.

Feeding bottle tops

S. Maw Son and Thompson, London

One complete top from fill at the back of 9 Pipitea Street is printed in black ‘S. MAW SON & THOMPSON/No11 & 12/ALDERSGATE St/LONDON.’ The top measures 24 mm in height and 40 mm in diameter. S. Maw Son and Thompson were in business from 1870–1901 (Richmond 2003: 246).

Mather, London and Manchester

Three tops were recovered from the firm of Mather. The most complete example from fill at the back of 9 Pipitea Street is printed in black ‘MATHER’S/INFANTS FEEDING BOTTLE/LONDON/&/MANCHESTER.’ This top measures 26 mm in height and 39 mm in diameter. A top of the same size from Area 3 House is printed on the side ‘[MA]THERS IMPROVED/SHILLING/[FEEDIN]G BOTTLE.’ A fragment of this type of top was also found in fill at the back of 9 Pipitea Street. The history of the Mather company is not known but these feeding bottle tops date to the late 19th century.

Unidentified Patterns

In total 137 unidentified transfer printed designs were recorded and allocated a code, for example ‘PS 001’, standing for Pipitea Street 001. Examples of unidentified designs are illustrated along with the other transfer printed patterns. Data on the distribution and vessel types for unidentified patterns are given on the CD that accompanies this report. Other designs decorated by different techniques were also given pattern codes and a selection are illustrated. Items which were clearly of 20th century manufacture were allocated codes but are not discussed further.

Manufacturers

A total of 31 manufacturers were identified from backmarks on earthenware, semi-vitreous ware and porcelain. As is typical for New Zealand historic archaeological sites the majority of these manufacturers are from Britain and most notably the Staffordshire district of England.

Bates, Brown-Westhead and Moore, Hanley, Staffordshire, 1859–61

The four vessels in the blue transfer printed pattern Donati are all made by Bates, Brown-Westhead and Moore. One of the plates has a full printed backmark with the initials 'BBW & M' and below this the pattern name.

Bishop and Stonier (Ltd), Hanley, Staffordshire, 1891–1939

Fragments of a chamber pot were recovered from fill at the back of 3 Pipitea Street backmarked with the pattern title 'MORTON' and the initials 'B. & S.' The style of the mark dates 1891–1936 (Godden No. 386). The pattern is not transfer printed and most likely dates from the early 20th century.

Edward F. Bodley and Co, Burslem, Staffordshire, 1862–81

The base of a mug found in fill at the back of 11–15 Pipitea Street is printed in green with a Staffordshire knot type mark containing the initials 'E.F.B/& Co' and below this a registration diamond for the date 26 April 1864 (Figure A.23b). While the initials stand for E. F. Bodley and Co the registration date matches a design registered to Bodley and Harold, operating from 1863–1865 (Kowalsky and Kowalsky 1999: 599). Godden suggests that there was some overlap between these two partnerships during the period 1863–65 (Godden 1991: 82). The mug base could not be matched to a pattern but measures 72 mm in diameter.

C. H. Brannam Ltd, Barnstaple, Devon, 1879–

Fragments of a large red-bodied mixing bowl were found in fill at the back of 9 Pipitea Street impressed with 'C.H.BRANNAM/BARUM/N.DEVON' (not illustrated). The bowl is decorated with a heavy blue slip glaze on the exterior and a cream slip glaze on the interior. This vessel was probably produced around 1930 or later.

Sampson Bridgwood and Son (Ltd), Longton, Staffordshire, c. 1805–1990s

One chamber pot base from Area 3 Rear/2 (Feature 85) had a backmark printed in brown with the trade name 'PORCELAINE OPAQUE' and '...GWOOD & SON' below. Fragments of another chamber pot decorated with gilt hairlines were found with the same backmark in fill behind 11–15 Pipitea Street. This mark was used by Sampson Bridgwood and Son from around 1885 until 1891, when 'England' was added to the mark (Godden No. 594).

Brown-Westhead, Moore and Co, Hanley, Staffordshire, c. 1862–1904

The base of a jug in the unidentified transfer printed pattern PS 151 from 11 Pipitea Street (Feature 391) had an embossed diamond registration mark on the base for the date 1 February 1869 (Figure A.18f). This matches a known registration for Brown-Westhead, Moore and Co (Kowalsky and Kowalsky 1999: 601).

Burgess and Leigh, Burslem, Staffordshire, 1862–

Three vessels in the unidentified purple transfer printed pattern PS 040 have full or partial marks attributable to Burgess and Leigh. One saucer and two cups were found in features in Area 3/9 Rear 2. The saucer has only the edge of the backmark but the cups have printed registration diamonds for the date 17 January 1866. This matches a known transfer printed design entitled Barbarini Vase registered by Burgess and Leigh on 17 January 1866 (Kowalsky and Kowalsky 1999: 399, 600). The date of this registration suggests that these vessels were produced sometime between 1866 and the early 1870s.

The Burslem Pottery Co Ltd, Burslem, Staffordshire, 1894–1933

Fragments of a Woodland pattern plate in green were found in fill in the area of 9 Pipitea Street with part of the standard printed backmark from The Burslem Pottery Co Ltd (Godden No. 732).

W. T. Copeland and Sons, Stoke, Staffordshire, 1847–

A small fragment of blue printed plate from Area 3/9 Rear 2 (Feature 330) bears the impressed backmark 'COPELAND.' Unfortunately not enough of the pattern is present for it to be identified.

Doulton and Co (Ltd), Lambeth and Burslem, c. 1858–

Fragments of a dinner plate were found in fill at the back of 15 Pipitea Street backmarked 'MADE IN ENGLAND/ROYAL DOULTON/ENGLAND/THE COPPICE/E.5803.' The plate measures 260 mm in diameter and dates from around the 1930s. One semi-vitreous plate from Feature 318 in the PS 096 design is backmarked 'ROYAL DOULTON/ENGLAND.' This mark dates to the early 20th century and the feature to no earlier than 1930.

William Fairbairns, Hanley, Staffordshire, 1863–98

The name William Fairbairns is recorded as having been involved with three pottery partnerships between 1863 and 1898 although details of when he may have traded under his own name are unclear (www.thepotteries.org). One saucer in the unidentified transfer printed pattern PS 039 from Area 3 Rear/2 (Feature 85) is backmarked with 'Wm FAIRBAIRNS' in a garter topped with a crown. Two brown cups, two red mugs and one other brown saucer in this pattern are present in features in Area 3 Rear/2. All of these vessels would have been made by the same pottery.

S. Fielding and Co (Ltd), Stoke, Staffordshire, 1879–

A small vase from Area 9 House (Feature 83) is backstamped 'CROWN/DEVON LUSTRINE/ FIELDING'S/STOKE on TRENT/ENGLAND/ROYAL GEORGE' (Figure A.21b). The Royal George design which features a large galleon was not introduced until 1924 and the mark dates to no later than 1930 (Godden No. 1550). This late manufacturing date suggests that material in Feature 83 is unlikely to have been deposited prior to 1930.

W. H. Grindley and Co, Tunstall, Staffordshire, c. 1880–

One fragment of plate in an unidentified green transfer printed design was found in the fill at the back of 11–15 Pipitea Street, backmarked with 'W.H.GRINDLEY & C/ENGLAND.' This mark most likely dates to the early years of the 20th century.

Ralph Hammersley (& Son), Burslem, Staffordshire, c. 1860–1905

One Rhine pattern plate from Area 3 Rear/2 (Feature 85) has a partial backmark with the pattern name in a border and '...MMERSLEY' below. Considering the early date for this feature this is most likely to stand for Ralph Hammersley, who operated under this name until 1884 when '& Son/s' was added to the company title (Godden 1991: 306).

Robert Heron and Son, Kirkcaldy, Scotland, 1850–1929

One dinner plate in the transfer printed Alaska pattern from Area 3/9 Rear 2 (Feature 211) is backmarked with the pattern name and the initials 'R.H. & S.' The style of the pattern suggests a manufacturing date around 1880.

Hulse, Nixon and Adderley, Longton, Staffordshire, 1853–68

Only one vessel was identified to this firm from Area 3/9 Rear 2 (Feature 330). Fragments of a blue Willow pattern serving vessel were backmarked 'STAFFORDSHIRE/STONE CHINA/H.N.&A.'

A. B. Jones and Sons (Ltd), Longton, Staffordshire, 1900–72

Fragments of one bone china saucer from Area 9 Front/2 (Feature 384) had a backmark from the pottery of A. B. Jones and Sons dating 1900 – 1913 (Godden No. 2192).

George Jones (& Co; & Sons), Stoke, Staffordshire, 1861–1951

Several vessels in the assemblage are likely to have been made by the George Jones pottery. The only marked piece is a complete Medici pattern bowl in grey from Area 5 Pipitea St (Feature 259). The bowl is backmarked with the pattern name in a border, with a 'JG & Co' monogram and 'STOKE-UPON-TRENT' below. The use of George Jones and Co dates to the early period of the pottery in the 1860s. Two other transfer printed patterns in the assemblage are also likely to have been produced by George Jones although no marked pieces are present. Pearl Wreath is the most numerous with eight vessels and is known to have been a design registered by George Jones and Co. Fragments of a bowl from Area 3 Rear/2 (Feature 85) in the unidentified pattern BLOM 006 (as recorded from the Blomfield House site in Russell) is also a design registered to George Jones. Examples of this pattern with a registration diamond for the date 18 December 1862 have been recovered from Edmonds Ruins, in the Bay of Islands (Challis 1994: 82) and from the Wellington Inner City Bypass excavations (CFG Heritage report in preparation).

Leboeuf and Milliet, Criel, France, c. 1841–95

One small cup from fill at the back of 13 Pipitea Street is stamped in black on the base 'CREIL et MONTE.../L.M. & Cie/PORCEL OPAQUE.' This is a mark used by the French pottery Leboeuf and Milliet, who operated from c. 1841–95 (Kovel and

Kovel 1986: 185). The cup stands 60 mm high with a rim diameter of 70 mm and is decorated in the unidentified transfer print PS 152.

Livesley, Powell and Co, Hanley, Staffordshire, 1851–66

Just two vessels were identified in the assemblage as having been manufactured by Livesley, Powell and Co. The most complete vessel is an Abbey pattern saucer printed in blue with sherds cross-matched from Features 85 and 311 in Area 3/9 Rear 2. The saucer is backmarked with 'IRONSTONE' above the pattern name in a border and a square impressed mark over the top 'BEST/L P & Co.' This mark is recorded as being used by Livesley, Powell and Co (Godden No. 2387). A more fragmentary saucer printed in blue in the Alhambra pattern was found in Area 9 Front/1 (Feature 390). The backmark is only partially preserved but includes the pattern name in a border and the same impressed mark as the Abbey saucer. A complete Alhambra pattern saucer printed in purple with a full Livesley, Powell and Co backmark was recorded from the Wellington Inner City Bypass excavations (CFG Heritage report in preparation).

John Maddock and Sons Ltd, Burslem, Staffordshire, 1855–

The base of one plain mug collected from the under-floor deposit of 13 Pipitea Street is printed with 'JOHN MADDOCK & SONS LTD/MADE IN ENGLAND.' The inclusion of 'Made In England' rather than just 'England' suggests a manufacture date well into the 20th century.

C. T. Maling (& Sons), Newcastle upon Tyne, Northumberland, c. 1859–1963

The base of one plain earthenware food storage jar 105 mm in diameter from the rear of 9 Pipitea St (Feature 318) is impressed on the base: MALING/NEWCASTLE. The contents of this feature indicate that the material was deposited after 1930 but this ceramic jar was most likely produced at sometime in the late 19th or early 20th century.

Melba China Co Ltd, Longton, Staffordshire, 1948–51

Vessels from this manufacturer are later than the cut-off date for analysis but the presence of one bone china cup base stamped 'MELBA BONE CHINA/GUARANTEED/MADE IN ENGLAND' from the fill at the back of 3 Pipitea Street indicates that some of the disturbance in this area is quite modern.

Old Hall Earthenware Co Ltd, Hanley, Staffordshire, 1861–86

Fragments of two Asiatic Pheasants pattern plates from Area 3/9 Rear 2 (Feature 292) and fill at the back of 9 Pipitea Street have backmarks with the pattern name and the initials 'O.H.E.C.L.' Both the plates and the backmarks are printed in blue.

Podmore, Walker and Co, Tunstall, Staffordshire, 1834–59

One largely complete Asiatic Pheasants pattern plate printed in blue from Area 3 Rear/2 (Feature 229) was backmarked with the pattern name and the initials 'P. W. & Co.' Podmore, Walker and Co are credited with first introducing Asiatic Pheasants and it became one of the most commonly produced patterns during the second half of the 19th century (Coysh and Henrywood 1982: 29).

Pountney and Co (Ltd), Bristol, Gloucestershire, 1849–69

Although Pountney and Co were established by the mid 19th century the few marked pieces in the assemblage all date to the 1930s and later. Two fragmentary saucers were found in Area 9 House and Area 9 Front/2, one with the full backstamp 'Bristol/WARE/POUNTNEY & Co Ltd/BRISTOL/ENGLAND/EST. 1683.' Both of these pieces date from 1930 onwards.

J. and W. Pratt, Lane Delph, Staffordshire, 1836–59 (www.thepotteries.org)

One of the Swiss Cottage pattern plates from Area 3 Rear/2 (Feature 85) is backmarked with the pattern name and the partial manufacturers name 'J.&W.PR...' This stands for J. and W. Pratt. The date for this partnership agrees well with the style of the pattern which dates to around the middle of the 19th century. All three Swiss Cottage vessels would have been produced by J. and W. Pratt.

Swinnertons Ltd, Hanley, Staffordshire, 1906–70.

One saucer from Area 3 Rear/3 (Feature 126) was backmarked with the name of this manufacturer and the pattern title 'Nestor.' The mark dates to no earlier than the 1930s which confirms the late date for this feature.

Turner and Tomkinson, Tunstall, Staffordshire, 1860–72

Apart from the Star pattern cups and saucers one other pattern is also most likely attributable to this pottery. A fragment of mug base from Area 3 Rear/2 (Feature 85) has a registration diamond printed on the base in blue for the date 7 March 1861 (Figure A.23e). This matches a registration taken out on this date by Turner and Tomkinson (Kowalsky and Kowalsky 1999: 598). The only pattern in blue from Feature 85 which occurred on mugs was the unidentified transfer printed design PS 037 and it is therefore highly likely that Turner and Tomkinson is the manufacturer. Fragments from at least ten mugs, three saucers and one lid from a small dish were found across Area 3/9 Rear 2 in this pattern.

Wedgwood and Co Ltd, Tunstall, Staffordshire, 1860–1965

Several vessels in the assemblage are attributable to this firm, all produced no earlier than 1900. The five Phoebe pattern vessels (described above) are backmarked 'Wedgwood & Co Ltd' in a style of mark which dates 1900–1906 (Godden No. 4057). Two semi-vitreous saucers from the back of 9 Pipitea St (Feature 318) decorated with dark blue bands around the rim (pattern PS 095) have printed backmarks in green with 'Wedgwood & Ld/England.' This mark dates from 1906 onwards (Godden No. 4059).

Thomas C. Wild and Sons (Ltd), Longton, Staffordshire, 1917–

Six bone china vessels in the PS 147 design are attributable to this late manufacturer. One cup was found in Feature 101, one cup and one saucer in Feature 346, and two cups and one plate from fill, all in the area of 9 Pipitea Street. The cup bases are all stamped with 'ROYAL ALBERT/CROWN CHINA' which dates from 1917 – 1935. These vessels were most likely purchased as a set from the Wellington branch of the D.I.C. department store as one of the cups also has 'D.I.C.' stamped in ink on the base.

Miscellaneous Marks

One fragment of semi-vitreous saucer from 5 Pipitea St (Feature 488) is stamped on the back with 'Rd No 128611.' This registration number dates to 1889 or 1890.

Stoneware Manufacturers

Joseph Bourne and Son (Ltd), Denby, Derbyshire, c. 1809–

The base of a stoneware bottle 72 mm in diameter from Area 3/9 Rear 2 (Feature 72) is impressed 'J BOURNE & SON/PATENTEES/DENBY POTTERY/NEAR DERBY/187.' This impressed mark was used from about 1850 to the end of the 19th century (Godden 1991: 90).

Doulton and Co, Lambeth, London, c. 1858–1956

One whole cream coloured bottle 146 mm high and 54 mm in diameter from fill on 9 Pipitea Street is impressed '4/DOULTON/LAMBETH.' This simple impressed mark was used from 1858 onwards.

Stephen Green and Co, Lambeth, London, c. 1820–58

A base fragment from a cream coloured bottle from Area 9 Front/1 (Feature 390) carries the partial impressed mark '...EN GREEN & Co/LAMBETH.'

Henry Kennedy (& Sons), Barrowfield Potteries, Glasgow, 1866–1929

One porter style bottle 210 mm high and 72 mm in diameter from Area 3 Rear/2 (Feature 85) carried a faint impressed mark from the pottery of Henry Kennedy.

Lovatt and Lovatt, Langley Mill, Nottingham, 1895–

One whole ink bottle was found in Area 3/9 Rear 2 (Feature 482) with the impressed mark 'LOVATT & LOVATT/NOTTS' LANGLEY MILL.' The bottle has a brown slip glaze and stands 155 mm high with a base diameter of 66 mm.

William Powell (& Sons), Bristol, c. 1830–1906

A large Bristol glazed condiments jar from Area 3 Rear/2 (Feature 85) bearing the impressed mark and partial paper label of the London provisions merchant J. T. Morton also has a potters mark for Powell, Bristol. The pottery mark is impressed in a circular fashion with 'REGd MARCH 1849/POWELL BRISTOL' with a '6' in the centre. The year 1849 is when J. T. Morton commenced business and it would seem that this vessel with its impressed markings was registered specifically for Morton's business.

Price, Bristol, 19th century

One complete jar with a two-tone Bristol glaze was found in Area 3 House. The jar is impressed on the side 'PRICE/BRISTOL' in an oval and stands 125 mm high with a base diameter of 83 mm. The Price family operated a pottery in Bristol producing stoneware from 1822 through to the 20th century (www.kalendar.demon.co.uk). The history of this pottery is not well recorded but stoneware bottles used by local Wellington aerated water manufacturers have been dated to the period 1885–1921 (Fisher 2004: 259).

George Skey, Tamworth, Staffordshire, 1862–92

A whole ink bottle with a tan slip from Area 9 House (Feature 136) carried an impressed mark 'GEORGE SKEY/WILNECOTE/TAMWORTH' in an oval near the base. The bottle stands 114 mm high and has a base diameter of 57 mm.

James Stiff (& Sons), Lambeth, London S.E., c. 1840–1913

James Stiff and Sons are the makers of a water filter recovered from the under-floor deposit of 11 Pipitea Street. The filter is rather elaborately embossed on the front with a royal coat of arms and the wording '[STI]FF's/[PATE]NT FILTER/HIGH STREET/LAMBETH.' Stiff and Sons were the last surviving independent pottery in Lambeth, taken over their giant neighbour Doulton in 1913.

Miscellaneous Marks

One fragment of bottle from Area 9 Front/1 (Feature 390) has the partial impressed mark near the base '...RANC.../...'

Clay Pipe Manufacturers

A total of six clay pipe manufacturers were identified from markings on either the stem or bowl. Manufacturers who continued to operate into the 20th century have been given a terminal date of 1891 as after this time all goods manufactured for export were required to be marked with the country of origin.

Blake, London, England, 1873–98

One largely complete pipe, with only fragments of the bowl missing, was found in Area 9 House (Feature 100) marked 'BLAKE//LONDON' in impressed serif lettering enclosed in a border. The back of the bowl is also marked with what appears to be a letter enclosed in a circle in relief, but only the edge of this is preserved.

Duncan McDougall and Co, Glasgow, Scotland, 1846–91

One stem fragment was found in Area 3 Rear/2 (Feature 85) impressed 'McDOUGALL GLASGOW//BURNS CUTTY PIPE., The term Burns Cutty refers to the style of the pipe, which was evidently quite popular as pipes under this name are known to have been made by several other manufacturers (Walker 1983: 17). Long pipes tended to break very easily and 'cutties' were short pipes which could be smoked while a man was at work (Apperson 1914).

William White, Glasgow, Scotland, 1805–91

One stem fragment from Area 3 Rear/2 (Feature 85) is impressed in sans serif lettering 'W.WHITE//GLASGO[W].' Bite marks on the end of the stem indicate that this pipe continued to be used after the original bite end broke off. A complete pipe broken into three pieces was found in Area 9 House (Feature 100). The pipe measures 175 mm in length with a bowl and spur 50 mm high and 26 mm wide. On the stem the pipe is marked with a mould number '78' then 'W.WHITE//GLASGOW' in impressed sans serif lettering. On the back of the bowl is marked 'T D' in impressed serif lettering and on the left side of the spur is a sideways '1' in relief. Three other William White pipes appear to be in the 'Baltic Yachter' style. Two stem fragments from Area 3/9 Rear 2 are impressed 'W.WHITE ...//...tic ...'

and ‘...ITE GLA...//Bal...’ (Feature 210) and one ‘W.WHITE ...//...ltic ...’ (Feature 330). The lettering for W. White is in sans serif while that for Baltic Yachter is in serif, with only the first letter of each word capitalised. A bowl fragment from Area 9 Front/1 (Feature 390) impressed with sans serif lettering ‘WHITE’S/RIFLE/PIPE’ enclosed in a shield on the back of the bowl may also be a W. White product.

John Miller, Glasgow, Scotland, 1866–88

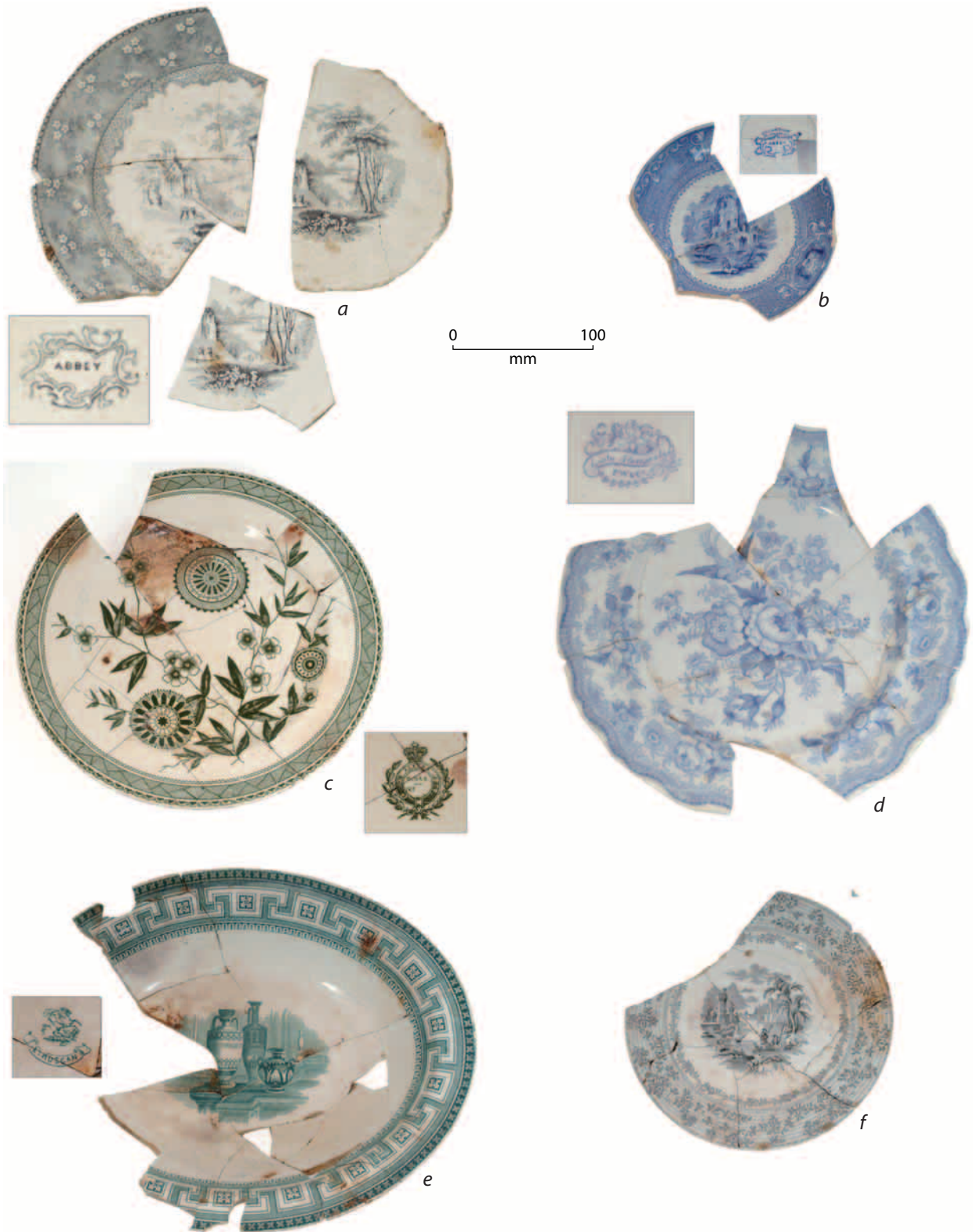
One stem fragment from Area 3/9 Rear 2 (Feature 197) is impressed in sans serif lettering ‘MILLER//GLASGOW.’

William Murray, Glasgow, Scotland, 1830–61

One stem fragment from Area 9 Front/1 (Feature 390) is impressed in serif lettering ‘MURRAY//GLASGOW.’

Thomas White and Co, Edinburgh, Scotland, 1823–76

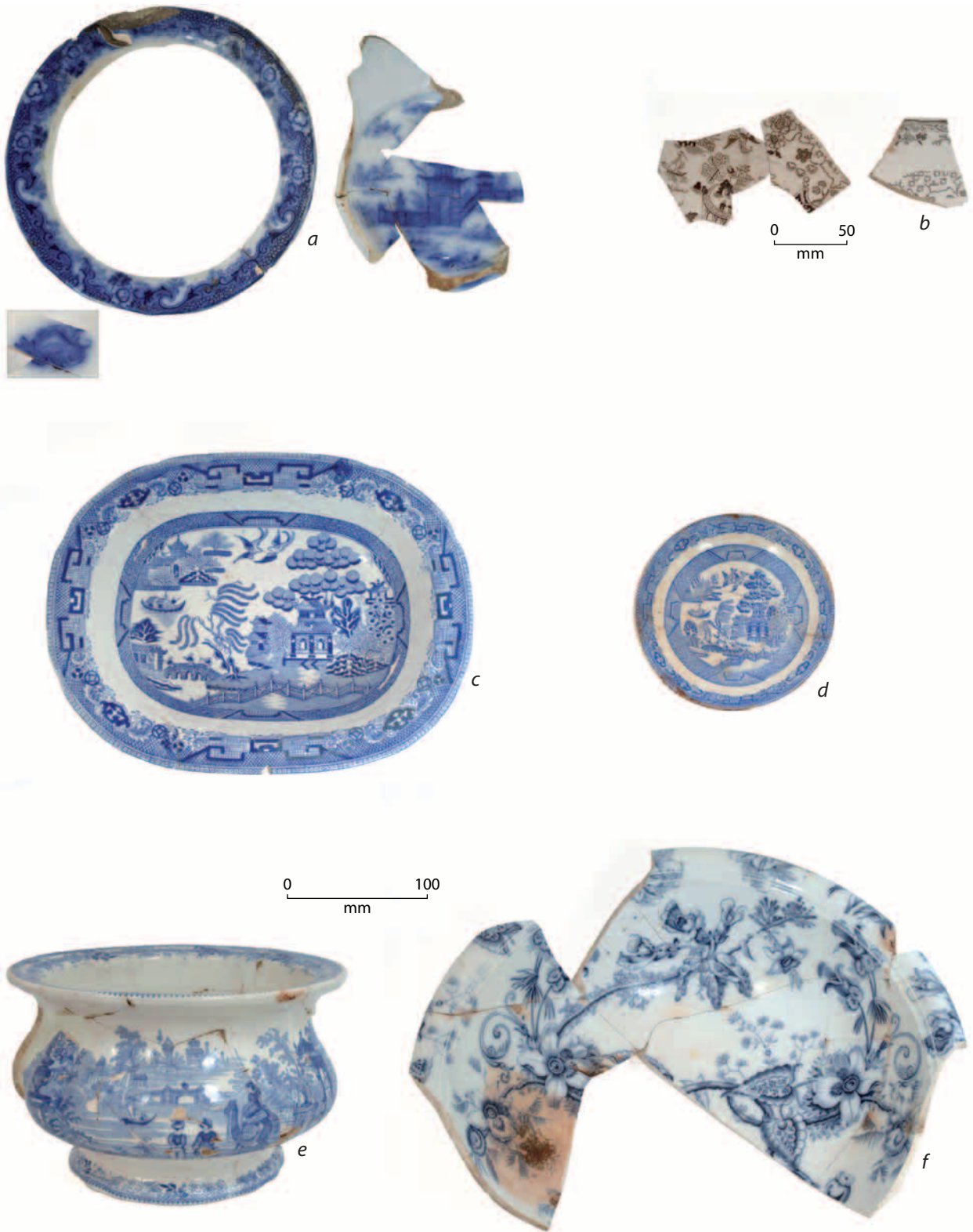
A small fragment of stem from Area 9 Front/1 (Feature 390) has the partial impressed mark in serif lettering ‘... & Co//EDI...’ Stems such as this are normally marked ‘THOS.WHITE & Co//EDINBURGH.’



A.2. Transfer prints: a, Abbey plates; b, Abbey saucer with Livesley, Powell and Co backmark; c, Alaska plate with Robert Heron and Son backmark; d, Asiatic Pheasants plate with Podmore, Walker and Co backmark; e, Etruscan serving dish; f, Geneva side plate.



A.3. Transfer Prints: a, Java saucer; b, Medici bowl with George Jones and Co backmark; c, Orange chamberpot with partial registration diamond backmark; d, Phoebe plate with Wedgwood and Co Ltd backmark; e, Rhine serving dish; f, Swiss Cottage plate with J. and W. Pratt backmark.



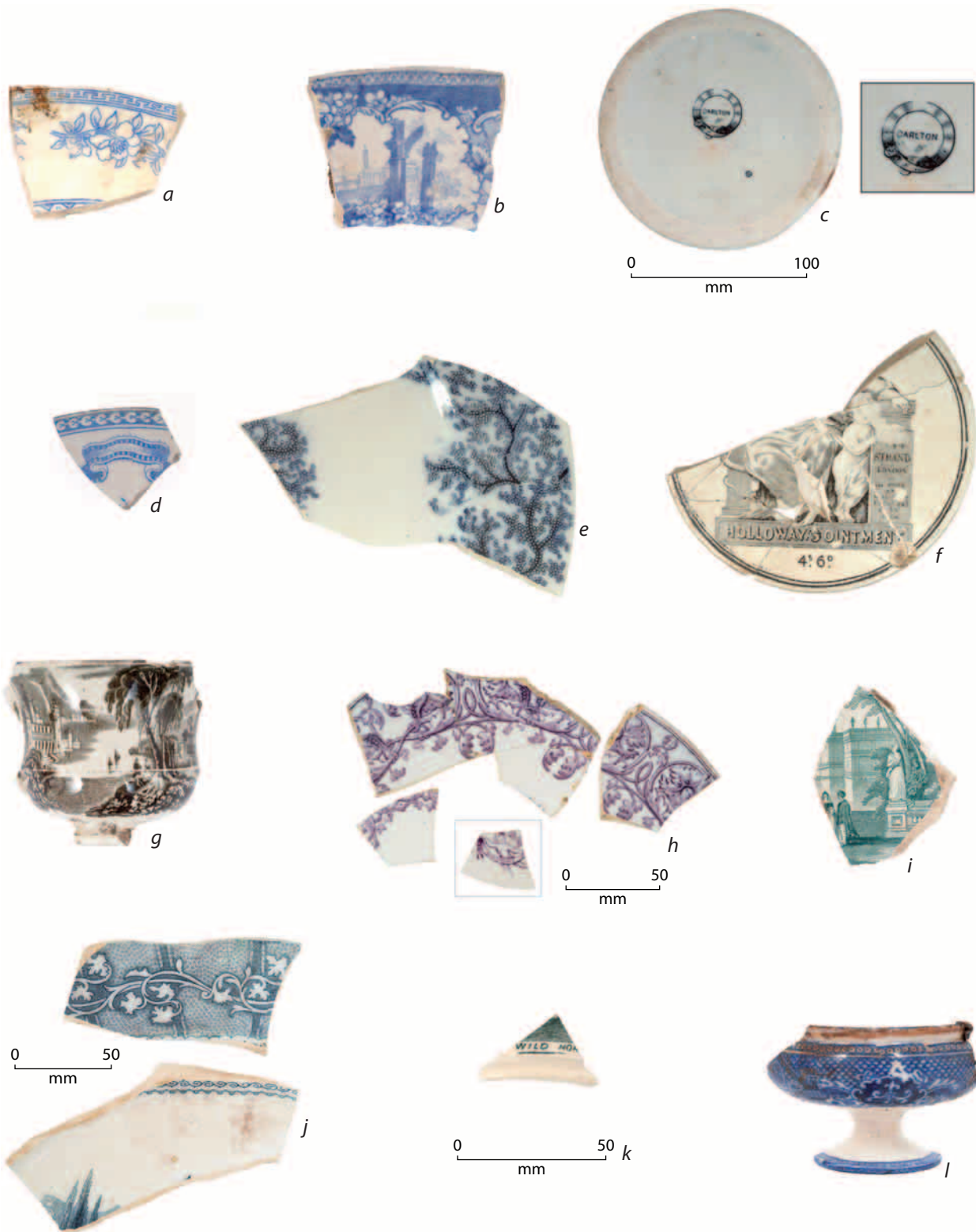
A.4. Transfer prints: a, Whampoa chamberpot; b, PS 066 saucer; c, Willow serving dish; d, late 19th–early 20th century Willow saucer; e, PS 001 chamberpot; f, PS 058 washbowl.



A.5. Transfer prints: a, Donati plate with Bates, Brown-Westhead and Moore backmark; b, Pearl Wreath serving vessel; c, Rouen 'A' saucer with unidentified J. B. backmark; d, Wicker serving dish; e, PS 087 jug; f, PS 103 serving vessel.



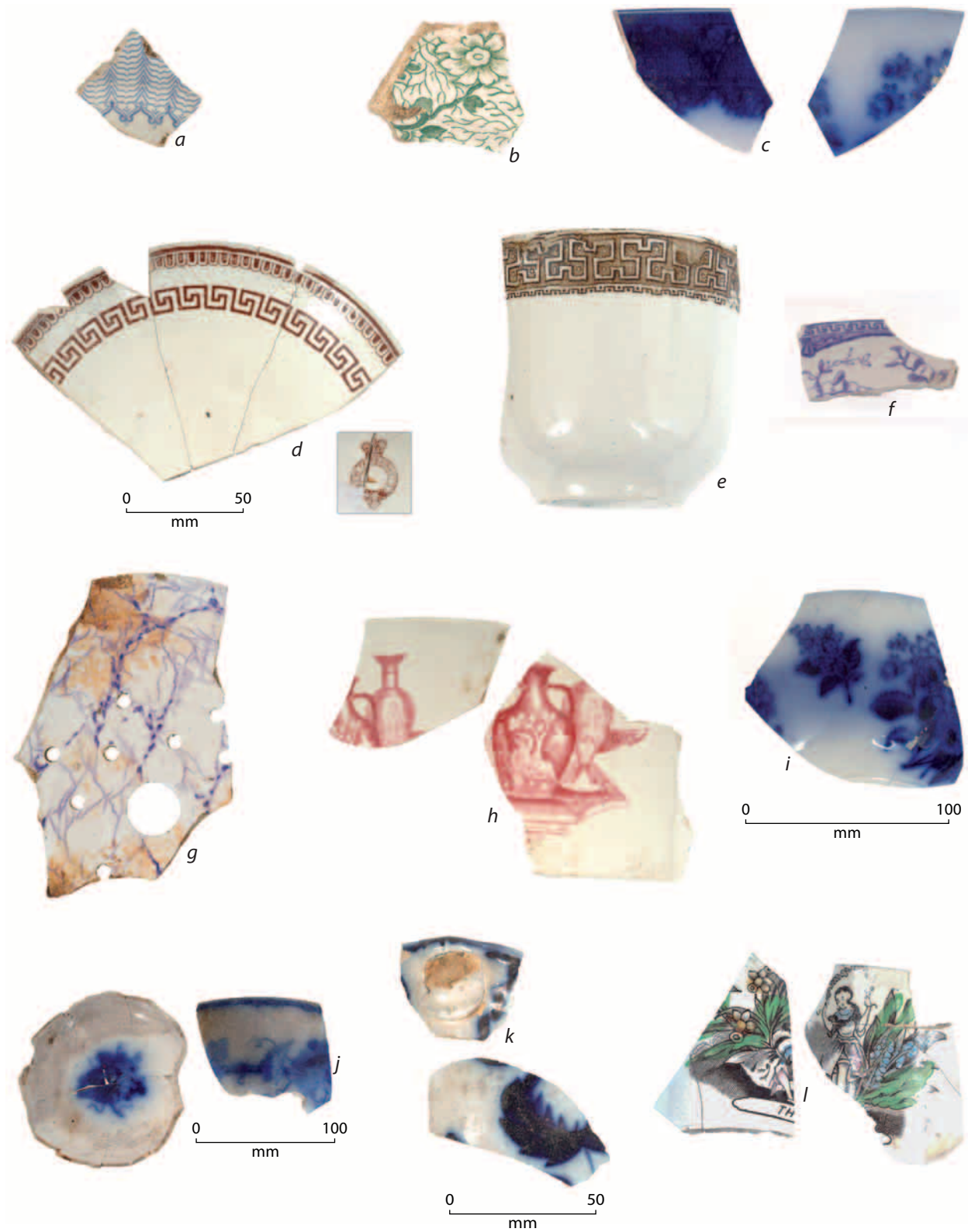
A.6. Children's transfer prints: a, Blindman's Buff plate; b, Dr Franklin's Maxims mug; c, Ducks plate; d, PS 067 mug; e, [Plough Th]e Ground plate; f, PS 148 plate; g, Buck mug.



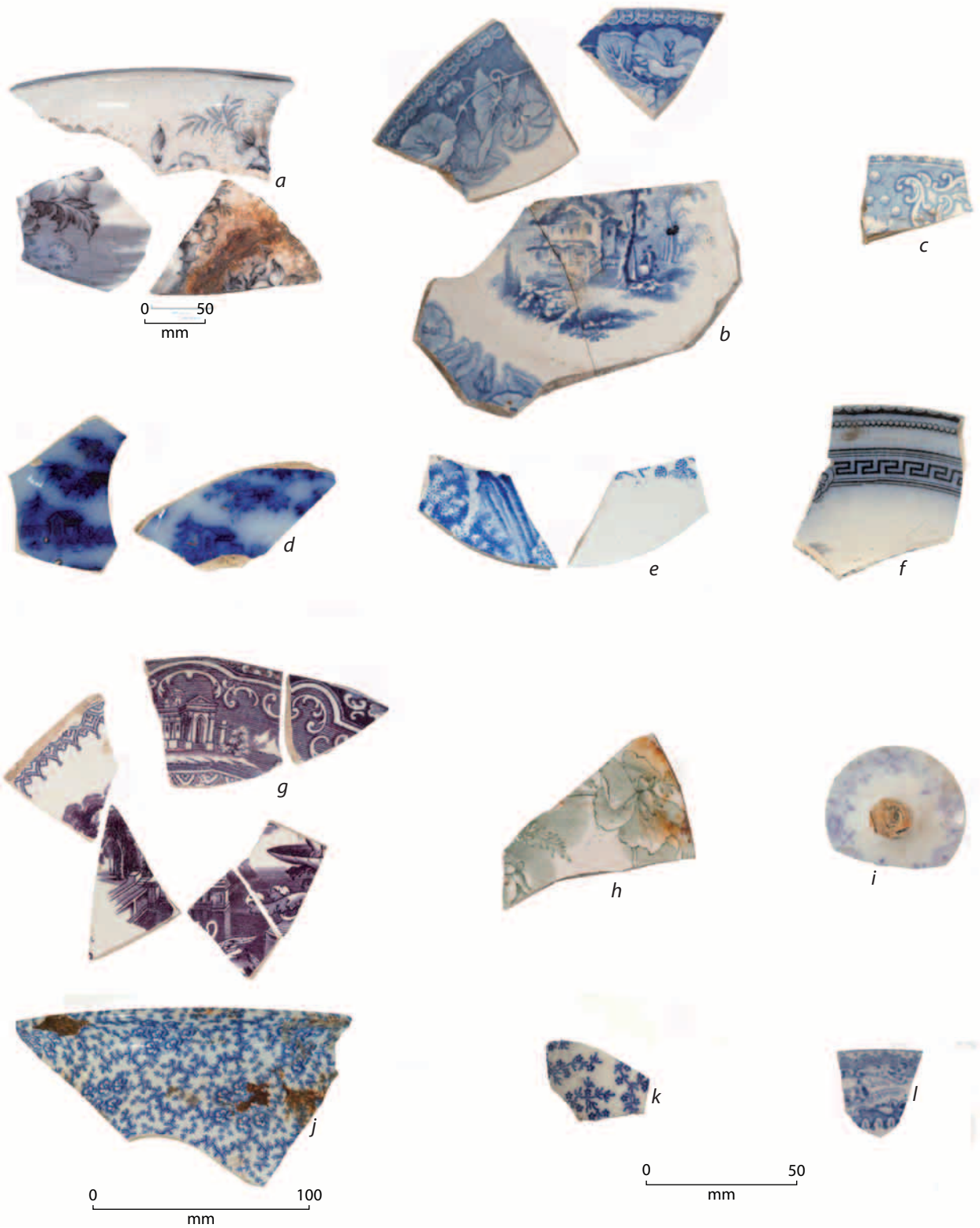
A.7. Transfer prints. a, Blom 033 saucer (previously identified from Blomfield House, Russell); b, PS 002 plate; c, Carlton chamberpot (pattern mark only); d, Clyde saucer; e, Coral side plate; f, Holloway's ointment pot lid; g, Milan cup; h, Nightingale saucer; i, Patras serving vessel; j, Rousillon serving vessel; k, Wild Horses child's mug; l, Willow serving bowl.



A.8. Transfer Prints. a, PS 004 cup; b, PS 006 saucer; c, PS 008 lid; d, PS 009 candlestick; e, PS 010 cup; f, PS 011 bowl/chamberpot; g, PS 012 plate; h, PS 019 unidentified; i, PS 020 serving vessel; j, PS 022 cup; k, PS 025 cup; l, PS 026 plate.



A.9. Transfer prints: a, PS 032 plate; b, PS 033 plate; c, PS 038 plate; d, PS 039 saucer with W. Fairbairns backmark; e, PS 043 cup; f, PS 047 saucer; g, PS 055 drainer; h, PS 059 mug; i, PS 062 bowl; j, PS 063 bowl; k, PS 064 jug; l, PS 070 child's mug.



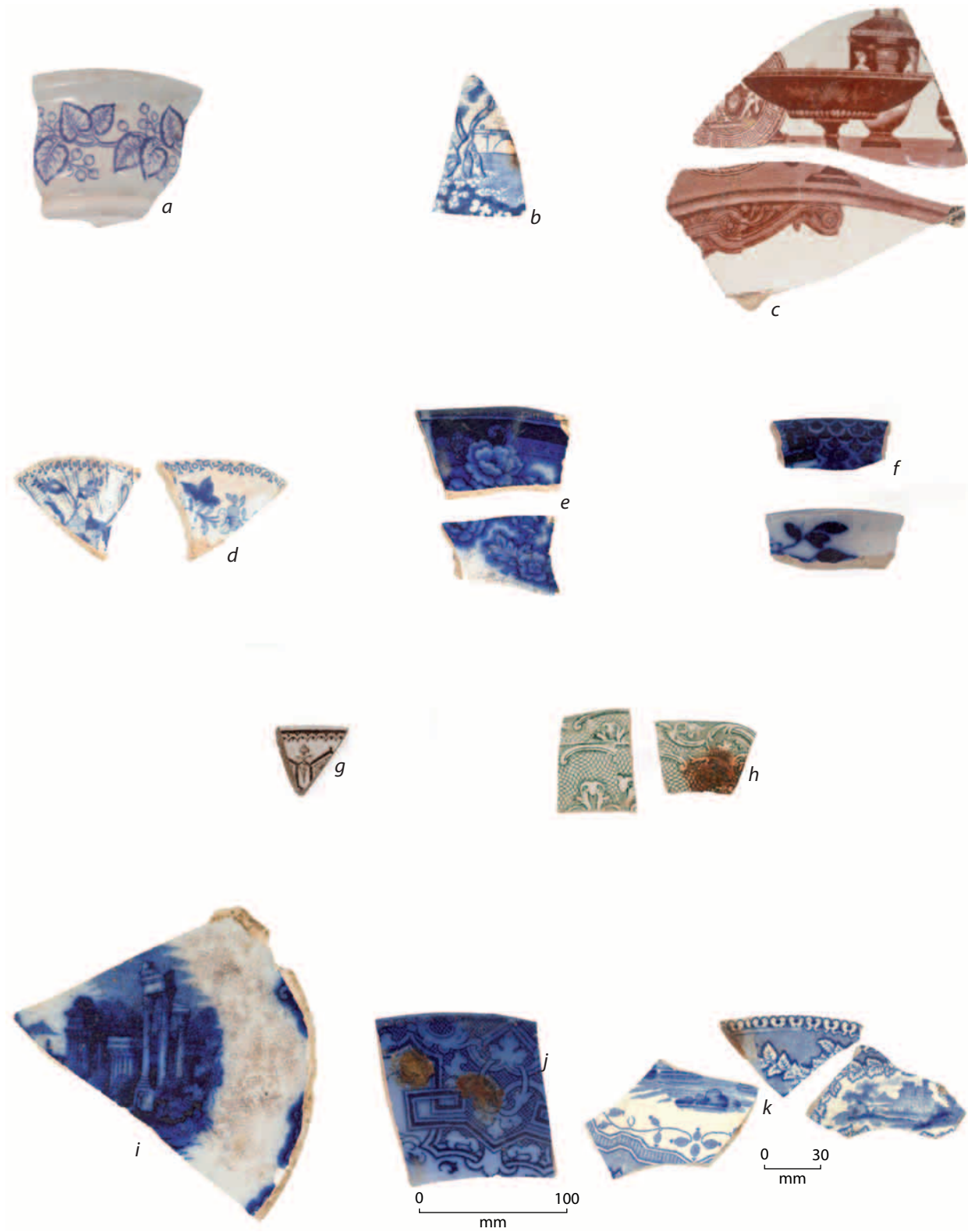
A.10. Transfer prints: a, PS 078 chamberpot; b, PS 080 saucer; c, PS 083 plate; d, PS 085 saucer; e, PS 093 cup/bowl; f, PS 100 saucer; g, PS 101 plate; h, PS 110 plate; i, PS 112 eggcup; j, PS 120 chamberpot; k, PS 121 cup; l, PS 122 plate.



A.11. Transfer prints: a, PS 124 mug/jug; b, PS 126 cup; c, PS 127 bowl/chamberpot; d, PS 132 saucer; e, PS 140 serving platter; f, PS 142 saucer; g, PS 143 bowl/chamberpot; h, PS 144 cup/bowl; i, PS 145 chamberpot; j, PS 149 plate; k, PS 152 cup with Leboeuf and Milliet backmark; l, PS 155 plate.



A.12. Transfer prints: a, PS 156 saucer; b, PS 157 saucer; c, PS 160 jug; d, PS 161 saucer; e, PS 162 saucer; f, PS 164 plate; g, PS 165 saucer; h, PS 168 cup/bowl; i, PS 170 plate/saucer; j, PS 171 jug; k, PS 182 plate; l, PS 185 bowl.



A.13. Transfer Prints: a, PS 190 bowl/dish; b, PS 194 cup; c, PS 196 chamberpot; d, PS 201 jug; e, PS 203 plate; f, PS 204 cup; g, PS 206 saucer; h, Patras plate; i, PS 209 plate; j, PS 210 plate; k, WICB 063 bowl/chamberpot (previously recorded from the Wellington Inner City Bypass excavation).



A.14. Transfer prints: a, PS 003 cup/bowl; b, Alhambra saucer; c, Antique saucer; d, Colosseum chamberpot; e, Donati dish lid; f, Forest bowl; g, Gem plate; h, Holloway's ointment pot; i, Morton chamberpot; j, Syria plate; k, Tacsonia chamberpot; l, [V]enetian pattern mark.



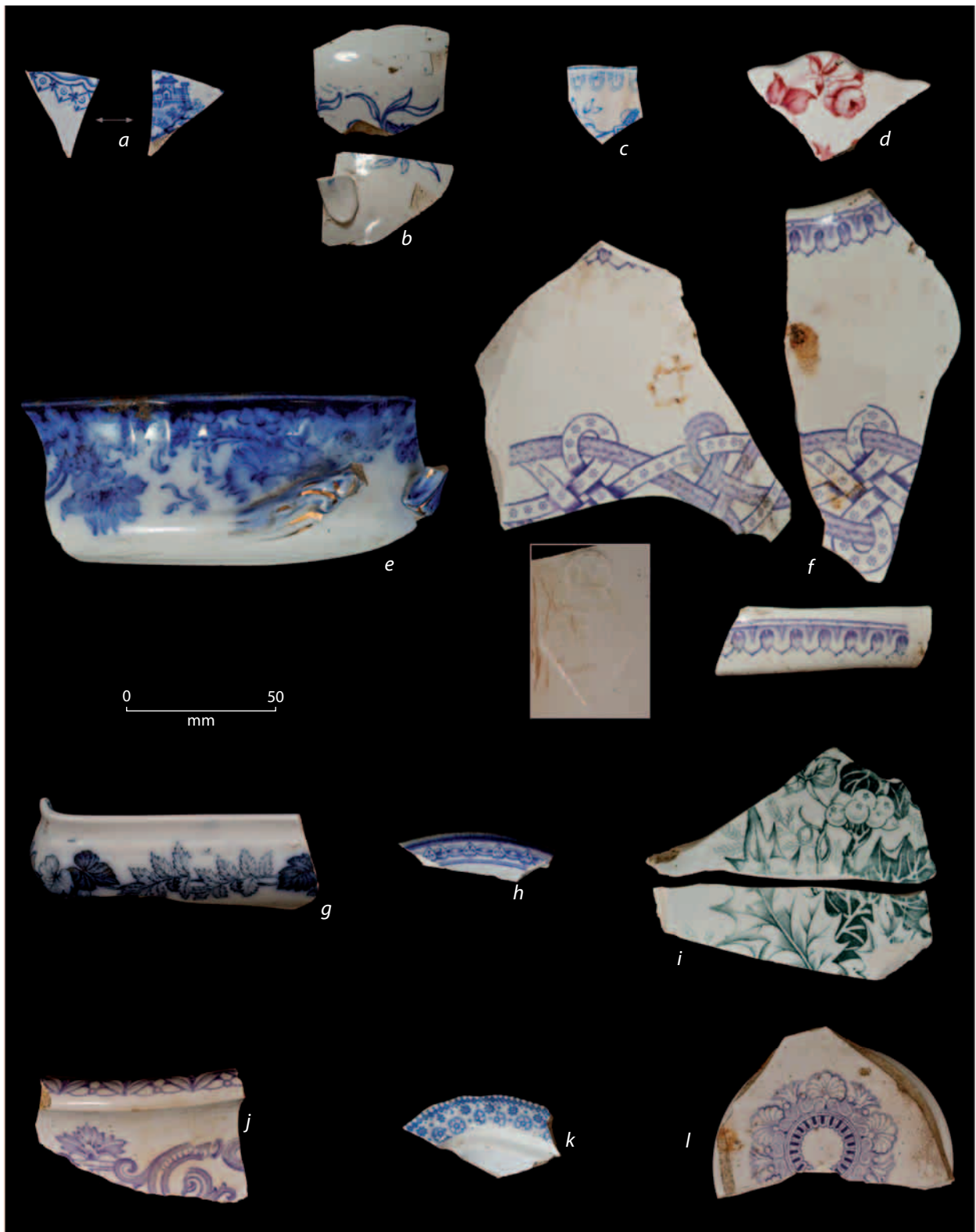
A.15. Transfer prints: a, PS 005 cup; b, PS 007 cup; c, PS 011 bowl/serving vessel; d, PS 013 chamberpot; e, PS 016 saucer; f, Antique bowl; g, PS 018 serving vessel; h, PS 021 bowl; i, PS 023 saucer; j, PS 024 saucer; k, PS 027 saucer; l, PS 036 saucer.



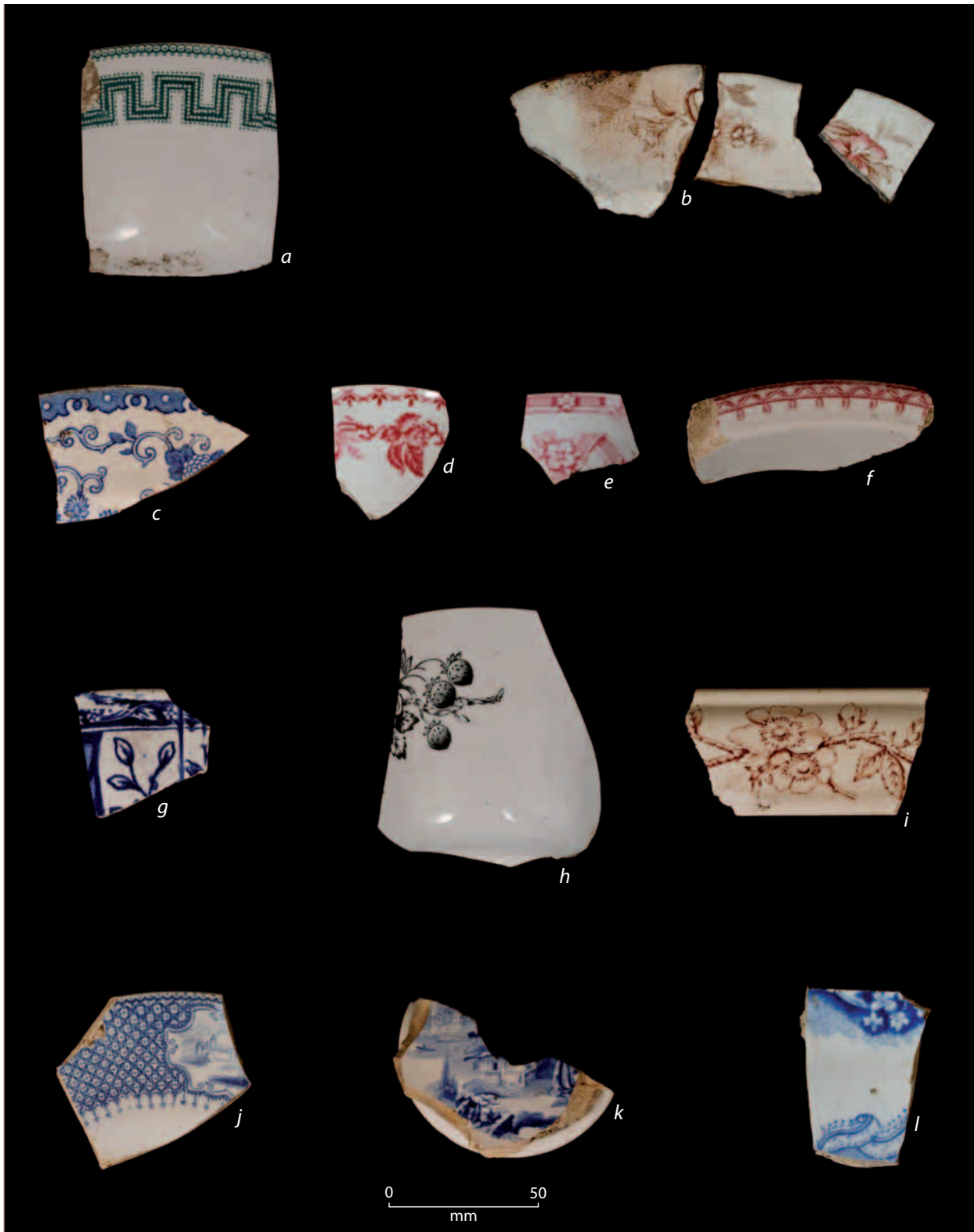
A.16. Transfer Prints: a, PS 037 mug; b, PS 039 mug; c, PS 040 cup with registration diamond for 17 January 1866; e, PS 041 serving vessel and plate; e, PS 044 unidentified; f, PS 044 jug; g, PS 045 cup; h, PS 046 cup; i, PS 048 cup; j, PS 049 jug; k, PS 054 cup; l, PS 056 toiletry dish lid.



A.17. Transfer prints: a, PS 068 bowl; b, PS 069 cup; c, PS 072 cup; d, PS 074 bowl; e, PS 075 bowl; f, PS 076 cup/bowl; g, PS 077 jug; h, PS 079 jug; i, PS 082 lid; j, PS 084 bowl/chamberpot; k, PS 086 sauceboat; l, PS 088 cup.



A.18. Transfer prints: a, PS 091 cup; b, PS 116 cup; c, PS 131 cup; d, PS 138 bowl/dish; e, PS 146 serving dish; f, PS 151 jug; g, PS 158 toiletry dish; h, PS 163 bowl/dish; i, PS 166 bowl/chamberpot; j, PS 167 chamberpot; k, PS 169 dish; l, PS 172 bowl.



A.19. Transfer prints: a, PS 178 cup; b, PS 179 plate; c, PS 180 plate; d, PS 181 cup; e, PS 183 cup; f, PS 184 chamberpot; g, PS 187 jug; h, PS 189 cup; i, PS 191 toiletry dish; j, PS 200 saucer; k, PS 202 cup/bowl; l, PS 211 saucer.



A.20. Mixed Ceramics: a, PS 028 child's plate; b, PS 029 gilt enamelled and moulded cup; c, PS 061 hairlined cup; d, PS 092 decorative vase; e, PS 104 handpainted cup; f, PS 113 handpainted candlestick; g, PS 125 sponged cup; h, PS 133 handpainted saucer; i, PS 174 handpainted and sponged cup; j, UCOL 216 bowl/chamberpot (previously recorded from the UCOL excavation, Wanganui); k, WICB 063 plate/serving dish. l, PS 065 handpainted cup.



A.21. Jugs and teapot: (a – f, relief moulded dyed-body jugs) a, PS 141 jug; b, PS 014 jug; c, PS 094 jug; d, UCOL 253 jug; e, PS 051 jug; f, PS 114 jug; g, PS 050 relief moulded teapot; h, PS 089 relief moulded teapot; i, PS 115 relief moulded teapot.



A.22. Mixed Ceramics: a, edgebanded saucer; b, mug base with E. F. Bodley and Co backmark and registration diamond for 26 April 1864; c, Mug base with registration diamond for 7 March 1861; d, PS 118 children's teaware; e, Children's toy saucer and cup; f, PS 117 relief moulded jug; g, PS 052 relief moulded jug.



A.23. Stoneware bottles: a–c, Bristol glazed stout bottles; d–f, Ginger beer bottles; g, Bottle with DOULTON/LAMBETH impressed mark; h, Jar with PRICE/BRISTOL impressed mark; i, Miscellaneous bottle; j, Ink bottle with GEORGE SKEY impressed mark.



A.24. Mixed Ceramics. a, PS 060 handpainted saucer; b, Royal George vase; c, PS 197 handpainted porcelain lid; d, PS 130 printed and handpainted saucer; e, PS 108 sponged and handpainted serving dish; f, PS 109 sponged and handpainted cup; g, PS 073 sponged cup/bowl; h, PS 186 sponged and handpainted cup; i, PS 030 moulded and handpainted jug; j, Shell Edge plate.

APPENDIX B GLASSWARE MANUFACTURERS AND CONTENTS

This appendix details the glassware found on site. The full catalogue of all artefacts analysed, which includes data on distributions, is contained on the CD that accompanies this report. CD data contents can be downloaded from www.cfgheritage.com/2008_72pipiteastreet.zip.

Embossed Black Beers

A & Co

These initials were found on a black beer base 75 mm in diameter from Feature 215.

A B & Co

This mark was found on a black beer base 80 mm in diameter from Area 3/9 Rear 2 (Feature 72).

COOPER & WOOD/PORTOBELLO

The partnership of Richard Cooper and Thomas Wood, Portobello, Scotland, commenced in 1859 and lasted until around 1868 when they split the business and continued to produce bottles as separate companies (Toulouse 1971: 142–43).

One base 88 mm in diameter from Feature 571 carried this embossing. Two other bases 80 mm in diameter from Area 3/9 Rear 2 (Features 70 and 311) had the slightly variant embossing ‘COOPER & WOOD/PORTOBELLO/MANUFACTURERS.’

R COOPER & Co/PORTOBELLO

One black beer base 79 mm in diameter was found in Area 11 Pipitea St (Feature 391) with this embossing. This mark dates from after 1868 to the late 19th century.

C W & Co

Two bottle bases were found with this embossing from Area 3/9 Rear 2, one 78 mm in diameter from Feature 311 and one 80 mm in diameter from Feature 180. These initials have not been positively identified but the fact that bottles with this marking are found in the same context as Cooper and Wood bottles, suggests the possibility that ‘CW & Co’ may relate to this company or at least the same period.

EDIN & LEITH/GLASS Co

This embossing was found on the base of a black beer bottle 82 mm in diameter from Feature 391. The Edinburgh and Leith Glass Co were established sometime around 1864 (Harris 2006: 3). A black beer base with the same embossing has previously been recorded from the Farmers Trading Company site in Dunedin (Petchey 2004: 45).

P

Eight black beer bases from Area 9 Front/1 (Feature 390) have an embossed 'P' on the base. All are 80 mm in diameter.

Black Horse

Fragments of one black beer were recovered from Area 9 Front/1 (Feature 506) embossed with '...STERED' and part of a rearing horse on the body of the bottle. Fragments of one other bottle with the same emblem were found in Area 3/9 Rear 2 (Feature 197). This design was first registered by Alfred Tooth in London 9 November 1855. The Tooth family were originally from Kent and involved in the brewing industry. The design represents the famous 'White Horse of Kent.' A brother of Alfred, John Tooth, emigrated to Australia and was co-founder of Tooth's Kent Brewery in Sydney in 1835 (www.users.bigpond.com/oz-riley/). It is probably from bottles imported to the Tooth's Sydney brewery that this example found its way to Wellington.

Dutch Gin manufacturers

Hoytema & Co, Culemburg, Netherlands

One fragment of glass from a case gin bottle from Area 3/9 Rear 2 (Feature 330) was embossed '... C...' and one fragment from Area 9 Front/1 (Feature 473) '... Hoytem...' This is the 19th century Dutch gin distiller van Hoytema and Co. This brand of gin was widely advertised in New Zealand from the 1860s.

John de Kuyper and Son, Rotterdam, Netherlands

Two much later case gin bottles were found in fill at the back of 3 Pipitea St and in Feature 206. Both bottles are broken but have 'J D K Z' embossed in large lettering on one side and 'THIS BOTTLE IS THE PROPERTY OF/JOHN DE KUYPER & SON/ROTTERDAM' on the other. The JDKZ brand was available in New Zealand from the early 1850s but these examples date to the early 20th century.

Condiment manufacturers

Lea and Perrins

One of the favourite condiments of New Zealanders then as now was Lea and Perrins Worcestershire sauce. Lea and Perrins was widely advertised in New Zealand from 1855. In total 30 of the 48 sauce bottles were identified as Lea and Perrins brand. All of the bottles are of the half-pint size and are embossed up the side 'LEA & PERRINS' and across the shoulder 'WORCESTERSHIRE SAUCE.' Whole bottles range in height from 180–186 mm with bases 53 mm in diameter. Twenty of the Lea and Perrins bottles have the mark 'A C B Co' embossed on the base. This mark stands for The Aire and Calder Bottle Company, of Castleford, Yorkshire, England (bottleinfo.historicbottles.com). This glassworks was established sometime around 1850 and continued into the 20th century (Toulouse 1971: 79). These bottles are found in features dating from the 1860s through to the end of the 19th century. Two later Lea and Perrins bases from Feature 482 have the embossing 'K/1145' of which the number is just a mould or batch number.

Holbrook's

Holbrook's were one of a number of companies who tried to imitate the success of Lea and Perrins by producing a Worcestershire style sauce and packaging it in the same type of bottle. All of the Holbrook's sauce bottles come from Features dating to 1900 or later. Eight were found in Area 3/9 Rear 2 (Feature 482), three from Area 9 House (Feature 136) and one from the second well in Area 5 Front (Feature 487). The bottles are embossed down the side 'HOLLBROOK & Co.' One whole example from Feature 482, with a partially preserved label, measuring 224 mm high with a base 58 mm in diameter.

Mellor's

One whole bottle with the embossing 'MELLOR & CO WORCESTER' and a part paper label was found in Feature 482. The bottle stands 190 mm high with a base 53 mm in diameter and is the same shape as the classic Lea and Perrins bottle. Mellor's sauce was advertised in New Zealand from 1878 (*Evening Post* 7 December 1878: paperspast.natlib.govt.nz) but this feature dates from around 1900. Around this time the price of a pint bottle of Mellor's sauce was 1s 4d; Holbrook's 1s; and Lea and Perrins 2s 3d (*Evening Post* 27 November 1902: paperspast.natlib.govt.nz).

Perfume and toiletry manufacturers

J & E ATKINSON/LONDON

This embossing was found on a small clear hand-finished bottle 66 mm high with a rectangular base 35 x 21 mm, from Area 9 House (Feature 83). J. and E. Atkinson was formed by James and Edward Atkinson in London in 1799 producing perfume and toiletries (www.perfumeintelligence.co.uk). The company continued under this name until it was incorporated into Lever Brothers in 1930. This bottle probably dates to the early part of the 20th century.

COTY/FRANCE

One small clear glass bottle, 63 mm high with a base 38 x 18 mm, carried this embossing on the base from Area 3/9 Rear 2 (Feature 138). The Coty perfume house was established in Paris in 1905 by François-Joseph-Marie Coty who continued to develop fragrances until his death in 1934 (www.perfumeintelligence.co.uk).

JOHN GOSNELL & CO/LONDON

John Gosnell and Co was established in 1760 in London and the company continues to produce perfume and toiletries today (www.perfumeintelligence.co.uk). One small aqua glass bottle, 127 mm high with a base 49 x 41 mm, and the base of another were found in Area 3/9 Rear 2 (Feature 330). The embossing on the bottles runs around the outside of the base.

ROGER & GALLET/PARIS

Armand Roger and Charles Gallet took over the family perfume company in 1862, changing the name to Roger and Gallet (www.perfumeintelligence.co.uk). One whole clear glass bottle, 88 mm high and 38 mm in diameter, was found in Area 9 House (Feature 83). Apart from the usual embossing the bottle also has an 'R & G'

monogram in the centre. One other clear glass bottle, 90 mm high and 42 mm in diameter, was found in Area 9 Front/2 (Feature 387). The slight variation in the size of the two bottles reflects the fact that they are hand made.

Other Pharmaceutical products

ANGIER'S/PETROLEUM/EMULSION

One aqua blue oval base 47 x 32 mm from Feature 275 had this embossed on the base. This product was advertised as a 'remedy for the throat and lungs and diseases of the digestive apparatus' from as early as 1889 (Fike 1987: 152). It continued to be produced up to 1960 but this example dates from around 1900.

BARRY'S//TRICOPHEROUS/FOR THE SKIN/AND HAIR//NEW YORK// DIRECTIONS/IN THE/PAMPHLET

Barry's Tricopherous was first produced around 1851 and continued to be marketed up to the 1980s (Fike 1987: 122). One complete bottle 160 mm high with a base 53 x 31 and fragments of two others, all in aqua blue glass, were found in Area 3/9 Rear 2 (Feature 292).

BAXTER'S/LUNG PRESERVER/CHRISTCHURCH

J. Baxter first developed his remedy for coughs and respiratory ailments from his pharmacy in Christchurch and by the 1880s was advertising his product widely in newspapers throughout the country. The product is still marketed today.

BONNINGTON'S/IRISH MOSS/CHRISTCHURCH

Bonnington's Irish Moss was another popular cure for coughs and colds available from at least the 1880s and possibly earlier. One complete aqua glass bottle 124 mm high with a base 48 x 30 mm and a base the same size in aqua blue glass were recovered from Area 3/9 Rear 2 (Feature 482). Both of these examples date to around the 1880s.

DAVIS//VEGETABLE//PAIN KILLER

Perry Davis first introduced his famous pain killer around 1840 and in the second half of the 19th century it was marketed around the world (Fike 1987: 130). One whole aqua blue glass bottle 125 mm high with a base 42 x 28 mm was recovered from fill at the back of 11–15 Pipitea St. The top from a Davis pain killer was also found in Feature 482.

Dr TOWNSEND'S//SARSAPARILLA//ALBANY/N.Y.

Samuel Townsend developed his sarsaparilla in 1839 and it continued to be marketed throughout the 19th century (Fike 1987: 220). Sarsaparilla in the 19th century was marketed for curing medical ailments such as liver and kidney complaints and for purifying the blood. Fragments of the common large emerald green glass, square sectioned, embossed bottles were found in Features 70, 276 and 390. One small whole aqua glass bottle 115 mm high and 40 mm square was found in Area 9 House (Feature 136), embossed the same as the full-sized bottles. The small size of this bottle means that it was most likely used as a promotional sample.

J U S T A R R I V E D.

ENO'S FRUIT SALT.

ENO'S FRUIT SALT.

ENO'S FRUIT SALT.

M O T H E R S E I G E L ' S
Curative Syrups.

**Dr. Tate Holland's Emacerating Powders,
for Corpulence.**

SOLD BY
H. BRITTAI N, CHEMIST,
Manners-street and Lambton Quay.

*B.1. Eno's Fruit Salts
advertisement from
H. Brittain (Evening
Post 14 February 1880:
paperspast.natlib.
govt.nz)*

had this marking embossed down the side panels. The details of 'Floraline' are not known but it was advertised along with Florida Water and so presumably was a brand of toilet water. Toilet waters were preparations of scented oils dissolved in alcohol and mixed with water to produce a weak perfume.

ENO'S/FRUIT SALT

Eno's Fruit Salt was a preparation of fruit salts for upset stomach, infectious diseases and blood poisons introduced by J. Eno, London, England, in the mid 19th century but did not become widely available until the late 1870s (Fike 1987: 161). A newspaper advertisement in the *Evening Post* shows that it was available in Wellington from local chemist H. Brittain in 1880 (Figure B.1). One whole bottle 175 mm high with a base 67 x 38 mm in aqua glass was found in Feature 482 along with a matching glass stopper embossed 'PREPARED BY ENO'S/PATENT.' The base of another bottle was found in Feature 275.

FLORALINE//LONDON

One aqua glass panel bottle base 50 x 36 mm, from Area 3/9 Rear 2 (Feature 211)

HOOD'S/SARSA/PARILLA//C I HOOD & Co//APOTHECARIES//LOWELL MASS

One whole aqua blue Hood's Sarsaparilla bottle, 224 mm high with a base 75 x 45 mm, was found in Feature 482. Charles I. Hood began formulating his own medicinals in 1876 and his products continued to be marketed into the 20th century (Fike 1987: 217). The use of the word 'apothecaries' on the back of this bottle suggests that it is one of the earlier examples dating to no later than the 1880s.

KRUSES/PRIZE MEDAL/MAGNESIA

The base of an aqua glass bottle 70 x 40 mm from Area 9 House (Feature 136) carried this embossing on the front along with part of the original paper label and the manufacturer's mark on the base 'B & Co Ltd/K.' The bottle maker's mark stands for Bagley and Co Ltd, Knottingly, Yorkshire, England (Toulouse 1971: 77). Kruse's Magnesia was advertised in New Zealand from the late 1860s but this example probably dates to around 1900.

LANGTONS/SCOTT & EDDEN/LONDON

The Langton brothers Scott and Edden were pharmacists based at 266 Upper Thames Street, London, in 1857 (*The Medical Times and Gazette Advertiser* 1857: books.google.com). They were well known for their 'Cod Liver Oil' which they produced from fresh cod livers in Newfoundland (*The Chemist* 1849-50: books.google.com). One complete aqua blue glass bottle, 180 mm high with a base 72 x 47 mm, and one base were found in Area 3 Rear/2 (Feature 229). Both of these bottles most likely contained cod liver oil.

Q-TOL/FOR SKIN COMFORT

Q-Tol is an antiseptic skin care lotion still available today. One whole clear glass bottle, 145 mm high with a base 55 x 35 mm, was found in Feature 488. The base is marked 'AGM' and the bottle is machine-made dating it to the 1930s or later.

CHESEBROUGH MFG Co/VASELINE

One clear glass jar, 68 mm high by 46 mm in diameter, was found in Area 9 House (Feature 136). The jar is machine-made but still has a cork closure. One other clear glass jar, 63 mm high by 48 mm in diameter, was found in fill around 9 Pipitea St embossed TRADE MARK/VASELINE/CHESEBROUGH/NEW-YORK. This jar is also machine-made, but has a screwtop closure. The Chesebrough MFG Co was founded in 1880 and cork closures were replaced by screwtop caps in 1908 (Fike 1987: 56). Both of these examples date to the early 20th century, with the cork closure jar produced before 1908.

WOOD'S/GREAT PEPPERMINT CURE/FOR COUGHS & COLDS

Wood's Cure was advertised in New Zealand from 1895 (*Evening Post* 29 June 1895) and continued to be marketed well into the 20th century. One aqua glass bottle, 140 mm high with a base 48 x 27 mm, from Area 9 House (Feature 136) probably dates to around 1900. While a clear glass example, 128 mm high with a base 47 x 27 mm, from 11 Pipitea St (Feature 12) marked on the base 'AGM' dates to the 1930s. Fragments of another clear glass Wood's Cure bottle from fill at the back of 15 Pipitea St date from the same period.

Miscellaneous Embossed Pharmaceutical Bottles

Several pharmaceutical type bottles are present in the assemblage which carry embossing but where not enough is preserved to identify the product of manufacturer. A cobalt blue glass base 41 x 26 mm from Area 9 Front/1 (Feature 390), has the partial embossing '...BURN' down the front. A middle fragment of aqua glass panel bottle from Feature 482 is embossed '...RST & HARD.../...OL AND LONDO...' Another aqua glass panel bottle fragment from Feature 482 has 'NEWCASTLE' across the top of the front panel. In the future with more complete examples being recorded it may be possible to identify these bottles.

Aerated water manufacturers*Bennett and Ready, Wellington, 1897–1920*

Robert Bennett and Alex Ready purchased the interests of George Dixon's aerated water business from his widow in 1897 and traded under the name Bennett and Ready until 1920 when they were bought out by Thomson and Lewis (Fisher 2004: 236). One complete Codd bottle 225 mm high and 66 mm in diameter was recovered from Feature 537. On the front is embossed 'BENNETT & READY/WELLINGTON' and on the rear a lion trade mark with the letters 'G' and 'D' to either side.

C. W. Brodie, Thorndon Quay, Wellington, 1888–1906

Charles Brodie entered the aerated water industry when he married the widow of George Cooper in 1888 (Fisher 2004: 231). In 1906 the business was bought out by A. G. Saunders. Fragments from three Cods were found embossed with 'C.W.B.' on the base. One from fill in the area of 15 Pipitea St, one from Feature 13 and one from Feature 482. The bases all measure 56 mm in diameter and middle fragments all have part of the distinctive crossed keys trade mark first employed by Brodie's predecessor George Cooper. The most complete example from Feature 13 is embossed 'C.W.B.../TRAD.../MARK/WELLINGTO[N]' and on the back '...FE GROOVE/... MAKERS/DAN RYLANDS Ld/BARNSLEY' and on the base 'CWB.'

George Dixon, Wellington, 1875–97

George Dixon established his own aerated water factory in Sydney Street in 1875 before taking over the interests of his father in Cuba Street the following year (Fisher 2004: 225). Fragments of a Hamilton or Codd Hybrid patent bottle embossed '... ORGE DIXON//... STREE...' were found in Feature 482. Bottles in this shape are only known from George Dixons early address at Sydney Street and so this example would date to 1875/6.

One stoneware ginger beer bottle impressed with the mark of George Dixon was also found at the back of 13 Pipitea St during the initial machine stripping of the site. The bottle is of the form known as a 'dumpy' and stands 172 mm high with a base diameter of 71 mm and has a blob top, which would have been sealed with a wired down cork. On the side is the impressed mark: TRADE MARK/GEORGE DIXON/CUBA STREET/ WELLINGTON. The trade mark in the centre is in the form of an anchor. This bottle was used by George Dixon from 1876 until about 1880 (Fisher 2004: 46).

The Phoenix Aerated Water Co (Ltd), Wellington, 1895–1960

The Phoenix Aerated Water Co was formed by Maurice Samuel in 1895 and in 1906 became a limited liability company (Fisher 2004: 235). From 1912 the company opened a second branch at Petone (Fisher 2004: 238). The most complete Codd from Feature 482 stands approximately 180 mm high (the top is chipped) and measures 55 mm in diameter. On the front is embossed the phoenix bird trade mark and 'THE PHOENIX/AERATED WATER Co/TRADE MARK/WELLINGTON.' On the back is the makers mark 'CANNINGTON SHAW & Co Ld/MAKERS/ST HELENS.' This bottle dates to around 1905. One fragmentary Codd base 64 mm in diameter from Feature 318 has the partial embossing '... AER.../TRADE .../ WELLINGTON' and the phoenix bird trade mark in the centre. A much later 20th century bottle from this company was found in fill at the back of 11–15 Pipitea St. The bottle is made of brown glass, with a crown-seal closure, and stands 235 mm high with a base diameter of 61 mm. The bottle is embossed 'THE PHOENIX AERATED WATER CO LTD/WELLINGTON & PETONE, and on the base 'P/ UGB/LONDON.' The United Glass group did not have a factory in London until 1920/21 and so this bottle was most likely produced in the 1920s or early 1930s.

Star Aerated Water Co Ltd, Petone, Wellington, 1931–1971

One clear glass bottle base was found in Area 3 Rear/3 (Feature 126) embossed 'STAR AERATED WATER Co Ltd WELLINGTON.' This bottle dates to no earlier

than the 1940s (Fisher 2004: 197) confirming the initial impression that this feature dated to around the middle of the 20th century.

Thomson Lewis and Co (Ltd)

One rather late Thomson and Lewis clear glass crown-seal bottle 280 mm high and 80 mm in diameter was found in fill behind 11–15 Pipitea Street. The bottle is embossed 'THOMSON LEWIS & Co Ltd NZ' and on the base '1966.' By 1960 Thomson and Lewis had consolidated the aerated water industry in Wellington under their own brand, having either bought out or outlasted all of the other smaller manufacturers represented by the earlier Codd and Hamilton patent bottles found across the site.

Embossed Hamilton Patents

Several fragments from Hamilton patent bottles from Feature 390 carry some embossing. One middle fragment simply has '...LE/...A WA...' which would have read 'DOUBLE/SODA WATER.' The base of a more complete bottle has '...URERS//...ERY ROW//...MINISTER//...ON.' The manufacturer would appear to be from London but not enough of the embossing survives to identify them. Another unidentified brand is represented by fragments of middle glass from two bottles that were most likely Hamilton patents. The most complete example reads '...//...WHAR...//...ITY ... ; ...HA...//...ITY...'

Embossed Maugham Patents

All of the fragments from Maugham Patent bottles are embossed and would appear to represent the same aerated water manufacturer. Based on the two most complete bottles the embossing reads '...TS/...ATED/...ATER//...HARFROAD/...TYROAD/...NDON.' These bottles are almost certainly from a London manufacturer and would have been imported from Britain.

Miscellaneous embossed products

HAUTHAWAY'S//PEERLESS GLOSS

Hauthaway's 'Peerless Gloss' was a product for polishing shoes. One whole aqua glass bottle, 125 mm high with a base 44 mm square, was found in Area 3/9 Rear 2 (Feature 331) and a more fragmentary example in Feature 210.

JEYES FLUID//JEYES FLUID

One whole brown glass bottle was found in Area 9 House (Feature 136) embossed down the sides 'JEYES FLUID.' The bottle stands 157 mm high with a base 60 x 31 mm. Like many of the bottles from this pit part of the original paper label is preserved. The bottle is hand finished and dates to the early 20th century.

KIWI BRAND//KIWI BRAND

One small clear glass bottle, 97 mm high with a base 38 x 21 mm, from Feature 482 carries this embossing down the side panels. The product was most likely shoe polish.

THE SINGER MANUF CO

One clear glass bottle, 127 mm high with a base 47 x 36 mm, was found in Feature 12 with this embossing. The bottle would have contained sewing machine oil. The bottle is machine-made and dates to around the 1930s.

SYKES MACVAY & Co/ALBION GLASSWORKS CASTLEFORD

This embossing was found on two aqua glass stoppers, 60 mm in diameter and 22 mm high, from features in Area 3 Rear/2. Sykes and Macvay were established in Yorkshire in the 1860s and continued in business under this name until 1888 (Toulouse 1971: 477).

VARNISH MAKERS

One incomplete aqua glass panel bottle from Feature 482 had this embossing down the side. Presumably the bottle contained a varnish or lacquer product.

WRIGHT & Co/BRIERLEY HILL

This embossing was found on an aqua glass stopper, 60 mm in diameter and 21 mm high, from Area 3 Rear/2 (Feature 238). The identification of this company is unknown but like the Sykes Macvay stoppers it most probably refers to the manufacturer of the stopper.

APPENDIX C DISTRIBUTIONS OF SELECTED ARTEFACT TYPES

Context	Description	NISP
3 House		
14	head fragments	2
3 Rear/2		
85	head	1
197	head	1
197	arms (2 different sizes)	2
204	leg	1
204	arms (2 different sizes)	2
229	arm	1
330	arm	1
333	body and arm fragments	3
9 Rear		
9	leg	2
11-15 Rear		
8	leg	1
15		
7	head	1
15 Rear		
282	leg	1
		19

Table C.1. Distribution of doll parts.

Context	length (mm)	base diameter (mm)	notes	total
3				
10	140	52		1
3 Rear/2				
330	-	-	penny ink	1
330	54	38	penny ink	1
9 front/1				
390	-	-	penny ink	2
390	44	49	penny ink	1
9 House				
136	125	58		1
136	115	52		1
136	90	63		1
136	114	57		1
11				
474	53	47	penny ink	1
13				
481	155	66		1
15				
7	55	50	penny ink	1
				13

Table C.2. Size range and distribution of stoneware ink bottles.

Context	length (mm)	base diameter (mm)	total
5			
488	160	73	1
7			
7 Pipitea Street	188	82	1
9 Rear/2			
72	160	73	1
180	130	60	1
180	160	72	1
210	190	80	1
211	160	72	1
9 House			
136	100	50	1
9 Rear			
330	150	69	1
330	190	78	1
9 Front			
387	130	62	1
387	190	79	1
11			
391	130	60	1
			13

Table C.3. Size range of whole stoneware blacking bottles.

Context	material	diameter (mm)	total
3 Rear/2			
85	glass	15	1
210	composite	25	1
229	shell	20	1
334	brass	14	1
334	ceramic	11	1
5 Rear			
247	ceramic	11	1
9 Front/1			
390	bone	17	1
390	bone	20	1
390	brass	13	1
390	brass	17	1
390	brass	16	1
390	brass	19	1
390	brass	14	1
390	ceramic	11	3
390	shell	20	1
11 Rear			
439	brass	16	1
536	composite	19	1
			19

Table C.4. Distribution of buttons.

Context	Object	MNI
3 Rear		
167	table fork	1
3 Rear/2		
85	knife handle	1
197	knife handle	1
210	knife handle	1
311	knife handle	1
7 Front		
488	knife handle	1
9 Front/1		
353	teaspoon	1
390	knife handle	1
390	spoon	1
		9

Table C.5. Distribution of table cutlery.

Context	estimated length (mm)	category	MNI pairs
3 Rear/1			
287	240	adult	1
287		adult	1
3 Rear/2			
63		adult	1
70			1
72	240	adult	2
74		adult	1
85	260, 220	adult	2
85	170	child	1
85			1
88		adult	1
180		adult	1
184			1
196		adult	3
196		child	1
292		adult	2
292	160	child	1
311			1
330		adult	3
330		child	1
5 Rear			
359			1
9 Front/2			
387		adult	1
441		adult	1
9 House			
93		adult	1
			30

Table C.6. Distribution of pairs of footwear (minimum numbers).

Context	mark	length (mm)	MNI
3 House			
14	G.B.KENT & Co/MARLBORO ST		1
3 Rear			
241	BARRAUD & SON/WELLINGTON	170	1
3 Rear/2			
85			1
86	...MMER WELLINGTON		1
188	illegible marking		1
210			1
211	GEORGE MEE/CHEMIST/TO THE GOVERNOR/ WELLINGTON		1
211	... & SON/...	165	1
211			2
229			1
5 Rear			
240			1
100	IMPROVED SECURE		1
			13

Table C.7. Distribution of bone toothbrushes.

Context	object	NISP	MNI
3 Rear/2			
197	Slate Pencil	4	3
197	Writing Slate	4	1
211	Slate Pencil	1	1
262	Slate Pencil	1	1
292	Slate Pencil	3	3
311	Slate Pencil	3	3
311	Writing Slate	1	1
330	Slate Pencil	4	4
334	Slate Pencil	1	1
5 Rear			
240	Slate Pencil	1	1
9 Front/1			
390	Slate Pencil	2	2
390	Writing Slate	3	1
15 Rear			
275	Slate Pencil	3	2
			24

Table C.8. Distribution of slate pencils and writing slate.

Context	portion	dimensions (mm)	diameter (mm)	MNI	Notes
3 Rear/1					
287	fragments			1	sardine style can
86	fragments		65	1	
3 Rear/2					
180	fragment			1	rectangular
196	fragment			1	round
204	fragments	40 thick		1	square/rectangular can
210	fragment			1	rectangular
211	fragment	110 long	65	1	
211	fragment			1	
292	whole	115 long	80	1	
292	whole	115 long	95	1	
292	whole	110 long	65	1	
292	fragments		55	1	
292	fragments		70	1	
292	whole	110 long	75	1	
292	fragments		70	2	hole and cap/hole in cap type embossed, illegible
482	fragment		55	1	
9 Front/1					
390	fragments			1	round
390	fragments			1	rectangular
9 House					
80	fragments	90 long		2	round
80	base		57	1	
83	fragments			2	1 round can and 1 sardine type
95	fragments		65	1	
9 Rear					
318	lid		65	1	
11					
3	whole	90 long	55	1	
15					
1	whole	115 long	75	1	
1	base		55	1	
1	whole	95 x 95 x 60		1	hinged lid
1	base	57 x 46		1	
1	base		70	1	hole and cap/hole in cap type
				32	

Table C.9. Distribution of food cans.

The archaeological excavations at 1–15 Pipitea St have made a substantial contribution to our understanding of the growth of Wellington from the mid 19th century. The site was excavated by CFG Heritage Ltd in May and June 2008.



Prior to the arrival of the New Zealand Company settlement in 1840 Maori lived at Pipitea pa on the coastal flat below and gardened in the general site area. Evidence of historic period Maori garden soils and a storage pit was found.

Excavation concentrated on the well preserved archaeology of 3 Pipitea St, occupied by the growing household of John Elisha Smith from 1863 through to the end of the 19th century. Evidence of occupation on 11–15 Pipitea St from 1881 was also uncovered. 9 Pipitea St was not built on until 1936 and until that time its neighbours used it with little regard to legal boundaries.

