5.0 Artefact Overview

5.1 Research Questions for Artefact Analysis
Several general questions were asked of the artefacts recovered during the course of excavations at 710-722 George Street, Haymarket. These questions have been used as a basis for addressing the research design developed for the archaeological assessment and excavation of the site. They have been adapted from several other nineteenth and early twentieth-century sites investigated by Casey & Lowe in the Sydney city area. These research questions formed the basis for the specific methodology and aims employed for excavation of the site and for post-excion artefact analysis. The most relevant questions underpinning the analysis of artefacts by each of the materials specialists are:

- What type and range of artefacts were found?
- What do the artefacts indicate about the range of activities undertaken at the site? Do the artefacts show changes in site use over the different occupation phases?
- In what way did the consumer goods at the site represent the availability, quality and variety of those in the world at large? What kind of interaction with the wider world do they indicate?

5.1.1 Artefacts Analysis
Due to the particular characteristics of the 710-722 George Street site several constraints were recognised as potentially affecting the artefact analysis. Many artefacts from the site (particularly those from the early pottery production phase) were recovered as secondary fills in large dumps. Ordinarily these types of deposits are not readily associated with primary activity areas. However, the large volume of pottery production wasters found in Areas A and B provide an important assemblage for the study of early pottery production in the colony (discussed in Section 4), despite the lack of evidence for kilns or other work areas. Their accumulation and disposal on site provides a significant body of data for understanding small-scale industrial practices in the early stages of the colony.

The most revealing artefacts relating to the post-Brickfield periods were found in underfloor deposits (principally those of the Woolpack Inn in Area A, but also in smaller occupation deposits from the mixed residential/commercial buildings in Areas B and C). Substantial artefact assemblages were also found in several cesspits in Areas A to C and within the backfill of a well in Area C. A detailed report on the results of the lead-glaze pottery analysis has been presented in a separate chapter (Section 4). The relative quantities of this material compared to the remainder of the site have not been included in the majority of artefact tables in this overview. Other classes of artefact found in association with the lead-glaze pottery assemblages and related to the pottery production have also been discussed in Section 4.

5.1.2 Cataloguing of Artefacts
All artefacts were catalogued by a specialist team using the cataloguing system developed by Dr Mary Casey, in consultation with the various specialists. The basis of this system has been published elsewhere and will not be repeated here. The main elements of this cataloguing system are the use of minimum vessel or item counts (MIC) to quantify the assemblages and the attribution of functional categories to the artefacts during cataloguing. This assists in understanding how the artefacts related to the daily lives of the people who used and disposed of them. Maintaining a

---

1 Casey & Lowe 2008 Archaeological Assessment 710-722 George Street, Haymarket, Sydney for Parkview.
2 A list of Casey & Lowe projects can be found at: http://www.caseyandlowe.com.au/index.htm
3 Casey 2004:30-33.
standard approach to artefact cataloguing also allows more meaningful comparative analysis between other archaeological sites excavated by Casey & Lowe.

The material catalogues prepared by each specialist are found in Appendix 5.4 of this report. Separate artefact reports for all material categories with the exceptions of miscellaneous items, metals and building materials which form the basis of the following summaries are included in Section 9. All information relating to these large and varied artefact classes has been obtained from the catalogues or in consultation with the relevant specialist.

5.2 Overview of Artefacts

The following brief overview presents a summary of the nature of the general artefacts found within the study area. Of the 11,807 artefacts recorded following the archaeological program at 710-722 George Street it was possible to identify a minimum of 8,838 items (Appendix 5.3: Table 1).4 Artefacts were recovered from the three main excavations areas: Area A (No. 720-722), Area B (No. 712-718) and Area C (No. 710) comprising 128 contexts in total (Table 3). Area A had the highest number artefacts (4355 items), accounting for 49 per cent of the minimum item count from the site; Area B contained 43 per cent of the assemblage, with Area C containing only 8 per cent of the items recovered during the excavation (Table 2). Outside of the Brickfield-phase fills the greatest numbers of artefacts were concentrated in contexts associated with underfloor deposits from the Woolpack Inn (Area A) and from the backfill of the well (7650) in Area C (Table 3). Artefacts were classified according to material class: miscellaneous (42.4%), organic (19.8%), glass (18.9%), ceramic (8.8%), architectural and building debris (6.1%) and metal (4.0%) (Table 1). In addition to these six artefact categories were 6874 fragments of bone and 373 fragments of shell which were collected from across the site (Tables 4, 6).5

5.2.1 Bone and Shell

Faunal remains were recovered from all three areas of the site (Table 4), with most recovered in Area A (71%). Bone was recovered in 23 contexts in Area A, 27 contexts in Area B, and 12 contexts in Area C. Unidentified fish species accounted for 42.8 per cent of the total faunal remains (2,940), with rat or rodent species making up 39.8 per cent (2,276), and sheep bone the next most prevalent with 17.7 per cent (1,220) (Table 5). Overall the high number of fish and rat/rodent bones reflects the underfloor deposits in Area A. The shells were found in 41 contexts across the site, with 184 shells in Area A, 136 in Area B and 53 in Area C (Table 6). The majority of the shells in Area A came from the Woolpack underfloor deposits (123), with 37 also found in the fill of a pit (7645). In Area B most shells (54) came from fill in a rubbish pit (7509), and in Area C (25) most shells came from the underfloor deposit in the front room of No. 710 George Street (7444). The shell assemblage was dominated by rock oyster (48.8%) and mud oyster (30.0%) (Table 7).

5.2.2 Building Materials

The number of building materials found across the site numbered 539 items, with bricks and roof tiles/setters dominating the assemblage (Table 8). The 225 bricks represented 41.7 per cent and the 262 roof tiles/setters 48 per cent of the building materials recovered. It is likely that the 262 roof tiles/setters and the 11 briquetage may relate to the Phase 3 pottery production on the site (Figs 5.1, 5.2).

4 All data and tables in this section can be found in Appendix 5.3 and/or specialist artefact reports.
5 These artefacts are quantified separately as they were catalogued by fragment and not by minimum number of individuals.
Figure 5.1: Selection of roof tile fragments reused as kiln setters, Area A, with burnt material and glaze on the surfaces (7645/#95028). Russell Workman, 10cm scale.

Figure 5.2: Example of briquetage fragments, Area B, showing finger smoothing and glaze patches (7460/#95224). Russell Workman, 10cm scale.
5.2.3 Metals
The metal category of artefacts numbered 352 items and these were represented by 34 individual shapes (Table 9). Nails were the most common shape (263), representing 74.7 per cent of the metal category. Most of the metal items were identified with the general function of architecture, including brackets, bolts, doorknobs, eye bolts, hinges, hooks, nails, screws, spikes and tacks (Figs 5.3, 5.4). A number were also related to horse transportation, such as horseshoes and a stirrup. Tools included an axe and files, and storage containers a barrel hoop, tin can and a tin/box.

Figure 5.3: Copper alloy household fittings, Area A. Front: handle 7323/#82010. Middle row: doorknobs 7335/#82064, 7335/#82065. Back row: roseplate 7337/#84911, hook 7324/#82053. Russell Workman, 10cm scale.
5.2.4 Organics
The organics artefact category numbered 1,749 items and these were identified by 36 different shapes which incorporated the functions of food, clothing, architectural and household furnishings (Appendix 5.3: Table 10). By far the most commonly identified organic item was the grape, with the 1,374 seeds representing 78.6 per cent of the assemblage. Other food items were found in far smaller numbers – apricot (3), coconut (1), nectarine (2), peach (2) and walnut (7). All 1,374 grape seeds were found in the well in Area C (7520), with 820 in fill 7567, 292 in fill 7568 and 262 in fill 7569, and represent only a small sample collected from the whole deposit. A number of leather items were also found in the same well and were mainly associated with footwear, in the form of various shoe and boot parts (Table 10), along with fragments of a woollen coat.

5.2.5 Miscellaneous
The miscellaneous category contained 3,750 artefacts and these were represented by 109 individual shapes (Table 11). By far the most dominant item found was the tobacco pipe, with the 1,409 items accounting for 37.6 per cent of this category (Figure 5.5).

Other frequently found shapes included pins (844), beads (676), buttons (183), marbles (146) and slate pencils (111) (Figs 5.6, 5.7, 5.8).
Figure 5.6: Glass beads of various colours and sizes used as jewellery and clothing decoration from a single excavated spit within gridded square D1 in Room 5 of the Woolpack Inn, in Area A (7337/#97435-#97462). Russell Workman, 10cm scale.

Figure 5.7: Types of sew-through and shanked metal buttons found in the Woolpack Inn, Area A (underfloor contexts 7323, 7324, 7335 and 7337). Front row: mother of pearl. Second row: bone. Third row: glass. Back row: porcelain and glass. Russell Workman, 10cm scale.
Aside from smoking, some of the other functions represented within this category of small finds relate to clothing, jewellery, currency, literacy, sewing, personal grooming, playing, gaming, weapons, cutlery, and household furnishings. Items identified within the category of jewellery and accessories numbered 39 (Table 12), with 74 per cent of these (29) found within the underfloor deposits of the rooms of the Woolpack Inn in Area A. The 39 items were made of glass, gold, brass, copper, ivory, mother of pearl, antler, grass, seed and leather (Figure 5.9).
The category of sewing, including lacemaking, was represented by 860 items (Table 13), with pins accounting for 98.1 per cent of the assemblage. Area A contained the most number of items relating to the activity of sewing, with the 647 items representing 75.2 per cent of the total assemblage. Three items of particular interest here are an ivory needle holder (7337/#97540) and two brass bodkins (#98016, #98085). The two different-sized bodkins were both found in the underfloor deposit of the front room of No. 710 George Street, in Area C (7444) (Figure 5.10).

![Figure 5.10: Finely decorated brass bodkin fragments from Area C. Front: 7444/#98085. Back: 7444/#98016. Russell Workman, 1cm scale divisions.](image)

Excluding the pins, the most commonly found sewing-related item was the brass thimble with the eight examples all dating from 1850 (Table 14). Two of these thimbles were part of a set that featured a short verse in relief on a band around the lower exterior body: 'I WISH YOU WELL' (7333/#96803) and '[BE] MERRY & WISE' (7335/#96841) (Figure 5.11).

![Figure 5.11: Selection of machine-pressed brass thimbles from Area A. (L-R): 7324/#96636, 7333/#96803, 7335/#96841, 7337/#97208. The two central thimbles feature verses. Russell Workman, 10cm scale.](image)
Some 49 items associated with weapons, munitions and the military were identified in Areas A (17) and C (32), with lead shot (35) being the most commonly represented especially in the underfloor deposit of Area C (context 7444, Table 15, Figures 5.12 and 5.13).

Figure 5.12: Items associated with weapons, munitions and the military, Area A. Front row (L-R): British pistol gunflint 7392/#97715, badge fragment 7337/#97429, gun eye bolt 7337/#97134, pistol percussion cap 7324/#96325. Back row: lead fineshot 7335/#96993, swanshot 7337/#97288, buckshot 7324/#96470, musket ball 7324/#96059, brass .32 calibre bullet cartridge 7337/#97132. Russell Workman, 10cm scale.

Figure 5.13: Lead shot found in excavated 1m squares of underfloor deposit 7444, Area C. (L-R): A2 #97901, C3 #98123 and F5 #98300. Russell Workman, 1cm scale divisions.
A total of 28 items were identified with personal grooming, health and hygiene. Of these ten were decorative hair combs and eight were ordinary combs (Table 16). One item of particular interest is a cut, carved and partly polished walking stick handle made of antler (#50960), found in one of the fills (7567) in the well in Area C (Figure 5.14).

Figure 5.14: Items associated with personal grooming, health and hygiene found in Area C. Front: bone toothbrush 7389/#97888. Second row: bone toothbrush 7389/#97887. Back row (L-R): glass spectacle lens 7444/#98149, bone stopper 7444/#97930, small brass pillbox lid with glass inset 7444/#98154, antler walking stick handle 7567/#98363. Russell Workman, 10cm scale.

Of the 163 recreational games and toys, the majority were marbles (146 or 89.6 per cent of the category, Appendix 5.3: Table 17, Figure 5.8). The remaining 17 items were dolls (7), counters (2), dominoes (2), and a single lead soldier (1), a teaset saucer (1), a teaset teacup (1), a teaset cup (1), toy glass (1) and bird whistle (1) (Figure 5.15, 5.16). The clay bird whistle (7657/#97752) is in the shape of a sitting pigeon and is thought to have been made by Thomas Ball.6

6 See Section 4.10.3.
Figure 5.15: Selection of toy and game recreational items from Area A. Front row (L-R): toy cup 7632/#97862, Jews harp 7301/#96003, doll’s leg 7337/#97431. Middle row: toy tea cup 7337/#97527, toy saucer 7324/#96430. Back row: hand-cut and polished bone dominoes 7323/#96167, 7232/#96201; toy stemmed glass 7335/#97091. Russell Workman, 10cm scale.

Figure 5.16: Clay bird whistle with broken tail, Area A 7657/#97752. Russell Workman, 5cm scale.
In Areas A and B a total of nine items relating to the economy were recovered. These were three lead tokens, 4 copper coins and 2 silver coins (Table 18, Figure 5.17). The 1826 farthing found in the underfloor accumulation on Room 3 of the Woolpack Inn (7335/#96906) had a small pierced hole to the left of Britannia’s head that indicated its reuse as a pendant or possible token (Figure 5.9).

The 1,409 tobacco pipes were found in all three areas of the site, in a total of 69 contexts (Section 5.7; Table 19). Area A had 930 pipes in 28 contexts, Area B had 99 pipes in 26 contexts, and Area C had 380 pipes in 15 contexts. The majority of the pipes in Area A were recovered from the underfloor deposits of the Woolpack Inn, numbering 791 pipes and representing 85 per cent of the total pipes from this Area. In Area C the overwhelming majority of pipes were found in two features (90%), with 179 pipes from the underfloor deposit of the front room of No. 710 George Street (7444) and a combined total of 163 pipes from the well fills (7569, 7568, 7567, 7466, 7465), in particular fills 7466 and 7567. The 23 pipe manufacturers identified across the site represent manufacture in Australia, Belgium, England, France and Scotland (Table 20). Some 260 pipes had known manufacturers, representing just 18.4 per cent of the total pipe assemblage, with the remaining 1,149 (81.5%) being of unknown manufacture (Table 21). The 930 pipes in Area A included just 89 with known manufacturers, the 99 pipes in Area B included just 15 with known manufacturers, and the 380 pipes in Area C included 156 with known manufacturers. In Area C the most frequently represented manufacturer was Desiree Barth from Andenne, Belgium, identified on 72 individual pipes. Although the majority of the pipes did not have identified manufacturer details, some 260 pipes had known manufacturers, representing just 18.4 per cent of the total pipe assemblage, with the remaining 1,149 (81.5%) being of unknown manufacture (Table 21). The 930 pipes in Area A included just 89 with known manufacturers, the 99 pipes in Area B included just 15 with known manufacturers, and the 380 pipes in Area C included 156 with known manufacturers. In Area C the most frequently represented manufacturer was Desiree Barth from Andenne, Belgium, identified on 72 individual pipes. Although the majority of the pipes did not have identified manufacturer details, some 260 pipes had known manufacturers, representing just 18.4 per cent of the total pipe assemblage, with the remaining 1,149 (81.5%) being of unknown manufacture (Table 21). The 930 pipes in Area A included just 89 with known manufacturers, the 99 pipes in Area B included just 15 with known manufacturers, and the 380 pipes in Area C included 156 with known manufacturers. In Area C the most frequently represented manufacturer was Desiree Barth from Andenne, Belgium, identified on 72 individual pipes. Although the majority of the pipes did not have identified manufacturer details, some 260 pipes had known manufacturers, representing just 18.4 per cent of the total pipe assemblage, with the remaining 1,149 (81.5%) being of unknown manufacture (Table 21). The 930 pipes in Area A included just 89 with known manufacturers, the 99 pipes in Area B included just 15 with known manufacturers, and the 380 pipes in Area C included 156 with known manufacturers. In Area C the most frequently represented manufacturer was Desiree Barth from Andenne, Belgium, identified on 72 individual pipes. Although the majority of the pipes did not have identified manufacturer details, some 260 pipes had known manufacturers, representing just 18.4 per cent of the total pipe assemblage, with the remaining 1,149 (81.5%) being of unknown manufacture (Table 21). The 930 pipes in Area A included just 89 with known manufacturers, the 99 pipes in Area B included just 15 with known manufacturers, and the 380 pipes in Area C included 156 with known manufacturers. In Area C the most frequently represented manufacturer was Desiree Barth from Andenne, Belgium, identified on 72 individual pipes. Although the majority of the pipes did not have identified manufacturer details, some 260 pipes had known manufacturers, representing just 18.4 per cent of the total pipe assemblage, with the remaining 1,149 (81.5%) being of unknown manufacture (Table 21). The 930 pipes in Area A included just 89 with known manufacturers, the 99 pipes in Area B included just 15 with known manufacturers, and the 380 pipes in Area C included 156 with known manufacturers. In Area C the most frequently represented manufacturer was Desiree Barth from Andenne, Belgium, identified on 72 individual pipes. Although the majority of the pipes did not have identified manufacturer details, some 260 pipes had known manufacturers, representing just 18.4 per cent of the total pipe assemblage, with the remaining 1,149 (81.5%) being of unknown manufacture (Table 21). The 930 pipes in Area A included just 89 with known manufacturers, the 99 pipes in Area B included just 15 with known manufacturers, and the 380 pipes in Area C included 156 with known manufacturers. In Area C the most frequently represented manufacturer was Desiree Barth from Andenne, Belgium, identified on 72 individual pipes. Although the majority of the pipes did not have identified manufacturer details, some 260 pipes had known manufacturers, representing just 18.4 per cent of the total pipe assemblage, with the remaining 1,149 (81.5%) being of unknown manufacture (Table 21). The 930 pipes in Area A included just 89 with known manufacturers, the 99 pipes in Area B included just 15 with known manufacturers, and the 380 pipes in Area C included 156 with known manufacturers. In Area C the most frequently represented manufacturer was Desiree Barth from Andenne, Belgium, identified on 72 individual pipes. Although the majority of the pipes did not have identified manufacturer details, some 260 pipes had known manufacturers, representing just 18.4 per cent of the total pipe assemblage, with the remaining 1,149 (81.5%) being of unknown manufacture (Table 21).
a few more were at least able to be assigned a country of origin stylistically (Table 22). A total of 359 pipes (25.5%) were assigned a country of manufacture, with 1,050 pipes still remaining unknown (74.5%). A number of tobacconists were also identified on 83 pipes with five from Australia, England and the United Kingdom. (Tables 23, 24). The Sydney tobacconist Hugh Dixson is the most commonly found, on a total of 78 pipes (94%), with most from Area C (67). Hugh Dixson pipes have a long date range, from 1839 to 1904 (Figure 5.18).

Figure 5.18: Examples of pipes commemorating the wedding of Queen Victoria and Prince Albert in 1840 made in Britain and sold by the Sydney tobacconist Hugh Dixson. Front: 7466/#98346. Bback: 7567/#98384. Russell Workman, 10cm scale.

A further breakdown of the artefacts recovered from each area of the site and their contexts is summarised in Sections 5.2.1 to 5.2.3. Artefacts from the most significant contexts post-dating Brickfield activity within each area were selected for further discussion in this overview. These are found within Section 5.3.

5.3 Area A, Lot 2: Summary of Artefacts
A total of 4,355 artefacts were recovered from Area A in varying contexts which represent the different phases and types of activity that were carried out on the site. These figures do not include bone, shell and the locally made lead-glaze and associated kiln furniture from Phase 3 activity.

8 These figures do not include bone, shell and the locally made lead-glaze and associated kiln furniture from Phase 3 activity.
The earliest dated artefacts found in Area A were recovered from contexts associated with the period of Brickfield activity on the site (Phase 3). These artefacts have already been discussed in detail and form no further part of the current chapter (refer to Section 4). Instead artefacts associated with the major period of occupancy in Area A, from contexts relating to the construction, occupation and eventual demolition of the Woolpack Inn form the major part of this discussion. This spans a period of nearly six decades prior to the construction of the Mercantile Bank building in the early 1880s. Occupation deposits in the form of a series of underfloor accumulations were excavated from Rooms 1 to 5 (7323, 7324, 7331, 7335, 7337), as well as a cesspit (7658) located near the boundary between 722 and 724 George which was backfilled sometime during the latter stages of the building’s occupation. The artefacts indicate it was probably backfilled sometime after 1870 (7653, 7654, 7655).

The underfloor deposits were for the most part shallow and no clear stratigraphic divisions could be found. This made it difficult to date their deposition or precise occupation phase. There was also some degree of disturbance to the archaeological remains through the centre of the building, caused by damage from later construction. Despite these constraints the underfloor deposits provide a useful assemblage for determining whether specific activity areas can be recognised within the building. As with many areas of the site, the underfloor deposits contained some lead-glaze ceramics which were residual in these contexts.

Twenty-three functional categories were represented across all the contexts in Area A (Table 25). The most commonly identified categories included recreation, personal, clerical, household, architecture, beverage and food (Figure 5.19). Most of the artefacts (1,052 items) were associated with recreational activities, including 930 tobacco pipes (Section 5.7, Figure 5.60). The 930 pipes were represented by a variety of types. The 374 of ‘Churchwarden’ type made from c1830-1880 were the most commonly identified (40.2%) (Table 26). The remaining 122 items in this category were a fishhook made from a sewing pin (1), a gaming counter (1), dominoes (2), a snuff bottle (1), a bird whistle (1), doll parts (2), marbles (111), toy saucer (1), toy glass (1) and toy teacup (1).

Figure 5.19: A selection of clerical items from Area A. Left and right: slate board fragments with surface marks 7337/#97526, #97501. Front to back (L-R): slate pencil fragments (with initials ‘NM’) 7335/#96908; with sawmarks 7321/#96036, 7337/97230, 7331/#96680, 7337/#97607, 7337/#97266; square lead pencil 7337/#97485(3). Russell Workman, 10cm scale.
Figure 5.20: Selection of jewellery from Area A. Front row: glass beads 7337/#97312, 7337/#97579, 7331/#96696, 7335/#97090, 7645/#97725. Middle row: left glass beads 7337/#97384, 7335/#96877; right jet beads 7324/#96393, 7335/#97014. Back row: black glass inlay 7337/#97636, purple glass or amethyst inlay 7335/#96823, gilt copper alloy clasp 7337/#97363, black glass inlay 7324/#96607. Russell Workman, 10cm scale.

Figure 5.21: Selection of personal grooming, health and hygiene items from Area A. Front: bone toothbrush 7321/#96029. Back row (L-R): spectacle lens and frame 7337/#97490; vulcanite comb and haircomb fragments 7337/#97229, 7337/#97411, 7337/#97412; pharmaceutical bottle lid 7335/#96907. Russell Workman, 10cm scale.
The 918 items identified as personal included items of jewellery, accessories, clothing, grooming, toiletry, health, perfume, religion and timekeeping (Figs 5.20, 5.21). All of the 642 beads (with one exception) were found in the underfloor deposits of the Woolpack Inn and are all identified with the role of jewellery and made from glass (640) and jet (2) (Appendix 5.3: Table 27). Most of the beads were recovered from the underfloor space in Room 5 (7337), with the 532 items representing 82.7 per cent of the beads found in Area A (Figure 5.6).

The 139 different types of buttons used to fasten clothing were made in a range of materials including silver, silver and fabric, bone, brass, brass and gold, iron, iron and fabric, glass, glass and silver, glass and iron, mother of pearl, and porcelain (Table 28) (Figs 5.7, 5.22). The highest number of small items within the miscellaneous category of artefacts was from the underfloor deposits in the five rooms of the Woolpack Inn.

The 184 shells in Area A represented 49 per cent of the entire shell assemblage found on site and were identified here in 15 contexts (Table 6). The underfloor deposits in the Woolpack Inn contained 123 shells and represented 66.8 per cent of the Area A shell assemblage. Thirty-seven shells were also found in the fill of a pit (7645). Bone was recovered in 23 contexts in Area A with the 4,860 fragments representing 71 per cent of the total bone found on site (Table 4). The
Woolpack Inn underfloor deposits contained 4,681 bone fragments representing 96.3 percent of the Area A bone assemblage (Table 38). The most commonly found bone fragments within the underfloor deposits were the unidentified fish (2,436), followed by the European rat (1,111), sheep (611) and rodent (359). These four animal species dominated the underfloor bone assemblage (96.5%), with other species such as cattle, chicken, dog, goose and pig represented in far fewer numbers (Table 38).

Specific information regarding the artefact assemblages from the major contexts is found in Section 5.3.1

5.4 Area B, Lot 3: Summary of Artefacts
A total of 679 artefacts were recovered from Area B in several different contexts and represent various types of activity that were carried out on this part of the site (Table 2). Together these account for just 8 per cent of the items found across the entire site.

As for Area A, a significant portion of the artefacts from this area were lead-glaze wasters and other items associated with Thomas Ball’s pottery production. These date to Phase 3, the period of Brickfield activity. The locally produced lead-glaze ceramics and associated artefacts have already been discussed in Section 4 and are not further commented upon here. However, unlike Area A, post-Brickfield occupancy in this part of the site is characterised by several shorter phases. Area B experienced successive building and development phases throughout the nineteenth and early twentieth century.

During Phase 4 (c.1823–1840) a single building was recorded on plans at the George Street end of the lot. The archaeological remains from this period did not belong to the structure of the house but were associated with its occupation. They included a sandstock brick box drain and fills (7339, 7431, 7432), and a possible rubbish pit (7508), the fill of which had been disturbed by later building activity (7509). The drain contained 30 general artefacts accounting for only 0.34 per cent of the finds from the site. The pit fill was dominated by oyster shell fragments with a small number of animal bones and a single ceramic item that dates broadly from between 1780 to 1860.

More substantial changes occurred during Phase 5 (c.1840–1860s) when the lot was subdivided into smaller allotments that correlate generally to the modern street numbering of 712 to 718 George Street. During this time the lot contained small shops and residences engaged in a variety of commercial enterprises. Several cesspit fills and an underfloor deposit contained artefact assemblages that can be specifically related to occupation and use of the buildings on this part of the site. These include an underfloor deposit (7395) from the timber building at 718 George Street and cesspit fills found at the rear of 712, 714, 716 and 718 George Street. The cesspits appeared to have been backfilled during Phase 6.

Sixteen functional categories were represented across all the contexts in Area B (Table 29). The most commonly identified categories included food, beverage and recreation. Just under a quarter of the assemblage was associated with the category of food, 159 artefacts. Items associated with this category included bottles (oil, pickle, pickle/chutney, sauce, vinegar), bowls, child’s mug, cups, jar, pepper shaker, plates, platter, saucers, small plates, soup plate, stemware, teapots, teaspoon, tumblers and tureens. Of these the most commonly identified are the plates (46), saucers (28) and cups (23) (Figs 5.23, 5.24).

9 These figures do not include bone, shell and the locally made lead-glaze and associated kiln furniture from Phase 3 activity.
The beverage category was represented by 140 glass bottles, with gin/schnapps (46), beer/wine (45) and champagne (35) being the most common, totalling 126 items. The remaining 14 bottles were aerated water, beer/wine/champagne, cordial, gin and spirits. The category of recreation was identified with a total of 119 items and once again it was the tobacco pipes which dominated this field, with 99 found (83.2%), (Table 30). Many of the pipes were plain and/or unidentified, however of the known types the Churchwarden type (24) was the single most commonly identified (Figure 5.19). Aside from the pipes the next most common recreation-related items were 18 marbles (15.1%). The majority of these were made of clay and unused. They were found in deposits of waster debris associated with Thomas Ball.  

10 Section 4.10.2.
The 136 shells in Area B represented 36 per cent of the entire shell assemblage found on the site and were identified here in 17 contexts (Table 6). The most number of shells (54) came from fill in a rubbish pit (7509). Bone was recovered in 27 contexts in Area B with the 269 fragments representing just 4 per cent of the total bone found on site (Appendix 5.3: Table 4). The most bone (79) was in a backfill of the cesspit at No. 718 George Street (7401) and included cattle (3), chicken (2), European rat (11), pig (3), sheep (58) and unidentified fish (2) (Table 69).

The artefacts from specific contexts are discussed in further detail in Section 5.3.2.

### 5.5 Area C, Lot 4: Summary of Artefacts

A total of 3,804 artefacts were recovered from Area C again from varied contexts that represent the different phases of activity that were carried out on this part of the site. Together these account for 43 per cent of the items found across the entire site (Table 2).

Unlike Areas A and B, no substantial remnants of Brickfield activity were found on this part of the site. From Phase 4 onwards the development of this lot followed a similar path to that of Area B. But as Area C was only a single house site there were some minor differences in the archaeological remains from each phase. Documentary evidence suggests that Area C remained vacant during the 1830s and no archaeological remains were found to suggest otherwise. By 1845 (Phase 5) the first substantial building had been constructed in Area C. It was a two-storey brick and timber structure listed as a shop and residence.

Artefact-bearing contexts from these phases included an underfloor deposit (7444) and a well (7520). A series of backfills were excavated from the well that probably date to between 1860 and 1890 (7465, 7466, 7567, 7568, 7569). The underfloor deposit was from Room 1 of the shop/residence at No. 710 George Street (Table 3). The backfills of two cesspits were also excavated, although cesspit 7418 (fill 7459) and cesspit 7419 (fill 7445) contained modern fills.

Twenty-four function categories were represented across all the contexts in Area C (Table 31). The single most commonly identified category was that of food, with 1,810 items. Other categories that are also well represented are recreation (408), beverage (261), household (261), architecture (253) and personal (131). A fairly large number of items (519) were unable to be identified. The particularly large number of food-related items relative to other categories is due to the inclusion of organic food material; grapes, walnuts, apricots, peaches, coconut and nectarine seeds. These organic items (1,388) represented 76.7 per cent of those identified within the overall category of food, with the grape seeds alone numbering 1,374 (from the well fills). The non-organic food items numbered just 422 and are therefore more in par with the rest of the artefacts in Area C, in particular the items identified with recreation. The 422 non-organic food items covered a wide range of shapes, including bottles (oil, oil/vinegar, pickle, pickle/chutney, vinegar), bowls, breakfast cups, bung jar, cleaver/knife, cups, dishes, egg cups, flacons, forks, jars, jugs, ladle, plates, platters, saucers, slop bowls, small plates, spoon, stemware, stopper, teapots, tin cans, tumblers and tureens. The shapes were associated with the preparation, serving, consumption and storage of food.

The next most commonly represented function is recreation (408), and again the tobacco pipes dominate this category, with the 380 pipes representing 93.1 per cent of the recreation field. The 380 pipes reflect the wide range of imported types available in the marketplace and are typical of
to late nineteenth century designs sold by the increasing number of local tobacconists (Table 32). The most commonly found decorative types found here are the thistle and ship motif (23), the ship and anchor design (16), and the Churchwarden (14). The majority of the pipes were plain and/or unidentified, however a few of the more notable pipe types include those that commemorate Victoria and Albert’s wedding of 1840 (3) (Figs 5.18, 5.25), a pipe depicting Jenny Lind (a famous Swedish singer between 1838 and 1887) (1), and pipes representing the London Great Exhibition of 1851 (1), and Uncle Tom’s Cabin, written by Harriet Beecher Stowe in 1852 and made by William Murray until 1861 (3).12

Aside from the pipes the next most common recreation-related item were the 17 marbles. Most were commonly imported German types and a considerable number were made of limestone (Figure 5.27).

The beverage category was represented by 261 items, either bottles or bottle closures. Eighty-three per cent of this category were three bottle types – beer/wine (133), gin/schnapps (57) and champagne (27). The remaining 44 items were identified as alcohol bottles (19), aerated water bottles (8), beer/wine corks (3), wire closures (5), gin bottle (1), ginger beer bottles (7) and spirit bottle (1). The category of household is dominated by sewing pins, with the 205 pins representing 78.5 per cent of the 261 household-related items. Other items related to household fittings, furnishings, laundry, maintenance, ornament, sewing (other than pins), storage and time keeping. The category of architecture is dominated by two items, with the 103 nails and 87 fragments of window glass representing a combined total of 190 items (75.1%). The remaining 63 items in this category relate to doors, finishes, structural and non-structural items (Figure 5.26).

12 Casey & Lowe artefact database. See Section 5.7.
The 131 items identified with the personal category included items of jewellery, accessories, clothing, perfume, health, toiletry and timekeeping. The most commonly identified shapes are the buttons (33), beads (30) and shoe/boot (17). The 33 buttons exhibited a standard range of types and fabrics although there were no glass or brass military buttons (Table 33) (Figure 5.27). The 30 glass beads all came from the underfloor deposit in the front room of No. 710 George Street (7444) and are in a wide range of colours (Table 34). The 17 shoe/boot leather items were found in the well fills 7567, 7568 and 7569, and indeed the well fills contained the only leather items recovered from the entire site (Table 35).
Figure 5.27: Selection of buttons from Area C. Front row: metal 7444/: #98087, #98250, #98116, #98088, #98071. Middle row: porcelain 7444/: #97940, #98271, #98243, #9815. Back row: bone 7568/#98393, 7444/#98059. Russell Workman, 10cm scale.

The 53 shells in Area C represented 14 per cent of the entire shell assemblage found on the site and were identified here in nine contexts (Table 6). The most number of shells (25) came from the underfloor deposit in the front room of No. 710 George Street (7444). Bone was recovered in 12 contexts in Area C with the 1,745 fragments representing 25 per cent of the total bone found on the site (Table 4). Most bone (1,376 mni) came from the front room underfloor deposit (7444) and was dominated by the European rat (715) and unidentified fish species (484) (Table 72).

The artefacts from specific contexts in Area C are discussed in further detail in Section 5.3.3.
5.6 Specific Contexts

5.6.1 Area A, Phase 4: The Woolpack Inn occupation, mid-1820s to c.1880
The contexts from the Woolpack Inn that contained significant artefact assemblages were a series of underfloor deposits pertaining to Rooms 1 to 5. These spaces represent the ground floor rooms of the Inn located at the Campbell Street end of the lot. As noted above no clear stratigraphic progression could be determined within these deposits and the artefacts represent a broad sample of activities and occupants over the entire period of the Inn’s use (Table 36, 37, 38).

Underfloor deposits exposed on the site accumulated during Phase 4. In Area A underfloor deposits were restricted to the Woolpack Inn. The Inn operated from c.1824 until demolition in c.1880. The exact layout of the building and dimensions of the rooms could not be clearly delineated due to disturbance from later construction, particularly from the modern footings and a large sewer line that cut through Rooms 1, 2, 3 and 5 (Plans 4, 22). These later phases of activity had also affected the degree of preservation and the distribution of underfloor deposits. Where present the underfloor deposits were excavated within a grid of 500mm x 500mm squares, in 50mm spits to provide stratigraphic and spatial controls (Section 3, Figure 3.33).

- The Room 1 underfloor deposit (context 7323) was only 30mm-100mm deep and most squares only contained one spit (less than or equal to 50mm).
- The Room 2 underfloor deposit (context 7324) was shallow, most of the grid squares were less than 50mm deep and the accumulation was only over 50mm in the vicinity of the fireplace.
- In Room 3 the deposit was in the northern portion of the room only, as twentieth-century construction had destroyed the remainder. The underfloor accumulation was in an area of 4m x 1.5m (7335).
- Room 4 contained a mid-brown silty underfloor deposit (context 7331), between 30mm and 75mm deep and almost non-existent at the western end of the room.
- The Room 5 underfloor deposit (context 7337) was generally no more than 30mm deep.

Two spits were removed in Rooms 1 to 4 and only Room 5 (7337) contained some areas of deeper deposit that required removal as three separate spits. The spatial distribution of the artefacts in all five rooms did not indicate where any doors or windows may have been positioned.

The spatial distribution of artefacts is plotted for each room with reference to the quantity of finds that were found in individual grid squares. The numbers refer to minimum item counts. Where a count of zero is recorded in a square this indicates that an artefact fragment (or fragments) was found in the square but did not represent a separate item (see Room 4 for example).
### UNDERFLOOR DEPOSIT 7323 – SPATIAL PATTERNING

<table>
<thead>
<tr>
<th>7323</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>9</td>
<td>24</td>
<td>37</td>
<td>14</td>
<td>84</td>
<td>17.6</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>17</td>
<td>53</td>
<td>25</td>
<td>9</td>
<td>104</td>
<td>21.8</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>18</td>
<td>20</td>
<td>43</td>
<td>21</td>
<td>13</td>
<td>24.1</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>18</td>
<td>20</td>
<td>6</td>
<td>8</td>
<td>6</td>
<td>12.2</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>31</td>
<td>26</td>
<td>5</td>
<td></td>
<td>62</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>11</td>
<td>9</td>
<td>3</td>
<td></td>
<td>23</td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>6</td>
<td>7</td>
<td>4</td>
<td></td>
<td>17</td>
<td>3.6</td>
<td></td>
</tr>
<tr>
<td>H</td>
<td>3</td>
<td>9</td>
<td></td>
<td></td>
<td>12</td>
<td>2.5</td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td>2</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>87</td>
<td>119</td>
<td>138</td>
<td>91</td>
<td>42</td>
<td>477</td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>18.2</td>
<td>24.9</td>
<td>28.9</td>
<td>19.1</td>
<td>8.8</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.28 Spatial distribution of general artefacts (MIC) in underfloor deposit from all spits in Room 1 (7323) excluding bone and shell. Each square represents a 500mm x 500mm grid square. The grey area shows the position of modern disturbance through the centre of the Woolpack building.

Grey shading indicates an area of major disturbance from the construction of the nineteenth century building. There were also isolated areas where intrusions from post-Woolpack buildings have partially removed some of the underfloor deposit, particularly in the southwest corner of the room. The absence of artefacts here is more likely a factor of post-deposition disturbance and not as evidence that there was little to no activity in this part of the room.

The remains of a fireplace support were found abutting the dividing wall between Rooms 1 and 2. A large concentration of artefacts in squares A3 and A4 was consistent with the high number of artefacts expected near a fireplace.
Room 1 was located in the southwest corner of the Woolpack Inn and its underfloor deposit was most evident in the northern half of the room, becoming increasingly more rubble-strewn and disturbed further south (Figure 5.28). A breakdown of the 478 artefacts by general function shows that the underfloor assemblage in Room 1 was dominated by the category of recreation, with 197 items identified in this field (Appendix 5.3: Table 39). Within this category it is the tobacco pipes that are particularly dominant with 182 pipes (92.4%). The nature of the underfloor deposit is reflected by the artefacts present, with the deposit dominated by small items that would easily slip between floorboards (Table 40). This is particularly noticeable within the miscellaneous category of artefacts, with tobacco pipes (182), pins (34), beads (27), buttons (21) and marbles (13) present in solid numbers.

There were also 603 fragments of animal bone contained within the underfloor deposit, catalogued separately from the main artefact data (Table 41). The most commonly identified species is the European rat with the 204 fragments representing 33.8 per cent of the bone found. Rodent was also identified by 98 fragments (16.3%), and the presence of rat and rodent scavengers within the underfloor environment is predictable. Sheep bone is also well represented by 173 fragments (28.7%). Elements of fish, pig, cow and chicken were also present in the deposit. A high frequency of bone fragments from sheep feet and pig’s teeth was identified during analysis of the Woolpack underfloor deposits. However the presence of these animal parts is not particularly remarkable when the deposit is an underfloor accumulation made up of items small enough to fall through gaps in the floorboards, and is therefore not necessarily indicative of dietary preferences. The 29 shell fragments were mainly comprised of Sydney rock oyster (20), with the club mud whelk (3), Sydney cockle (1), barnacle (2) and unidentified (3) also represented. The front rooms of the Woolpack Inn, Rooms 1, 3 and 4, were in all likelihood used as public spaces, with activities relating to eating and drinking as well as pastimes such as sewing and gaming taking place.

As noted previously, the underfloor deposit was very rubbly, especially in the southern half of the room, and in some parts it was clearly not specifically just underfloor, with some contamination with the underlying construction layer (7320) and also from one of the upper backfills (7326) of a large clay extraction pit (7436) pre-Woolpack. Intrusions from post-Woolpack activities also impacted on the underfloor deposit, in particular in the southwest corner of the room.

Room 2 was located directly to the east of Room 1 and its underfloor deposit was more extensive than Room 1 (Figure 5.29). The underfloor deposit was sitting above a layer of construction debris (7379) which may have been mixed with an earlier levelling fill as it contained artefacts including glass, lead-glaze pottery and tobacco pipes. A large stone fireplace was built into the eastern wall and this room has been interpreted as the back kitchen of the Inn. A breakdown of the 795 artefacts by general function shows that the underfloor assemblage in Room 2 was again dominated by the category of recreation, with 384 items identified in this field (Table 42). As is the case in Room 1, it is again the tobacco pipes which are dominant, with 361 pipes representing 94 per cent of the recreation field. Again, the underfloor deposit is dominated by small items that would easily slip between floorboards, either as whole items or as fragments when broken (Table 43).

---

13 Shell and bone was catalogued separately and not included in this functional breakdown.
14 Fillios 2010 Vol 2, Section 9.4 in this report.
15 Casey & Lowe shell database.
16 Shell and bone was catalogued separately and not included in this functional breakdown.
Room 2
UNDERFLOOR DEPOSIT 7324 – SPATIAL PATTERNING

<table>
<thead>
<tr>
<th>7324</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Disturbed Area</td>
<td>11</td>
<td>16</td>
<td>7</td>
<td>28</td>
<td>22</td>
<td>84</td>
<td>0.1</td>
</tr>
<tr>
<td>B</td>
<td></td>
<td>12</td>
<td>6</td>
<td>5</td>
<td>22</td>
<td>28</td>
<td>19</td>
<td>0.1</td>
</tr>
<tr>
<td>C</td>
<td></td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>30</td>
<td>29</td>
<td>34</td>
<td>0.1</td>
</tr>
<tr>
<td>D</td>
<td></td>
<td>3</td>
<td>7</td>
<td>12</td>
<td>21</td>
<td>27</td>
<td>30</td>
<td>0.1</td>
</tr>
<tr>
<td>E</td>
<td></td>
<td>4</td>
<td>12</td>
<td>16</td>
<td>36</td>
<td>36</td>
<td>29</td>
<td>0.2</td>
</tr>
<tr>
<td>F</td>
<td></td>
<td>14</td>
<td>11</td>
<td>13</td>
<td>35</td>
<td>38</td>
<td>33</td>
<td>0.2</td>
</tr>
<tr>
<td>G</td>
<td></td>
<td>7</td>
<td>15</td>
<td>29</td>
<td>31</td>
<td>29</td>
<td>12</td>
<td>0.2</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>59</td>
<td>76</td>
<td>84</td>
<td>182</td>
<td>215</td>
<td>179</td>
<td>795</td>
</tr>
<tr>
<td>%</td>
<td></td>
<td>0.1</td>
<td>0.1</td>
<td>0.1</td>
<td>0.2</td>
<td>0.3</td>
<td>0.2</td>
<td>100</td>
</tr>
</tbody>
</table>

Figure 5.29: Spatial distribution of general artefacts (MIC) in underfloor deposit from all spits in Room 2 (7324) excluding bone and shell. Each square represents a 500mm x 500mm grid square. The grey area shows the position of modern disturbance through the centre of the Woolpack building.

This is particularly noticeable within the miscellaneous category of artefacts, with the 545 items identified in this general category representing 68.5 per cent of the assemblage in this room, with tobacco pipes (361), pins (58), beads (35), buttons (28) and marbles (22) present in strong numbers. Glass bottles were also well represented in this room (61), including beer/wine, champagne and gin/schnapps. Spatial analysis of the flat window glass fragments (34) showed that the glass was scattered widely throughout the room, with no concentrations suggesting window frame positions in the walls (Section 3, Figure 3.29).

There were 1,496 fragments of animal bone contained within the underfloor deposit (Table 44). Almost half of the bone, 713 fragments, is unidentified fish (47.7%). The presence of scavenging rodents is again well represented, with 317 fragments identified as European rat (21.2%) and 223 fragments identified as rodent (14.9%). One hundred and seventy two sheep bone fragments were also found (11.5%). The unidentified fish, European rat, rodent and sheep bones account for 95.3 per cent of the bones found in the underfloor deposit (1,425). The high number of bone fragments, aside from the rats and rodents, is thought to be associated with food preparation and disposal associated with kitchen-related activities. Similar numbers of bone fragments were also found in the underfloor deposit of Room 5, also at the rear of the structure and adjacent to Room 2. Also, like in Room 1, there was a high frequency of bone fragments from sheep feet and pig’s teeth identified.
The ceramics from the underfloor deposit in Room 2 are only indicative of food consumption, not food preparation, with tableware (plates) and teaware-related items (breakfast cups, cups, small plates, saucers) identified. This dominance of items associated with the consumption of food is indicative of the greater risks of breakages that objects that were used every day, and often more than once a day, faced. The 36 shell fragments were comprised of Sydney rock oyster (29) and Sydney cockle (7) and may relate to the preparation of meals in the kitchen.17

The impacts from later phases of activity had affected the preservation of the underfloor deposits in all the rooms, and in Room 2 the deposit was limited to the eastern half of the room.

Room 3
UNDERFLOOR DEPOSIT 7335 – SPATIAL PATTERNING

<table>
<thead>
<tr>
<th>7335</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>Disturbed Area</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>60</td>
<td>58</td>
<td></td>
<td></td>
<td>118</td>
<td>19.5</td>
</tr>
<tr>
<td>B</td>
<td>9</td>
<td>70</td>
<td>27</td>
<td></td>
<td>106</td>
<td>17.5</td>
</tr>
<tr>
<td>C</td>
<td>11</td>
<td>125</td>
<td>47</td>
<td></td>
<td>183</td>
<td>30.2</td>
</tr>
<tr>
<td>D</td>
<td>18</td>
<td>12</td>
<td>10</td>
<td></td>
<td>40</td>
<td>6.6</td>
</tr>
<tr>
<td>E</td>
<td>19</td>
<td>13</td>
<td>5</td>
<td></td>
<td>37</td>
<td>6.1</td>
</tr>
<tr>
<td>F</td>
<td>10</td>
<td>16</td>
<td>3</td>
<td></td>
<td>29</td>
<td>4.8</td>
</tr>
<tr>
<td>G</td>
<td>6</td>
<td>12</td>
<td>13</td>
<td></td>
<td>31</td>
<td>5.1</td>
</tr>
<tr>
<td>H</td>
<td>14</td>
<td>12</td>
<td>15</td>
<td></td>
<td>41</td>
<td>6.8</td>
</tr>
<tr>
<td>I</td>
<td>12</td>
<td>8</td>
<td></td>
<td></td>
<td>20</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>159</td>
<td>326</td>
<td>120</td>
<td></td>
<td>605</td>
<td>100</td>
</tr>
<tr>
<td>%</td>
<td>26.3</td>
<td>53.9</td>
<td>19.8</td>
<td></td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Figure 5.30: Spatial distribution of general artefacts (MIC) in underfloor deposit from all spits in Room 3 (7335) excluding bone and shell. Each square represents a 500mm x 500mm grid square. The grey area shows the position of modern disturbance through the centre of the Woolpack building.

17 Casey & Lowe shell database.
Room 3 was located to the north of Room 1 and also fronted George Street. Only the northern portion of the room was extant, with the remainder destroyed by twentieth-century construction (Figure 5.30). Because the room was so severely truncated any spatial analysis is compromised. A breakdown of the 605 artefacts by general function shows that the underfloor assemblage in Room 3 was mainly dominated by the category of household, with 221 items identified in this field (Table 45). The two general functions of recreation (110) and personal (102) are also well represented. The deposit is again dominated by small items that fall between floorboards, either whole or fragmented when broken, and it is again the miscellaneous category of artefacts that is particularly well represented, with the 456 items representing 75.4 per cent of the assemblage (Table 46). Pins (215) are the most identified item in this room, with tobacco pipes (82), beads (42), buttons (35) and marbles (25) also present in notable quantities. Glass bottles were also identified in significant numbers (72) and included beer/wine, champagne, gin/schnapps and condiment bottles.

There were 451 fragments of animal bone contained within this underfloor deposit (Table 47). Almost half of the bone (213 fragments) were of unidentified fish species (47.2%), as in Room 2. The European rat was also commonly found here, with 149 fragments identified (33%). The unidentified fish and the European rat accounted for 80.2 per cent of the bone assemblage in this underfloor deposit. Of the 62 sheep bones found, almost half of these were small toe bones. Seven shell fragments, including Sydney cockle (4), Sydney rock oyster (1), bittersweet clam (1) and gold-mouthed top shell (1) were present.

---

18 Shell and bone was catalogued separately and not included in this functional breakdown.
19 Fillios 2010 Vol 2, Section 9.4 in this report.
20 Casey & Lowe shell database.
### Room 4

**UNDERFLOOR DEPOSIT 7331 – SPATIAL PATTERNING**

![Diagram](image)

<table>
<thead>
<tr>
<th>7331</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>24</td>
<td>12</td>
<td>11</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td>52</td>
<td>19.7</td>
</tr>
<tr>
<td>B</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>7</td>
<td>5</td>
<td>10</td>
<td>32</td>
<td>12.1</td>
</tr>
<tr>
<td>C</td>
<td>2</td>
<td>1</td>
<td>5</td>
<td>7</td>
<td>8</td>
<td>7</td>
<td>3</td>
<td>33</td>
<td>12.5</td>
</tr>
<tr>
<td>D</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td>4</td>
<td>6</td>
<td>2</td>
<td></td>
<td>27</td>
<td>10.2</td>
</tr>
<tr>
<td>E</td>
<td>5</td>
<td>5</td>
<td>7</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td></td>
<td>29</td>
<td>11.0</td>
</tr>
<tr>
<td>F</td>
<td>0</td>
<td>4</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>5</td>
<td>4</td>
<td>23</td>
<td>8.7</td>
</tr>
<tr>
<td>G</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>5</td>
<td>8</td>
<td></td>
<td>25</td>
<td>9.5</td>
</tr>
<tr>
<td>H</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>9</td>
<td>3</td>
<td></td>
<td>24</td>
<td>9.1</td>
</tr>
<tr>
<td>I</td>
<td>1</td>
<td>0</td>
<td>5</td>
<td>4</td>
<td></td>
<td></td>
<td>9</td>
<td>19</td>
<td>7.2</td>
</tr>
<tr>
<td>Total</td>
<td>31</td>
<td>20</td>
<td>26</td>
<td>39</td>
<td>49</td>
<td>53.0</td>
<td>46</td>
<td><strong>264</strong></td>
<td>100</td>
</tr>
<tr>
<td>%</td>
<td>11.7</td>
<td>7.6</td>
<td>9.8</td>
<td>14.8</td>
<td>18.6</td>
<td>20.1</td>
<td>17.4</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Less than 10 items per square</th>
<th>21-40 MIC per square</th>
<th>10-20 MIC per square</th>
<th>41-60 MIC per square</th>
<th>More than 60 MIC</th>
</tr>
</thead>
</table>

**Figure 5.31:** Spatial distribution of general artefacts (MIC) in underfloor deposit from all spits in Room 4 (7331) excluding bone and shell. Each square represents a 500mm x 500mm grid square.

The underfloor deposit in this room consisted for the most part of a single 50mm spit, with only square A1 having enough depth to require removal of a second spit (7331). There was a fireplace in the northeastern area of the room, located in squares A2 to A4, accounting for the lack of underfloor material in this part of the room (indicated by hatched area) (Figure 5.31).

Room 4 also fronted onto George Street and was directly to the north of Room 3. Contamination of the underfloor deposit was evidenced a large quantity of early locally-made lead-glazed earthenware. This contamination was from deposits below, including the waster pits associated with Thomas Ball and the levelling fills used prior to the construction of the inn. A breakdown of the remaining 264 artefacts by general function shows that the underfloor deposit in Room 4 was
dominated by the category of recreation, with 88 items identified in this field (Appendix 5.3: Table 48). The general function of beverage was also fairly well represented here, by 62 items (23%). It is again the miscellaneous category of artefacts that is the most commonly identified, with 140 items representing 53 per cent of the assemblage (Table 49). The tobacco pipes (86) were the most commonly found items (recreational), followed by the 67 glass bottles (beer/wine, champagne, gin/schnapps and condiment bottles). There were 337 fragments of animal bone contained within this underfloor deposit (Table 50) and just over half, 173 fragments, was European rat (51.3%). Sheep bone (88) and unidentified fish (56) were the next most commonly represented. These three species together number 317 fragments and account for 94 per cent of the bone in this room. The sheep bone was mainly identified by rib, vertebrae and toe bones and Room 4 had the highest percentage of ribs than any of the other rooms.22 Cattle bones (4), like in the other underfloor deposits, were low in number and severely fragmented. The 23 shell fragments featured eight types of shell with the Sydney rock oyster again dominating (13), followed by the Sydney cockle (3), bittersweet clam (2), oyster drill (1), olive shell (1), lima vulgaris (1), auger shell (1) and gold-mouthed top shell (1).23

The artefacts in the underfloor deposit from Room 5 contained a higher number of whole objects compared with fragments of incomplete items (Figure 5.32). This is evident in the higher MIC counts compared to fragment counts, a trend that was not so marked in the underfloor deposits of the other rooms without breaking the total artefact counts into functional categories (Table 36).24 These complete objects derive mainly from functions associated with jewellery, sewing, household and clothing and are mostly pins, beads, buttons, other small items of personal jewellery and occasional architectural elements that find their way into the occupation deposits during the course of their use.

21 Shell and bone was catalogued separately and not included in this functional breakdown.
22 Fillios 2010 Vol 2, Section 9.4 in this report.
23 Casey & Lowe shell database.
24 Shell and bone was catalogued separately and not included in this functional breakdown.
Room 5
UNDERFLOOR DEPOSIT 7337 – SPATIAL PATTERNING

<table>
<thead>
<tr>
<th>7337</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>108</td>
<td>15</td>
<td>18</td>
<td>99</td>
<td>1</td>
<td>241</td>
<td>17.7</td>
</tr>
<tr>
<td>B</td>
<td>88</td>
<td>73</td>
<td>13</td>
<td>10</td>
<td></td>
<td>184</td>
<td>13.5</td>
</tr>
<tr>
<td>C</td>
<td>183</td>
<td>62</td>
<td>25</td>
<td>5</td>
<td></td>
<td>275</td>
<td>20.2</td>
</tr>
<tr>
<td>D</td>
<td>368</td>
<td>11</td>
<td>20</td>
<td>3</td>
<td>1</td>
<td>403</td>
<td>29.6</td>
</tr>
<tr>
<td>E</td>
<td>8</td>
<td>23</td>
<td>20</td>
<td>5</td>
<td>2</td>
<td>58</td>
<td>4.3</td>
</tr>
<tr>
<td>F</td>
<td>54</td>
<td>60</td>
<td>31</td>
<td>11</td>
<td>5</td>
<td>161</td>
<td>12.0</td>
</tr>
<tr>
<td>G</td>
<td>5</td>
<td>6</td>
<td>9</td>
<td>13</td>
<td>4</td>
<td>37</td>
<td>2.7</td>
</tr>
<tr>
<td></td>
<td>814</td>
<td>250</td>
<td>136</td>
<td>146</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>%</td>
<td>59.9</td>
<td>18.4</td>
<td>10.0</td>
<td>10.7</td>
<td>1.0</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Disturbed area

Less than 10 items per square 21-40 MIC per square
10-20 MIC per square 41-60 MIC per square
More than 60 MIC

Figure 5.32: Spatial distribution of general artefacts (MIC) in underfloor deposit from all spits in Room 5 (7337) excluding bone and shell. Each square represents a 500mm x 500mm grid square. The grey area shows the position of modern disturbance through the centre of the Woolpack building.

Room 5 was a back room that shared a common wall with Rooms 3 and 4 and was on the same alignment as Room 2, the kitchen. Room 5 may have been a continuation of Room 2. However, to avoid the dangers of conflation in initial analysis, they were recorded as separate rooms. Room 5 contained the largest number of artefacts found in any of the rooms, with a total of 1359 items recovered. The miscellaneous artefacts category encompasses most small finds relating to such things as personal clothing, personal adornment (Figure 5.33), sewing, toys and smoking, to name just a few (Table 51). The common items found in Room 5 are beads (531) and pins (298) and together these two types of artefacts total 829 items and represent 71.1 per cent of miscellaneous items found in the room (Table 52) (Figure 5.6). Other items found included tobacco pipes (80), slate pencils (53), buttons (37) and marbles (28). The high number of pins in the deposit suggests that sewing took place in this room. The activity of sewing may also be reflected in the high number of beads found here, with the 531 items representative of more than just accidental loss from clothing, jewellery or furnishings. Glass bottles (37) were represented here by beer/wine, champagne, food and pickle types, but notably no gin/schnapps.

Forty-four ceramics were found in this room and the identified ceramics are predominately associated with food (22), in particular the direct consumption of food (18). Items of tableware
(plates), teaware (cups and saucers) and teaware/tableware (egg cups and small plates) are associated with food consumption, with the serving of food (dish and platter), its storage (jar), and drinking of beverages (ginger beer bottle) also represented. This room, like Room 2, is thought to have been a kitchen, and also like Room 2, it contains no ceramics associated with the role of food preparation. If Room 5 is actually part of Room 2, making the two back rooms into a single long kitchen, the dominance of sewing-related items here (pins and beads) indicates that this end of the room was used for other activities. Room 2 also contained no food preparation items, however this may be a reflection of the modern disturbance through the centre of the Woolpack that removed part of the underfloor deposits as well as perhaps the fact that items associated with food preparation were more durable and if broken they would not necessarily break into fragments that would be small enough to fall through floorboards, and items associated with the consumption of food run a greater risk of breakages because they are used every day and often more than once a day.

There were 1,794 fragments of bone in this underfloor deposit (Table 53). Three-quarters of the bone, 1,360 fragments, were unidentified fish (75.8%). The presence of scavenging rodents is again well represented, with 268 fragments of European rat (14.9%). Sheep is also fairly well represented by 116 fragments (6.5%). The unidentified fish, European rat and sheep bones account for 97.2 per cent of the bones found in the underfloor deposit (1,744). Like Room 2, the high number of bone fragments, aside from the rats, is thought to be associated with food preparation and disposal associated with kitchen-related activities. The 28 shell fragments featured five types of shell with the Sydney rock oyster once again being the most common (21), followed by the bittersweet clam (3), paphies sp (2), Sydney cockle (1) and frog shell (1).  

Figure 5.33: Ivory brooch/pendant featuring a finely fret-sawed/pierced design of a rearing stag 7337/#97400, underfloor deposit, Wool Pack Inn. Russell Workman, 1cm scale divisions.

25 Casey & Lowe shell database.
Woolpack Inn cesspit 7658

Artefacts relating to the final occupation phase of the Woolpack Inn were found in cesspit 7658, within three fills (contexts 7655, 7654, 7653 from lowest to highest). The brick cesspit was probably backfilled in the 1870s when plumbed toilets were installed. Artefacts within the fills suggest that the backfilling occurred after 1858 and probably after 1873. The cesspit was probably still in use until the 1870s but after conversion to the main sewers the structure was backfilled. The fills may have included accumulated rubbish from the surrounding area.

The rectangular sandstock brick cesspit was 23m from the rear of the Woolpack Inn and was located close to the property boundary between 722 and 724 George Street. There were no cess deposits in the structure, and it appears that the three distinct sand fills represent one backfilling event. The three fills contained a total of 72 items (241 fragments), with the most number found in the central fill 7654, representing 83.3 per cent of the cesspit assemblage (Table 54). Within the ceramic category two items were found to have conjoins between two of the fills, supporting the idea that the deposition occurred in the one event. Both items had conjoins between the middle fill (7654) and the lowest fill (7655). Five sherds in fill 7654 from a blue transfer-printed “Albion” pattern platter (#73613) joined with 37 sherds in fill 7655 (#73622) from the same platter. Three sherds in fill 7654 from a blue transfer-printed “Willow” pattern serving dish (#73614) joined with 21 sherds in fill 7655 (#73621).

The general functions of the artefacts recovered from the fills are consistent with a household or an establishment such as the Woolpack Inn, with the functions of food and beverage being the most commonly identified (Appendix 5.3: Table 55). The 72 items in the cesspit were represented by 27 individual shapes within the functional categories of architecture, beverage, economy, food, personal, pharmacy and recreation (Table 56). Included in this are three identified shapes with no identified function – bar, bottle and rod. Overall the general shape of bottle is the most common shape found here (31), associated with beverage (13), food (6), personal (1), pharmacy (9) and unidentified (2). The bottles are in glass (28) and stoneware (3). The beverage-related bottles are identified as beer/wine (8), unidentified alcohol (1), gin/schnapps (1) and ginger beer (3); the food-related bottles are pickle (3), oil (2) and vinegar (1); the personal-related bottle is perfume (1); the

26 Shell and bone counts are not included in this artefact count.
27 Ward 2010 Vol 2, Section 9.1 in this report.
pharmacy-related bottles are unidentified pharmaceutical (3), castor oil (1) and patent medicine (5), and there are two bottles of unidentified function.

The three whole salt-glazed stoneware bottles are all ginger beer bottles (#73317-#73319), one of which features the impressed makers’ mark of the Sydney potter Thomas Field – “T FIELD” / “POTTER” / “SYDNEY”. This mark dates between c.1850 and c.1860s. The two ceramics that feature conjoins between fills 7654 and 7655, the “Willow” pattern dish and the “Albion” pattern platter, are also listed in Table 56 as “0” in the item count for fill 7655 because they have already been counted in fill 7654.

Two of the ceramics in the cesspit backfill can be specifically identified with children (perhaps the publican’s children). A child’s mug with the clobbered transfer-printed pattern “The Ethiopians” was identified in fill 7654 (#73615), and a black transfer-printed alphabet plate was identified in fill 7653 (#73601) (Figure 5.35).

Overall the ceramic decorative types recovered in the cesspit are generally indicative of the mid-nineteenth century onwards, and two of the identified transfer-printed patterns in particular supported this, “Albion” (1858-1937) and “Costumbres Espanoles” (c.1861-1873). Three basemarked items indicated that the backfilling occurred in the second half of the nineteenth century, post-1861. These items were the above mentioned stoneware ginger beer bottle manufactured by Thomas Field dated between c.1850 and c.1860s (#73319); a semi-vitreous fine earthenware glazed and moulded jug featured an embossed registration diamond indicating that its design was registered on 19 May 1860 (#73611); and a blue transfer-printed pearlware poe

---

28 Ward 2010 Vol 2, Section 9.1 in this report.
29 Ward 2010 Vol 2, Section 9.1 in this report.
featuring the “Costumbres Espanoles” pattern (attributed to George Jones of Stoke), dated to between c.1861 to 1873 (#73617).³⁰

Almost all of the glass artefacts in the backfill came from fill 7654 and all the datable items are consistent with being associated with the Woolpack Inn. All the bottles were made after 1820 and before 1920 and one third of the bottles had an 1850s terminus post quem. The beer/wine bottles have an 1820s to 1850s/1870 date range. Most of the medicine bottles were generic forms that were used by chemists and patent medicine manufacturers, with the contents of just two bottles identified as castor oil (#48084) and a cough remedy (#48090).³¹

The cesspit backfill also contained some animal bone, 23 fragments in total (Table 57). Sheep (11) and cattle (8) were the most common, being 82.6 per cent of the bone recovered from the cesspit. Just eight shell fragments were found in the cesspit, in fills 7655 (2) and 7654 (6), and these included Sydney rock oyster (4), scallop (2) and mud oyster (1).

5.6.2 Area B, Phase 5: c.1840-c.1860
Located in the southern part of Area B (at 718 George Street) were the remains of a timber building that had been truncated by later building phases. It appears to have been a 4-roomed structure that represented at least two houses or shops between 1845 and 1861. The archaeological evidence relating to this structure was confined to a fireplace support (7394), some brick walling (7467) and an occupation-related deposit (7395). Its structural fabric was either removed or destroyed in the early 1860s (Phase 6) when the buildings along the George Street frontage were redeveloped.

Occupation deposit, 7395
The occupation deposit (7395) was spread over an area of 5.5m x 6.5m on the western side of the fireplace and was 70mm deep. The deposit was disturbed by later activity and was also contaminated from below by the backfill of an early pottery waster pit (7460). The deposit was excavated within a 500mm x 500mm grid, in 50mm spits and was sample sieved. From the sieving it was clear that the deposit was quite disturbed and lacked stratigraphic integrity. It contained brick and sandstone fragments throughout, along with charcoal, bone and various artefacts. Contamination from the early pottery waster pit was evident in the large amounts of lead-glazed earthenware that dominated the deposit and these have been removed from the artefacts under discussion here. The animal bone (36) and shell (4) is not included in the general artefact count.

A total of 46 artefacts (95 fragments) were found in the deposit and these belong to nine identified general function categories (Table 58). Just five of the items were unable to be identified with a particular function. The two most commonly represented functional categories are food (11) and recreation (11), followed by beverage (7) and architecture (5). The 11 recreation items were all tobacco pipes, and the food items were a condiment bottle (1), dish (1), stemware glasses (2), pepper shaker (1), plate (2), tumbler (1) and saucer (2) (Table 59). The majority of the artefacts within the deposit have broad manufacturing date ranges and generally fit into the Phase 5 period. The nine non lead-glazed ceramics are a good indication of this (Figure 5.36).

³⁰ Ward 2010 Vol 2, Section 9.1 in this report.
³¹ Harris 2010 Vol 2, Section 9.3 in this report.
The blue transfer-printed pearlware pattern “Wild Rose” was identified on a serving dish (#73669). This pattern was made by many potteries and was extremely popular between the 1830s and 1850s. The two shell-edged pearlware plates date between c.1780 to c.1840 and c.1780 to c.1860 and have different end dates because of the colour used on their rims, one is green (#73668) and the other blue (#73675). Shell-edged ware was manufactured by many British potteries, is often unmarked, and was exported in large quantities from the 1780s through to the late nineteenth century. Blue was the most commonly used underglaze colour, with green, red, brown and black used to a far lesser extent. \(^{32}\) Although the colours other than blue probably all began production at the same time these other colours, including the green, are rare after c.1840, with only blue continuing on until the late nineteenth century. \(^{33}\) Although shell-edged ware was produced until the late nineteenth century it is believed it was in decline in Australia by the 1860s. \(^{34}\) Miller also states that shell-edged ware is not commonly found in archaeological assemblages after the 1860s, even though it continues production into the 1890s. \(^{35}\) The blue flow saucer dates from the 1830s to the 1930s (#73674), the plain pearlware pepper shaker dates from the 1780s to 1870s (#73670), the blue transfer-printed pearlware unidentified item dates between the 1800s to 1870s (#73673), the whiteware unidentified item dates from 1830 onwards (#73667), and the blue transfer printed saucer (#73672) and unidentified item (#73671) both date from c.1830 onwards. \(^{36}\)

Two of the 11 tobacco pipes featured Sydney manufacturer marks. One was made by Samuel Elliot. It dated between c.1828 to c.1840 (#97775). The other was made by Jonathan Leak. It dated between 1822 to 1839 (#97783). An undated brass 12-point starburst brooch was identified as

\(^{32}\) Brooks 2005:41  
\(^{33}\) Brooks 2005:41  
\(^{34}\) Wilson 1999:218  
\(^{35}\) Miller 1991:6  
\(^{36}\) Ward 2010 Vol 2, Section 9.1 in this report.
being possibly associated with the military (#97779) (Figure 5.37).\footnote{Casey & Lowe artefact database} The animal bone was catalogued separately from the other artefacts and a total of 36 fragments were found here (Table 60). Sheep bone (13) were the most common, followed by unidentified fish (9), European rat (7), cattle (6) and unidentified animal (1).

![Figure 5.37: Copper alloy 12-point starburst brooch 7395/#97779, No. 718, and brass buckle 7401/#97801, cesspit fill, No. 718. Russell Workman, 10cm scale.](image)

### 5.6.3 Area B, Phase 6: 1860s-c.1890
Area B underwent significant changes at the start of this Phase. All but one of the shops and dwellings that had characterised the George Street frontage during Phase 5 were pulled down between 1861 and 1863. Only the structure at No. 712 remained and by 1863 three new two-storey buildings had been constructed. These buildings remained throughout Phase 6 and were still standing at the turn of the century. Bakers, milliners, confectioners, saddlers, a tobacconist, a boot manufacturer and a hairdresser were among the commercial enterprises lining the George Street frontage of Area B during Phase 6.

Artefactual evidence that could be securely dated to Phase 6 was limited to the backfills contained within cesspits found at the rear of 712, 714, 716 and 718 George Street. The four cesspits found in Area B were substantial in construction and well built, especially the three made of sandstone blocks. The cesspits were identified in the backyards of Nos 712 (7625), 714 (7626), 716 (7635) and 718 (7347) George Street and all appear to have been backfilled once they were connected to the municipal sewerage system. The cesspit at No. 712 George Street (7625) was constructed of sandstock bricks, had a clay base and was built in the c.1840-1860s (Phase 5). The ceramics recovered from its backfill (7627) relate to its connection to the sewer in the 1870s (Phase 6). The three sandstone block cesspits (7626, 7635, 7347) were all constructed in the same style and were probably built at about the same time and by the same builder. The cesspits were built and backfilled in the years between 1860 and c1890 (Phase 6). The artefact assemblages recovered in all three cesspits related to the backfilling event that occurred in the 1870s (when toilets were plumbed into the municipal sewerage system). The artefacts do not come from any original cess deposits.
The probability that the four cesspits were backfilled at the same time is confirmed by the identification of conjoining ceramic items between the backfill of the cesspit at 712 George Street (7625) with that at 714 George Street (7626). Three sherd{s from a blue transfer-printed pearlware “Venus” pattern soup plate (#73769), in the backfill of cesspit 7625 (fill 7627) were found to conjoin with seven sherd{s (#73771) in the backfill of cesspit 7626 (fill 7632). Twelve sherd{s from a multi-coloured transfer-printed poe in the backfill of cesspit 7625 (#73768) also had conjoins with eight sherd{s in cesspit 7626 (#73770).

Cesspit 7625, No. 712 George Street

Within the sandstock brick cesspit at 712 George Street was a dark brown silty material with a high organic content that may represent cess material from the last use of the pit (7630). It contained only a few glass artefacts identified as beverage bottles (#47723-47727). The backfilling of the cesspit occurred sometime in the 1870s when the toilets were plumbed into the municipal sewerage system. The backfill (7627) would have occurred in preparation for the toilet installation and it consisted of building rubble, sand and a number of artefacts.

A total of 44 artefacts (295 fragments) were recovered from the cesspit, with five items in fill 7630 and 39 items in fill 7627 (Table 61). The general functional categories of beverage (18) and food (11) are the most commonly represented, indicative of items commonly associated with household domestic waste, and the artefacts were either comprised of glass (36) or ceramic (8). The five glass bottles in fill 7630 were an aerated water bottle (c.1820), a beer/wine bottle (1850 to 1920), and three gin/schnapps bottles (1800s to 1870). The 31 glass items in backfill 7627 predominately relate to beverage (13) and food (7). Alcoholic beverages including beer/wine (7), champagne (1) and gin/schnapps (4) are dominant, with just a single aerated water bottle. Condiments bottles included oil (1), pickle (1) and sauce (1). The domestic nature of the deposit is emphasised by two glass ornamental items, a lid (#47598) and a vase (#47599), and a perfume bottle (#47597).

The eight ceramic items in the cesspit fill 7627 included two identified transfer-printed patterns and two items had conjoins with another context (Figure 5.38). The two identified patterns were the “Willow” and “Venus” patterns, with the commonly manufactured “Willow” pattern identified on a plate (#73764). The “Venus” pattern was on a soup plate (#73769) and was attributed to Podmore, Walker & Co, of Tunstall and dated between 1834 to 1859. Fragments of this vessel were also found in the cesspit at 714 George Street. The cesspit at No. 714 (7626) contained four backfills. The three fragments from the “Venus” pattern soup plate in fill 7627 (#73769) conjoined with seven fragments from the same soup plate in fill 7632 (#73771), and 12 fragments from a multi-coloured transfer-printed poe in fill 7627 (#73768) also joined with eight fragments in fill 7632 (#73770). The fills in both these cesspits represent backfilling prior to their being plumbed into the municipal sewerage line, and the presence of conjoining items in the two cesspits indicates that they were backfilled at the same time using rubbish from the same source. The contents within each cesspit cannot therefore be attributed to a specific house.

38 Ward 2010 Vol 2, Section 9.1 in this report.
Cesspit 7626, No. 714 George Street

In the rear yard of No. 714 were the remains of a single trapezoidal-shaped sandstone cesspit. The cesspit was constructed from neatly cut but not dressed rectangular sandstone blocks and had a sandstone flagged base. It was of similar construction to the cesspits at Nos. 716 and 718 George Street. The cesspit contained four sandy fills (7634, 7633, 7632, 7631), although ceramic conjoins revealed that they all belonged to the same backfilling event, coinciding with the installation of plumbed toilets. The base fill (7634) contained no artefacts and there was no artefact-rich cess deposit, suggesting that the cesspit had been completely cleaned out and backfilled before being plumbed into a main sewer line and therefore not likely to contain artefacts securely relating to the occupation of No. 714.

A total of 66 artefacts (396 fragments) were recovered from the cesspit, with the single item (3 fragments) in fill 7633 counted as “0” because it conjoined with sherds in fill 7632, 64 items (386 fragments) in fill 7632, and just two items (7 fragments) in the uppermost fill (7631) (Appendix 5.3: Table 63). Again the general functional categories of food (32) and beverage (14) are the most commonly found. The uppermost fill (7631) contained seven glass fragments from two bottles, a beer/wine bottle (1850 to 1870) and a spirits bottle (1800+). The three ceramic fragments in fill 7633 were from a sprigged bone china saucer (1830s to 1920s) and these joined with four fragments from the same saucer in fill 7632 (#73792), supporting the backfilling of the cesspit as a single event.39

Fill 7632 contained the most artefacts (Table 64) and also featured two ceramic items with conjoins with another cesspit (7625) at No. 712 George Street (fill 7627; see above). These conjoining items indicate that the two cesspits were backfilled at the same time (Figure 5.39).

---

39 Ward 2010 Vol 2, Section 9.1 in this report.
Aside from the “Venus” pattern, two other patterns were identified, the “Rhine” and “Willow” patterns. The “Rhine” pattern was identified on a black transfer-printed semi-vitreous fine earthenware jug dating from 1845+ (#73777). The “Willow” pattern was identified on five items (a tureen and four plates) and all in blue transfer-printed pearlware (#73772-#73776) (Figure 5.40). Three of the “Willow” pattern plates also included transfer-printed basemarks: one plate featured a bird carrying a ribbon with “OPAQUE CHINA” on it. Because this term was used by many potters the manufacturer could not be identified. It was catalogued with the broad date range of c.1810 to 1870s (#73773). Two plates featured a ribbon with “WARRANTED” above and the initials “P.B. &
H.” below. These initials belong to Pinder, Bourne & Hope of Burslem, and date between 1851 and 1862 (#73774, #73775).

One other basemarked item was also recovered within fill 7632, a gilded bone china saucer featuring an impressed circular basemark of four interlinking scrolled “W” characters (#73780). This mark belongs to the Kerr & Binns period at the Worcester Porcelain Factory, dating between 1852 and 1862.

The ceramics recovered from cesspit 7626 are predominantly associated with food (both serving and consumption) and appear to indicate that these items were dumped here as part of a final clearing out of household domestic rubbish prior to the cesspit being connected to the main sewer line. The five “Willow” pattern items - a tureen (#73776) and four plates (#73772-#73775) - suggests that matching dinnerware had been in use, and the presence of another decorative ware (sprigged bone china in a recurring design) supports this. The 12 sprigged items found here featured alternating large and small purple grapevine sprays at regular intervals on the cavetto (saucers), marley (small plates) and upper exterior body (cups). These items are all teaware-related (#73781-#73792/#73794), with five cups, five saucers and two small plates identified (Figure 5.24). Sprigged teaware-related items similar to the 12 items found here have been recovered on other excavated sites, in both the same and different patterns and in the same shapes, and it would appear to have been a very popular and affordable mid nineteenth-century teaware.40

The domestic nature of the deposit is also supported by the glass items associated with beverages (beer/wine, gin/schnapps), food condiments (oil, pickle, sauce), serving (stemware), and tableware (tumblers). Two perfume bottles (#47697, #47699) and a grooming bottle (#47698) are also associated with the domestic sphere, as are two toys which indicate the presence of children in a familial environment – a toy cup (#97862) and a doll (#97867) (Figure 5.41).

Figure 5.41: Porcelain head and shoulders of a soft-bodied ‘Mary’ or ‘Jenny Lind’ type doll from cesspit 7626 /#97867. Russell Workman, 10cm scale.

40 Sprigged teaware has also been found at other Casey & Lowe sites including Penrith Plaza, Penrith; 109 George Street, Parramatta; Parramatta Children’s Court, Parramatta; 50-73 Union Street, Pyrmont; 19-41 Reservoir Street, Surry Hills; Parramatta Justice Precinct, Parramatta; and Darling Walk, Darling Harbour.
The glass artefacts also support the proposed date of backfilling (around 1870). Three tobacco pipes were also recovered from the fill (#97864-#97866), with one dating specifically between 1856 to 1874 (#97864). No shell was in the cesspit and just 11 fragments of animal bone were found in fill 7632: cattle (3), sheep (6) and unidentified bird (2).

Cesspit 7635, No. 716 George Street
In the back yard area of 716 George Street were the remains of a single triangular sandstone cesspit. All of the blocks were well cut but poorly dressed and the cesspit had a sandstone flagged base. There was no cess material in the pit. The fills related to the backfilling that occurred in the 1870s when toilets were plumbed into the municipal sewerage system. The four fills and the respective number of artefacts were 7638 (11), 7640 (1), 7641 (2), and 7642 (12). The fills contained a total of 26 items (81 fragments), with the most found in the lowermost (7638) and uppermost (7642) fills (Table 65). The artefacts in the four fills were represented by eight general functional categories, with food (6) and architecture (5) the most common.

A total of just seven ceramics (52 fragments) were found in the cesspit, and all seven items were found in the lowermost fill (7638). None of the ceramics featured basemarks, identifiable patterns or had conjoins with any other context. The seven items were associated with food preparation (pudding bowl), food consumption (cups, saucers, a child’s mug) and gardening activities (a plant pot) (Table 66). The plant pot was a complete large fine stoneware vessel manufactured in China (#73798). It was broken into 13 sherds. It was covered in a rough creamy-white glaze on the exterior body, featured a central drainage hole in its base, and dated from c.1790 onwards. Overall the ceramics from 7635 were available throughout much of the nineteenth century and well into the twentieth century, including whiteware, flow ware, sprigged, spongeware, gilded and glazed (Figure 5.42). Perhaps the most interesting item is a child’s mug (#73797). This bone china mug features the worn gilded script “A Present” / “for my” / “Dear Girl” on an area of the exterior body and dates from c.1850+. This mug suggests at least a post-1850s deposition.

Figure 5.42: Ceramics in cesspit 7635 (fill 7638). The child’s mug featuring the gilded script “A Present” / “for my” / “Dear Girl” is at the rear, second from left (#73797). Russell Workman, 10cm scale.

41 Casey & Lowe artefact database
Other categories of artefacts included glass, miscellaneous and building materials. A total of 10 glass items (21 fragments) were recovered in backfills 7640 (1), 7641 (1) and 7642 (8). The uppermost fill of 7642 included crown window glass (1870TPQ), plate mirror glass, unidentified bottle forms, and a bottle for one of the many Ayer’s famous patent medicines, dating between 1838 to 1939 (#47565). The presence of a toy (a handpainted porcelain marble, #97868) and a child’s mug (#73797) suggests the presence of children in a familial environment. The uppermost fill also contained two vulcanite haircombs that could have been manufactured as early as c.1844 but were noted as being more commonly made from c.1870 (#97873, #97874). A total of 22 bone fragments were also found in the cesspit backfills, with cattle bone numbering five fragments and sheep bone 17 fragments. The small quantity of artefacts within this cesspit suggests that they were incidental inclusions in the backfill material rather than being indicative of the nature of the fill itself.

Cesspit 7347, No. 718 George Street
In the back yard of No. 718 George Street were the remains of a single triangle-shaped sandstone cesspit. It was located just 1.2m from the rear of the building and was constructed of mostly whole rectangular sandstone blocks that were well-cut but poorly dressed. The cesspit had a sandstone flagged base and it again contained no deposits pertaining to its use. The cesspit was very similar in construction to its northern neighbours (cesspits 7626, 7635) and these three cesspits were probably built within a relatively short time-frame and possibly by the same builder. The lack of any artefact-rich cess deposit indicated that this cesspit had also been completely cleaned out and then backfilled in the 1870s when toilets were plumbed into the municipal sewerage system. The cesspit contained four fills (7411, 7401, 7387, 7342) and these featured a total of 134 artefacts (654 fragments). The artefacts in the four fills were represented by 11 general functional categories, with beverage (68) the most common (Table 67).

The 11 general functional categories are associated with 116 of the artefacts found in the cesspit, with the remaining 18 items being unidentified because of small fragment sizes. The 68 beverage-related items represent 58.6 per cent of the identified items here, with food (16), recreation (12) and architecture (9) the next most commonly found. The uppermost fill (7342) contained 13 artefacts (9.7%), the next fill layer (7387) contained 71 artefacts (53.0%), the next fill (7401) contained 48 artefacts (35.8%), and the lowermost fill (7411) contained just two artefacts (1.5%). Within the artefact categories glass was the most prevalent, with 84 items (62.7%), followed by 23 ceramics (17.1%), 18 miscellaneous (13.4%), five building materials (3.7%) and four metal items (3.0%). The items are all generally indicative of domestic household rubbish (Table 68).

The glass items were 568 fragments featuring seven items (17 fragments) in the uppermost fill (7342), 63 items (458 fragments) in the next fill layer (7387), and 14 items (92 fragments) in the lower fill (7401). The 68 beverage-related items dominate the glass assemblage and indeed the entire cesspit contents, and are associated with beer/wine bottles (8), champagne (29), gin/schnapps (30) and gin (1). The high frequency of both gin/schnapps and champagne bottles here is not an accurate reflection on consumption habits as beer/wine bottles could be refilled at the pub or hotels from casks, whereas gin/schnapps and champagne would have been imported and sold in bottles only during this period. Five of the gin/schnapps bottles had date ranges of 1800 to 1850, 11 were from 1820 to 1870 and seven were manufactured between 1850 to 1900. Dates for the beer, wine and champagne bottles all fell within these ranges, with the champagne bottles appearing only after 1850.

42 Harris 2010 Vol 2, Section 9.3 in this report.
43 Casey & Lowe artefact database
44 Harris 2010 Vol 2, Section 9.3 in this report.
None of the 23 ceramics (41 fragments) feature basemarks or have conjoins with any other context. All of the items (with two exceptions) are represented by very small fragment sizes (catalogued with a portion size of <10 per cent of the vessel). The two exceptions, both represented by 75 per cent vessel portion size, are a gilded bone china cup (#73684) and a black flow saucer (#73693) (Figure 5.43). The ceramics are predominately associated with food, in particular its consumption (cups, plates, saucers, small plates). Fifteen of the ceramics are food-related items with the one other identified item associated with personal hygiene (ewer). The remaining seven items were all catalogued as unidentified, both in function and shape, reflecting the overall small size of the ceramic sherds found in the cesspit backfills. The ceramic decorative types all feature long periods of manufacture and were available throughout much of the nineteenth century and in many cases, well on into the twentieth century. These include banded, black flow, black transfer print, blue transfer print, blue transfer-printed pearlware, gilded, pearlware, purple transfer print and whiteware. The three fills featuring ceramics (7401, 7387, 7342) have items suggesting at least a post-1860s deposition. The top fill (7342) has a banded plate that dates from c.1860+ (#73662), the middle fill (7387) has a banded saucer that also dates from c.1860+ (#73665), and the lower fill (7401) contains the black transfer-printed “Albion” pattern tureen dating from the years between 1858 and 1937 (#73,691).

The miscellaneous category (18) was dominated by 11 tobacco pipes, and at least three of these have datable characteristics (97,772, #97,773, #97,793). One of the pipes in particular is unusual in that it is made of black clay and the bowl is relief moulded in the form of a Negress (African American or Indigenous American). It was manufactured in either the Netherlands or France and dates between c.1850 to c.1930 (#97,772) (Figure 5.44). The historical background of this pipe is

45 Ward 2010 Vol 2, Section 9.1 in this report.
A pipe stem manufactured by Thomas Davidson of Glasgow dates between 1862 to 1911 (#97,773), and a pipe bowl/stem manufactured by C. Crop of London dates between 1856 to 1924 (#97,793). Some animal bone was also recovered from the cesspit, with most found in fill 7401 (Appendix 5.3: Table 69). The 79 bone fragments represent six species, with the 58 fragments of sheep bone the most dominant (73.4%).

Figure 5.44: Female Negress pipe bowl 7387/#97772. Russell Workman, 1cm scale divisions.

5.6.4 Area C, Phase 5: c.1840-c.1860
A large building and a northern laneway were the structural characteristics of this Phase in Area C. The building was constructed prior to 1845 but the exact date is unknown. In 1845 it was represented in the Assessment Books as a two-storey, six-roomed brick shop with a shingled roof. Its configuration changed a little over Phase 5, with the most notable increase in rooms (4 to 8) probably reflecting the use of neighbouring No. 712 as an extension of the premises in 1858. A grocery business occupied the premises from at least as early as 1855, and continued to make use of it as a shop and finally a house and store in 1861. The Phase 5 artefactual remains are from an underfloor deposit (7444) excavated in the front room of the building.

The underfloor deposit (7444) was inconsistent in depth (between 20mm to 110mm), often amounting to less than 50mm. It was excavated in a 500mm x 500mm grid and in 50mm spits with stratigraphic constraints. The excavated underfloor deposit covered an area of approximately 6m x 3m and consisted of coarse-grained clayey sand with inclusions of sandstock brick, sandstone fragments, shell fragments and charcoal flecking. It included a wide range of artefacts with dates spanning the nineteenth century. Because of the conflated stratigraphic nature of the deposit and the broad date range of the artefacts, the unit could not be securely tied to this or any other Phase. However, the underfloor material has been included in this Phase because it is the earliest possible

46 Casey & Lowe artefact database, Robyn Stocks notes.
date for deposition. The accumulation almost certainly includes artefacts from this period, but the material is not exclusive to this Phase.

A total of 963 artefacts (1272 fragments) were recovered within this underfloor accumulation. The general functional category of recreation is the most commonly occurring here, with the 200 items representing 20.8 per cent of the total (Table 70). This is closely followed by the category of household, with 180 items (18.7%). Other well represented functions are architecture, with 139 items (14.4%) and beverage, with 104 items (10.8%). These four general function categories have a combined total of 623 items and represent 64.7 per cent of the entire underfloor assemblage. Given the very nature of the deposit, whereby the artefacts contained in it are all small enough to have fallen through floorboards, a large number of the items remained unidentified even in relation to their general function. These 132 items represent 13.7 per cent of the assemblage. Of the 831 items that were able to be assigned general functional categories the four categories of recreation, household, architecture and beverage represent 74.9 per cent.

The function of recreation was dominated by 182 tobacco pipes, including 179 pipes, two pipe holders and one pipe with holder (Table 71). These pipes accounted for 91 per cent of the recreation category. The remaining 18 items are children’s toys, with dolls (2), marbles (15) and a lead soldier (1) (Figure 5.45).

![Figure 5.45: Selection of toys, mostly from underfloor deposit 7444. Front row: limestone, glass and stoneware marbles (L-R): 7444/#98269, 7444/#98266, 7444/#98267, 7444/#98268, 7444/#98265, 7444/#98150, 7444/#98172. Back row: porcelain dolls: 7393/#97893, 7444/#98226; lead soldier 7444/#98124; dolls 7444/#98270, 7396/#97900. Russell Workman, 10cm scale.](image)

Household was the next largest group and it was dominated by sewing items. 160 pins represented 88.8 per cent of the household category. Architecture was the next most commonly identified function (139), and the items in this field are dominated by flat window glass (70) and nails (67).
The window glass was identified as 69 fragments of crown window glass (1850 TAQ or 1870 TAQ depending on thickness), and one broad glass pane (1850 TPQ).\textsuperscript{47} All but one of the 104 beverage items were alcohol-related (including the wire from around cork closures). A salt-glazed stoneware ginger beer bottle was the only non-alcoholic item identified in this category (#73328). Of the remaining 103 items the following were represented: general alcohol (20), beer/wine (41), champagne (1), gin (1) and gin/schnapps (40). All the bottles were made after 1800 and before 1900 and many have date ranges that span much of the nineteenth century. Approximately 50 per cent were manufactured after 1850. Among the bottles is a Gilbey’s gin bottle that has an 1857TPQ (#48850).\textsuperscript{48} Glass artefacts were also associated with food and pharmacy. Food-related items include condiment bottles (13) and stoppers (3), including oil (4), sauce (3), oil/vinegar (4), pickle (1), and pickle/chutney (4), and the pharmaceutical items include castor oil bottles (5), a vial (1), a tube (1), and generic patent medicine/chemist bottles (7).

Ceramics did not feature highly in this underfloor accumulation, with just 78 items (84 fragments) recovered. They represented just 8.1 per cent of the assemblage. All of the ceramics were represented by very small fragments and because of this a large proportion was unable to be identified, either by function or shape. Forty-three ceramics fell into this category, representing 55.1 per cent of the ceramics found here. None of the ceramics featured basemarks and none were found have to conjoins, either between the spits, squares or indeed any other context.\textsuperscript{49} The 35 items able to be identified by shape reflect a deposit of domestic use, in particular items associated with food, its serving and consumption. Food consumption was by far the most dominant (a total of 30 items), including teaware (23), tableware (6), and teaware/tableware (1). This dominance of artefacts associated with the everyday consumption of food reflects the greater risk of breakages for items that were commonly used every day, and often more than once a day. Teaware items in particular feature prominently here, with the shapes of a breakfast cup (1), cups (9), saucers (12) and a teapot (1) identified. Only three ceramic patterns were identified in this deposit, two transfer printed and one white-glazed and moulded. The two transfer-printed patterns of “Two Temples II” (1) and “Willow” (6) were made by many potteries throughout the nineteenth century, with the ubiquitous “Willow” pattern still being manufactured to the present day. Two white-glazed and moulded semi-vitreous fine earthenware saucers feature the “Forget-Me-Not” pattern (#73838, #73839), and both feature a version of the pattern that is attributed to E. & C. Challinor, of Fenton, Staffordshire and date between 1862 and 1891.

Some animal bone was also recovered from the underfloor deposit, with 1,376 fragments found. The species represented here include cow, dog, rodent, pig, rabbit, sheep and fish, with the two most commonly identified being the European rat (715) and unidentified fish (484). These two categories account for 87.2 per cent of the bone found in the deposit (Table 72). The bone assemblage from the Woolpack Inn underfloor deposits was also dominated by the European rat and unidentified fish. A total of 4,681 bone fragments were recovered from the underfloor deposits of Rooms 1 to 5 (Table 38), and the 1,111 European rat fragments and 2,436 unidentified fish fragments accounted for 75.7 per cent of the bone recovered from these deposits. The European rat and unidentified fish were the two most commonly identified categories of bone found across the whole site. A total of 6,874 bone fragments were found on site (Table 5), with the 1,866 European rat fragments (27.1%) and the 2,940 unidentified fish fragments (42.8%) accounting for 69.9 per cent of the entire bone assemblage.

Overall the artefact assemblage is indicative of household domestic use, not retail space, suggesting that another room beyond the limits of the excavation to the west was the street-frontage area of

\textsuperscript{47} Harris 2010 Vol 2, Section 9.3 in this report.  
\textsuperscript{48} Harris 2010 Vol 2, Section 9.3 in this report.  
\textsuperscript{49} Ward 2010 Vol 2, Section 9.1 in this report.
the shop/commercial business. Contamination of the deposit from the underlying construction layer (7518) and levelling fill (7519) is evident, with some lead-glazed items relating to the local Sydney potter Thomas Ball and his use of the site in Phase 3 (see Section 4).

5.6.5 Area C, Phase 6: 1860s-c1890

The Phase 5 building at No. 710 continued to be in use throughout most of Phase 6, although by 1888 it had been pulled down and replaced by a large elongated structure that may have been split to accommodate two or three businesses. It appears that the Phase 5 building was demolished sometime in 1882 or 1883, as suggested by the notes of the Assessment Books and the occupants listed in the Sands Directory. No. 710 was occupied by grocers until the early 1870s. That decade saw a wool and fancy warehouse and a fancy toy bazaar take up residence. In the early 1880s, shortly before the Phase 5 building was demolished, it was occupied by a tobacconist as well as the fancy bazaar.

The archaeological remains pertaining to the building were limited to the backfilling of a well and the construction and then backfilling of two cesspits when toilets were plumbed into the municipal sewerage system.

Cesspit 7418, No. 710 George Street

The remains of two brick cesspits were found in the backyard area of 710 George Street. Cesspit 7418 was against the northern property boundary of No. 710 George Street. The cesspit had a natural clay base. The backfill of this cesspit (7459) was of late nineteenth-century fill and consisted of mostly brownish-grey sand with large brick, sandstone, render and plaster inclusions. There was no cess material, suggesting that it had been completely cleaned out and backfilled before being plumbed into a main sewer line, just like the cesspits in Area B.

A total of 40 artefacts (55 fragments) were recovered from the cesspit backfill. Thirty-six of these could be assigned general functional categories with just four items remaining unidentified (Table 73). Six functional categories including architecture, beverage, clerical, food, pharmacy and recreation were identified. The six items associated with the function of clerical were whole salt-glazed stoneware penny ink bottles, dating between the 1830s to 1930s (#73333-#73338). These six penny ink bottles dominated the ceramic assemblage in function (clerical), shape (penny ink), decoration (salt glaze) and fabric (stoneware). The remaining ceramics related to food, platter (1), plates (2) and saucers (3), and three items remained unidentified. None of the ceramics featured basemarks or had conjoins with any other context, and the decorative types represented all had very broad general date ranges of manufacture, stretching from the early nineteenth century through to the mid twentieth century (Figure 5.46).

Overall, apart from the above mentioned penny ink bottles, bottles in general are the most commonly recognised shapes with 40 recovered in the cesspit backfill. Glass bottles were identified as beverage, food and pharmacy (Table 74). The two beer/wine bottles date between 1820 to 1850 (#48875, #48886), the champagne bottles (2) date between 1850 to 1920 (#48884, #48885), the condiment bottle (1) dates from 1820+ (#48878), the pickle/chutney (1) dates from 1850+ (#48877), the pickle bottle (1) dates between 1850 to 1920 (#48874), and a generic pharmaceutical bottle dates from 1820+ (#48876). A stopper belonging to a sauce bottle, embossed with “GEORGE WHYBROW”, dates from 1840 (#48881).
Three of the tobacco pipes were also datable, and all three were indicative of a post-1850s backfill. One pipe bowl featured a view of the 1851 Great Exhibition Crystal Palace building (#98312), a stem fragment had the mark of Dunca n McDougall of Glasgow, dating to the years between 1846 and 1967 (#98314), and a mouthpiece was identified as being manufactured by Desiree Barth of Belgium. It dated to the years between 1855 and 1890 (#98316).

A very small amount of animal bone was also found in the backfill, with the nine fragments in total associated with cattle (2) and sheep (7) (Appendix 5.3: Table 75).

**Cesspit 7419, No. 710 George Street**

Cesspit 7419 was located further south of cesspit 7418. It had been greatly impacted upon by early twentieth-century footings (7440) and a concrete encased service trench. Only the eastern end of the structure survived and it too had a natural clay base. The backfill of this cesspit (7445) was similar to that found in cesspit 7418, a clay loam with brick and charcoal inclusions, few artefacts and no evidence of any cess-like fill.

Just nine artefacts (26 fragments) were recovered from the cesspit backfill. They were of glass (5), ceramic (3) and metal (1). None of the glass was dated, however the ferrous nail dated from the years between 1860 and 1890 (#82163). A sprigged bone china saucer dated between the 1830s and 1920s (#73895), and a green flow semi-vitreous fine earthenware toiletry box dated between c.1840 and the 1930s (#73896) (Table 76) (Figure 5.47).
The two brick cesspits 7418 and 7419 contained no artefact-rich cess deposits. The artefacts in both fills (7459 and 7445) were part of the clean-out and backfilling event that occurred in the Phase 6 period (1860s to c1890). The two artefact assemblages relate to the backfilling that occurred in the 1870s when the toilets were plumbed into the municipal sewerage system, as in Area B.

**Well 7520**
A sandstock brick well (7520) was located 3.8m from the rear of the building at No. 710 George Street. It was constructed in the period between c.1840 to c.1860 (Phase 5). The well had a depth of 4m and contained five fills. The top 1.5m of the well was excavated by hand (7465, 7466), however due to safety regulations the rest of the well was excavated by machine. The machine removed the eastern half of the well and then roughly separated the fill into three 1m spits (7567, 7568, 7569). Artefactual analysis indicated that the fills related to the late Phase 6 period (1860s-c1890), and that the lower three fills of the well were backfilled as part of a single short term event.

A total of 2,582 artefacts were recovered from the five fills. The three machine excavated fills (7567, 7568, 7569) yielded the greatest numbers (2,355 artefacts and 91.2 per cent of the entire well assemblage, see Table 77). Fill 7567 had the largest number of artefacts (1,229), and just under half of the total for the well (47.6%). A total of 21 general function categories were identified across these five fills, with 15 of these categories being represented in fills 7567 and 7568 (Table 78). Overall it is the general functional category of food that is the most common in all the fills, with the 1,660 items representing 64.3 per cent of the total. A number of items remained unidentified both in general function and shape because of small fragment size, with these accounting for 14.2 per cent of the entire well assemblage (366). The identified functions reflect a backfill of household waste with some contamination in the upper two fills from demolition debris.
Modern Fills 7465 and 7466

The upper two fills (7465 and 7466) had a high level of contamination from modern demolition material, including cement render, sandstone rubble, concrete, sandstock bricks and dry pressed bricks in a yellow clay and sandy loam mix. These two fills had a combined total of 227 artefacts (383 fragments and 8.8 per cent of the well contents). They will be discussed here only briefly and with particular reference to the glass and ceramic artefact categories, drawing on the information contained in their specialist reports (Section 9).

The top fill (7465) contained glass with a probable date range of between 1850 and 1920. The identified bottles included beer/wine (4) and oil/vinegar (1). The 13 ceramics were generally indicative of typical household refuse, with items associated with food consumption (teaware) dominant. Basemarked ceramics indicated that the upper fill was deposited post-1880. The basemarked items included a salt-glazed stoneware bottle with the impressed mark of “T FIELD” / “POTTER” / “SYDNEY”, dating between c.1850 and c.1860 (#73339), and two white-glazed and moulded semi-vitreous fine earthenware saucers with the black transfer-printed basemark featuring “ROYAL IRONSTONE CHINA” above a coat-of-arms, with “W.H. GRINDLEY & Co” / “ENGLAND” below, dating between 1880 and 1925 (#73912, #73913). Also in this fill was a fragment from a blue transfer-printed pearlware “Two Temples II” pattern small plate, dating between c.1819 to c.1870 (#73910), that joined with three fragments from the same small plate in fill 7466 (#73930) and one fragment in fill 7568 (#74031). These conjoins indicate that the backfilling of the well occurred within a short period of time and was part of a single short term event (Figure 5.48).

The second fill layer, 7466, contained more artefacts than the top layer although it still contained demolition material. Out of the 202 artefacts recovered in this fill 114 were glass and 25 ceramic, representing 68.8 per cent of the total. The glass bottles were made by technology that spanned the nineteenth century, with the earliest dateable bottle being an oil/vinegar bottle with a patent

---

50 Harris 2010 and Ward 2010

Figure 5.48: Ceramics in well fill 7465. Russell Workman, 10cm scale.
registered mark dated February 28, 1849 (#48999). Other bottles from this fill date to about the same time: a William Goodman Henfrey aerated-water bottle (1848 to 1878), and manufacturing technologies such as bare iron pontil scars (1840s to 1870), form-tooled lip finishes on beer/wine bottles (1850 to 1920), cup bottom moulds (1850+) and blow-back moulds (1850+). Food (condiments, tableware) and beverage (alcohol, aerated waters) represents approximately 73 per cent of the glass assemblage. There are also generic medicine bottles, castor oil bottles (pharmaceutical) and a mirror (household) identified in the assemblage which are generally indicative of domestic refuse.

Figure 5.49: Selection of ceramics in well fill 7466. Fragments from the blue-transfer-printed “Willow” pattern plate (#73928), at front left, joined with fragments in well fill 7567. Fragments from the blue-transfer-printed pearlware “Two Temples II” pattern small plate (#73930), at front centre, joined with fragments in well fills 7465 and 7568. Russell Workman, 10cm scale.

This household waste is also reflected in the 25 ceramics found in the fill. Items associated with food (jars, platter, plates, breakfast cup, cups, saucer, teapots, small plates) dominated, but it also included clerical items (4 ink bottles) and maintenance items (3 blacking bottles) (Figure 5.49). Two of the ceramics feature dateable basemarks and both are stoneware items that were manufactured in the United Kingdom by the same manufacturer and date from the same period. A Bristol-glazed stoneware jar featured the impressed circular mark of “STEPHEN GREEN” / “IMPERIAL” / “POTTERIES” / “LAMBETH” (#73351), and a salt-glazed stoneware blacking bottle featured the impressed circular mark of “STEP(HEN GREEN)” / “PATENT” / “DOUBLE GLAZED” (#73345). Sherds from two vessels in context 7466 indicated again that the backfilling of the well occurred as part of a short term event, with five fragments from a blue-transfer-printed “Willow” pattern plate, dating from c.1810+ (#73928), joining with three fragments in fill 7567 (#73988). A blue transfer-printed pearlware “Two Temples II” pattern small plate, dating between c.1819 to c.1870 (#73930), has three fragments with conjoins in fills 7465 (#73910) and 7568 (#74031). Within the glass category a conjoin was also noted between this fill and two others: a dark aqua square pickle/chutney bottle, dating between 1850 to 1870 (#49092, #49025) featured three fragments that joined with seven fragments in fill 7568 (#48530) and two fragments in fill 7569 (#49161).
As stated above, the lower three machine excavated fills yielded the greatest number of artefacts (7567, 7568, 7569) with a combined total of 2,355 items retrieved through sample sieving and representing 91.2 per cent of the entire well assemblage. These three fills are now discussed in slightly more detail than the preceding two upper fills of 7465 and 7466.

Fill 7567 was the upper 1m of well fill, directly below fill 7466. It contained just under half of the total artefacts contained in the well (1,229; 47.6%, Table 79). Just under three-quarters of the fill was identified with the general function of food, with the 911 items representing 74.1 per cent of the fill assemblage. The domination of this particular category is explained here by the inclusion of 820 grape seeds which represent 90 per cent of the food-related items. The non-grape seed items number just 91, representing the remaining 10 per cent of the food-related group. Overall the 820 grape seeds represent 66.7 per cent of the entire assemblage recovered from fill 7567. The largest number of identified items in the food category, aside from the grape seeds, were the glass pickle/chutney bottles (32). Condiment bottles were well represented within the glass category, with oil/vinegar (1), oil (1), pickle (1), pickle/chutney (32), condiment (5) and vinegar (2).

The glass bottles were made using techniques that spanned the nineteenth century, with the earliest datable item being a condiment bottle with a Betts patented capsule foil seal dating from 1849 (#48459). Other bottles from this fill date to about the same time: form-tooled lip finishes on beer/wine bottles (1850 to 1920), cup-bottom moulds (1850+) and blow-back moulds (1850+). Dates for product manufacturers include Rowland’s Macassar Oil (1840 to 1853). Other datable artefacts include panelled press moulded tumblers (1830+), stemware with a ground and polished base (1840+), and a vertical wick lamp chimney (1820+). Overall the glass reflects domestic-related rubbish with items associated with food (condiment bottles), beverage (alcohol, aerated waters), pharmaceutical (generic and patent medicine bottles) and household lighting (lamp chimney and shade).

Like the glass, the 66 ceramics in fill 7567 also reflects a deposit of domestic household waste. Items associated with the serving, consumption and storage of food are particularly dominant, including jars (2), jugs (2), platters (2), bowl (1), plates (10), breakfast cups (3), cups (6), saucers (5), slop bowls (2), egg cup (1) and small plates (5), with items relating to clerical (2 ink bottles), household maintenance (3 blacking bottles) and personal hygiene (2 ewer, 1 ointment/toothpaste jar) also present.

Three of the ceramics feature identified basemarks, two being Bristol-glazed stoneware jars with the impressed circular mark of "STEPHEN GREEN" / "IMPERIAL" / "POTTERIES" / "LAMBETH" and dating between 1820 to 1858 (#73366, #73367), and the third item is a blue transfer-printed pearlware “Willow” pattern platter featuring the transfer-printed basemark of "Copeland" / "Late Spode" and dating between c.1847 to 1867 (#73989). Three of the ceramics were also identified with conjoins in three of the other well fills, reiterating that the backfilling occurred as a single event. Four fragments from the blue transfer-printed pearlware “Willow” pattern platter (featuring the transfer-printed basemark of "Copeland" / "Late Spode", #73989) joined with three fragments in fill 7569 (#74071). Three fragments of a blue transfer-printed “Willow” pattern plate dating from c1810+ (#73988) joined with five fragments in fill 7466 (#73928), and a fragment from a blue transfer-printed “Rousillon” pattern slop bowl, dating from 1846+ (#73980) joined with two fragments in fill 7568 (#74032) (Table 5.50).
A total of 74 items were identified with the general function of recreation in fill 7567 and all are tobacco pipes (Figure 5.51). Many of these are datable and span the nineteenth century.
Some examples of the dateable pipes are: the thistle and ship motif, made by Desiree Barth, Belgium, dating between 1855 to 1890 (#98369-#98372); the Baltic Cutty type dating between 1823 to 1882 (#98373); pipes manufactured by Thomas White, Edinburgh, dating between 1823 to 1882 (#98374-#98380); a pipe manufactured by William Murray, Glasgow, dating between 1830 to 1861 (#98382); pipes made in the United Kingdom for the Sydney tobacconist Hugh Dixson, dating between 1839 to 1904 (#98383; #98385; #98386; #98388-#98390), and the Churchwarden type, dating between 1830 to 1880 (#98391). In the early 1880s, shortly before the Phase 5 building at No. 710 George Street was demolished, it was occupied by a tobacconist (as well as a fancy bazaar), and whether any of the pipes in the well reflect shop stock is open to conjecture (Figs 5.52, 5.53). One item of interest, catalogued under the general function of personal, is a tapered piece of sawn and modified antler used as a walking stick handle (#98363) (Figure 5.14).

Figure 5.52: Baltic Cutty tobacco pipe, right side with fouled anchor (7567/#98373). Russell Workman, 1cm scale divisions.

Figure 5.53: Baltic Cutty tobacco pipe, left side with three-masted sailing ship (7567/#98373). Russell Workman, 1cm scale divisions.
Fill 7568 was the middle 1m of the machine excavated fills. It was below fill 7567 and contained 631 artefacts, just under a quarter of the entire number of artefacts contained in the well (24.4%) (Appendix 5.3: Table 80). Over half of the items in the fill are identified with the general function of food, with the 370 items representing 58.6 per cent of the fill assemblage. The strong presence of this category is again explained by the presence of 292 grape seeds which represent 78.9 per cent of the food-related items. The non-grape seed items number 78 and represent the remaining 21.1 per cent of the food-related category. Overall the 292 grape seeds represent 46.3 per cent of the entire assemblage recovered from fill 7568. Remains of a peach (1), apricots (2) and walnuts (2) were also identified. Condiment bottles are again well represented in this fill, with 24 identified including flacon (2), oil/vinegar (1), oil (1), pickle/chutney (8), pickle (11) and vinegar (1).

Some of the glass bottles were made with technologies that spanned the nineteenth century, but others used techniques practiced only from 1850 onwards such as form-tooled lip finishes on beer/wine bottles (1850 to 1920), cup bottom moulds (1850+) and blow-back moulds (1850+). Other dateable glass items include a Betts patented capsule foil seal dating from 1849+ (#48550), a partial British Royal registry mark dating between 1842 to 1868 (#48548) and press-moulded panelled tumblers dating from 1830+ (#48566). The glass recovered in this fill again reflects domestic-related rubbish, with items identified with food (condiment bottles), beverage (aerated water and alcohol bottles, tumblers), personal toiletry (perfume bottle) and household lighting (lamp chimney and shade).

![Figure 5.54: Selection of ceramics from well fill 7568. Russell Workman, 10cm scale.](image)

The 59 ceramics are typical of domestic household waste. Items associated with the serving, consumption and storage of food are predominant, including jars (2), dish (1), tureen (1), bung jar (1), plates (6), breakfast cups (3), cups (9), milk/cream jug (1), saucers (7), slop bowl (1), egg cup (1), small plates (3), with items relating to other household functions also represented in beverage (2 ginger beer bottles), clerical (3 ink and 1 penny ink bottles), household maintenance (2 blacking bottles), household ornament (1 figurine), personal hygiene (1 ewer, 2 poes) and pharmaceutical (1 ointment jar) (Figure 5.54). Three of the ceramics feature identified basemarks: a salt-glazed stoneware ginger beer bottle with the impressed mark of the Sydney ginger beer manufacturer “D. KEARNEY” on the shoulder (#73377, dating between c.1851 and 1861); a bristol-glazed stoneware
jar with the impressed circular mark of "STEPHEN GREEN" / "IMPERIAL" / "POTTERIES" / "LAMBETH" (#73383, dating between 1820 and 1858), and a blue transfer-printed “Gondola” pattern saucer with a transfer-printed basemark featuring “GONDOLA” in a foliated scroll cartouche, dating from c.1830+ (#74041).

Eight of the ceramics feature conjoins in four of the other well fills, again corroborating that the backfilling of the well occurred during a short period of time and was part of a single short term event. Three fragments from the salt-glazed stoneware ginger beer bottle with "D. KEARNEY" on its shoulder (#73377, dating between c.1851 and 1861) joined with one fragment in fill 7569 (#73393). Two fragments from the bristol-glazed stoneware jar manufactured by Stephen Green, (#73383, dating between 1820 and 1858) joined with four fragments in fill 7569 (#73395). Two fragments of a blue transfer-printed “Willow” pattern serving dish, dating from c1810+ (#74028) joined with one fragment in fill 7569 (#74072). Eleven fragments of a salt-glazed stoneware bung jar (#73368, dating between c.1830 and 1930s), joined with seven fragments in fill 7569 (#73396). Three fragments of a blue transfer-printed pearlware saucer (#74037, dating between c.1800 and c.1870) joined with four fragments in fill 7569 (#74070). Two fragments of a blue transfer-printed “Rousillon” pattern slop bowl (#74032, dating from 1846+) joined one fragment in fill 7567 (#73980). One fragment of a blue transfer-printed pearlware “Two Temples II” pattern small plate (#74031, dating between c.1819 and c.1870), joined with one fragment in fill 7465 (#73910) and three fragments in fill 7466 (#73930), and 11 fragments of a black flow chamber pot (#74011, dating between c.1830 and 1930) joined with five fragments in fill 7569 (#74057).

Apart from the above ceramic conjoins, others were also noted in two other artefact categories, glass and organic. Seven fragments of a square dark aqua pickle/chutney bottle (#48530, dating between 1850 and 1870, fill 7568) joined with three fragments in fill 7466 (#49092, #49025) and two fragments in fill 7569 (#49161). Within the category of organic were two items, a gumboot and a coat, with conjoins between fills 7568 and 7569. Two fragments of a rubber gumboot, dating from c.1880 and found in fill 7568 (#95597), joined with eight fragments of the same boot in fill 7569 (#95598). Three fragments of a wool coat in fill 7568 (#95571) joined with 13 fragments of the same coat in fill 7569 (#95570) (Figure 5.55).

Figure 5.55: Cut fragments of woollen coat found in well fills 7568/#95571 and 7569/#95570. Russell Workman, 10cm scale.

51 Ward 2010 Vol 2, Section 9.1 in this report.
A number of leather items were also recovered from fill 7568 (20 in total). These items were mostly footwear, with various parts of shoes/boots identified including lining (1), counter (2), heel cupping (1), offcut (3) and outsole (1), a partial pump/slipper (2), near whole lace-up boots (2), and the sole of a shoe (1). Offcuts were separated into parts of belts/straps (3) and general offcuts (2). The footwear was all identified as adult-sized and the datable leather items ranged between c1820 and c1860 (Table 35).

A total of 17 tobacco pipes were found in fill 7568. Many of these are datable and span the greater part of the nineteenth century. A sample of the datable pipes follows: steam engine and paddle steamer motif dating between 1839 to 1904 (#98406) (Figs 5.56, 5.57), the Baltic Cutty type, manufactured by Thomas White of Edinburgh between 1823 and 1882 (#98407), thistle and ship motif, made by Desiree Barth of Belgium, dating between 1855 and 1890 (#98410), and pipes made in Britain for the Sydney tobacconist Hugh Dixson, dating between 1839 and 1904 (#98412-#98416).
The 631 artefacts contained in fill 7568 are generally indicative of a deposit dating from Phase 6 (1860s to c1890), however one item indicates that it occurred in Phase 7 (c1890+). A handle of a large silver-plated spoon features hallmarks that include a crown, “VR” in a rectangle, and then the makers mark of “G C & Co”, identified as Charles Green & Co Ltd, Birmingham, and dating from 1905 (#98396).52

Fill 7569 is the lowermost fill in the well and contains 495 artefacts, 19.2 per cent of the entire well assemblage (Appendix 5.3: Table 81). Once again over half of the items in this fill are identified with the general function of food, with the 313 items representing 63.2 per cent of the fill assemblage. The high occurrence of this category is once more explained by the presence of 262 grape seeds which represent 83.7 per cent of the food-related items. The non-grape seed items number just 51 and represent the remaining 16.3 per cent of the food-related category. Grapes were not the only edible items in evidence, with coconut (1), nectarine (1), peach (1), apricot (1) and walnut (2) also identified. Among the food-related items were glass condiment bottles (14): oil/vinegar (1), pickle/chutney (7) and pickle (6).

The glass bottles in this fill were for the most part made using techniques that date from 1850 onwards, including form-tooled lip finishes on beer/wine bottles (1850 to 1920), cup bottom moulds (1850+) and blow-back moulds (1850+). Other datable glass items include a Cooper & Aves pickle bottle, with a Betts patented capsule foil seal, dating from 1849+ (49153), an unidentified bottle made by Crosse & Blackwell of London, dating between 1830 and 1900 (#49157), and an alcohol bottle made by William Powell & Co, Bristol, dating between 1830 and 1906 (#49102). One glass item, a machine-made panelled tumbler, has a manufacturing date of between 1910 and 1930 (#49137), indicating that there was some contamination of this fill caused by the excavation methodology used (bulk machine excavation). The glass in this fill reflects household rubbish, with items identified with food (condiment bottle, stemware), beverage (aerated water and alcohol bottles, tumbler), personal toiletry (perfume bottles), pharmaceutical (generic medicine bottles) and household lighting (lamp shade).

---

52 Casey & Lowe artefact database, Robyn Stocks notes.
The 45 ceramics in fill 7569 also reflects a deposit of domestic household waste (Figure 5.58). Items associated with the serving, consumption and storage of food are again predominant, including a jar (1), a dish (1), jugs (3), a ladle (1), a platter (1), a tureen (1), a bung jar (1), a bowl (1), plates (4), a breakfast cup (1), cups (7), saucers (3), egg cups (1) and small plates (3), with items relating to other household functions also represented in beverage (3 ginger beer bottles), household maintenance (5 blacking bottles), personal hygiene (1 ewer, 1 poe) and pharmaceutical (1 ointment jar). Five of the ceramics have identifiable basemarks: a salt-glazed stoneware ginger beer bottle features the impressed mark of the Sydney potter “T FIELD” / “POTTER” / “SYDNEY”, (#73393, dating between c.1851 and 1861). A salt-glazed stoneware ginger beer bottle with the impressed mark of the Sydney ginger beer manufacturer “D. KEARNEY” on the shoulder and the impressed mark of the Sydney potter “(T FIELD)” / “(POTTE)R” / “(SYDN)EY” remaining on the lower body dates from the years between c.1851 and 1861 (#73394). A blue flow jug in the “Romanesque” pattern features the basemark “ROMANESQUE” and the monogram mark used by Thomas Dimmock & Co. of Shelton & Hanley. It dates from 1828 to 1859 (#74078). A salt-glazed stoneware bottle with the remains of an impressed mark of the Sydney potter “T (FIELD)” / “POTTER” / “SYDN(NEY)”, dates between c.1850 and c.1860 (#73385), and an unidentified purple transfer-printed base sherd features the basemark “J. & W. PRATT”, dating between 1836 and 1859 (#74056).

Seven of the ceramics also featured conjoins in two of the other well fills (6 in fill 7568 and 1 in fill 7567). The six items with conjoins in fill 7568 included the following: one fragment from a salt-glazed stoneware ginger beer bottle with the impressed mark of “T FIELD” / “POTTER” / “SYDNEY” (#73393, dating between c.1851 and 1861) joined with three fragments that featured the impressed mark “D. KEARNEY” on the shoulder (#73377). Four fragments from a bristol-glazed stoneware jar manufactured by Stephen Green (#73395, dating between 1820 and 1858) joined with two fragments (#73383). One fragment from a blue transfer-printed “Willow” pattern serving dish, dating from c.1810+ (#74072), joined with two fragments (#74028) and seven fragments of a salt-glazed stoneware bung jar (#73396, dating between c.1830 and 1930s), joined with 11 other
fragments (#73368). Four fragments of a blue transfer-printed pearlware saucer (#74070, dating between c.1800 and c.870), joined with three other fragments (#74037), and fragments from a black flow chamber pot (#74057, dating between c.1830 and 1930) joined with eleven other fragments (#74011). The item with conjoins in fill 7567 consisted of three fragments of the blue transfer-printed pearlware “Willow” pattern platter (#74071, dating between c.1847 and 1867) that joined with four fragments featuring the basemark “Copeland” / “Late Spode” (#73989).

Apart from the above ceramic examples, conjoins were also noted in two other artefacts categories (glass and organic). Two fragments of a dark aqua square pickle/chutney bottle dating between 1850 and 1870 (fill 7569, #49161) joined with three fragments in fill 7466 (#49092, #49025) and seven fragments in fill 7568 (#48530). Within the category of organic were two items, a gumboot and a coat, with conjoins between the two lower fills 7568 and 7569. Eight fragments of a rubber gumboot, dating from c.1880 and found in (fill 7569, #95598) joined with two fragments of the same boot in fill 7568 (#95597). Thirteen fragments of a wool coat in fill 7569 (#95570) joined with three fragments of the same coat in fill 7568 (#95571) (Figs 5.55, 5.59).

![Figure 5.59: Double-layered cut woollen coat fragments with hand-stitched buttonholes found in well fill 7569/#95570. Russell Workman, 10cm scale.](image)

A number of leather items were also recovered from fill 7569 (16 in total). These items are mainly footwear (16), with various parts of shoes/boots identified including counter (2), heel (1), heel cupping (1), insole (2), offcut (1) and sole (1). Three pump/slippers (partial and uppers), a near whole lace-up boot (1) and a whole lace-up shoe (1) were also recognised. The footwear was all identified as adult-sized except for one child-sized insole for a shoe/boot (#95608). The datable leather items range from 1812 through to 1900 (see Table 35).
A total of 14 items were identified with the general function of recreation in fill 7569 and all are tobacco pipes. A number of these are datable and again they span the greater part of the nineteenth century. A sample of the datable pipes are: pipes made in the United Kingdom for the Sydney tobacconist Hugh Dixson dating between 1839 and 1904 (#98426, #98428-#98431), a pipe manufactured by Thomas White of Edinburgh dating between 1823 and 1882 (#98433), and a Jenny Lind type dating between c.1840 and c.1900 (#98425).  Jenny Lind (Johanna Maria Lind) was a Swedish opera singer who was famous from 1838 until her death in 1887 (see Section 5.7, Figure 5.67).

Although almost all of the 495 artefacts contained in fill 7569 are indicative of a deposit dating from the Phase 6 period (1860s to c1890), one solitary item did suggest that there was some disturbance to the deposit that was a direct result of the excavation methodology used. A fragment from a machine-made panelled glass tumbler (#49137) has a manufacturing date of between 1910 to 1930, indicating that the use of a machine to bulk excavate the well had resulted in some contamination of this lower fill.

There were 333 fragments of animal bone from the well (Appendix 5.3: Table 82). Five species were identified. Sheep was the most common with 248 fragments (74.4%). The remaining 85 fragments were cattle (66), chicken (11), pig (5), unidentified fish (2) and rabbit (1).

**Well summary**

Artefact analysis indicated that the five fills contained in the well related to the late Phase 6 period (1860s-c1890), and that the lower three fills occurred within a short period of time as part of a single backfilling event. The upper two fills were excavated by hand (7465, 7466) and contained a large amount of contamination from demolition material. The building at No. 710 George Street was demolished sometime around 1882 or 1883 and it was replaced by a large elongated building by 1888. This later building was constructed over the well so the material within it had to therefore pre-date this structure. Within the uppermost fill (7465) were two white-glazed and moulded semi-vitreous fine earthenware saucers featuring the black transfer-printed basemark “ROYAL IRONSTONE CHINA” above a coat-of-arms, with “W.H. GRINDLEY & Co” / “ENGLAND” below (#73912, #73913). These dated between 1880 to 1925 and indicated that this fill occurred at least after 1880.

The top two fills were excavated by hand to a depth of c.1.5m, and the remainder of the well was excavated by machine due to safety regulations. The machine removed the eastern half of the well and then roughly separated the fill into three 1m spits (7967, 7968, 7969). This excavation methodology explains the intrusion of two twentieth-century items into the lower fills of 7568 and 7569 (a handle of a silver-plated spoon featuring a manufacturers mark belonging to Charles Green & Co Ltd of Birmingham, and a fragment of a machine-made panelled glass tumbler. The spoon handle (#98396) dated from 1905. The tumbler (#49137) was manufactured between 1910 and 1930.

The presence of a number of ceramic, glass and organic conjoins between the various fills also indicated that the backfilling of the well occurred during a relatively short period of time. The identified shapes recovered within the well fills reflect a deposit of general household domestic waste, with items associated with the consumption of food (and beverage) particularly well represented, although the total number of artefacts in the well is disproportionately swollen by the inclusion of 1374 grape seeds which represent just over half of the 2582 artefacts recovered here (53.2%). The presence of such a large number of grape seeds, which were found only in the well

---

53 Casey & Lowe artefact database
and nowhere else on site, may perhaps be explained by the fact that No. 710 George Street was occupied by grocers until the early 1870s.

5.7 Tobacco Pipes\textsuperscript{54}
Ball clay moulded smoking pipes formed the largest part of the miscellaneous assemblage from the site and provide interesting information about the occupants and spatial uses of the different allotments. The main focus of the discussion will be the Woolpack Hotel in Area A supplemented by a small selection of other pipes from Areas B and C (in instances where finds were instructive or unusual). For general pipe tables see Appendix 5.3; the clay pipes made by Thomas Ball at his pottery found in Areas A and B are described in Section 4.10.1.

5.7.1 Area A
Excavation of various contexts in Area A revealed that the residents, workers, and visitors to this allotment were prodigious smokers having thrown away or lost some 930 broken ball clay and fine earthenware pipes. 494 of these (approximately half) were decorated or were able to be identified as a specific type. The pipes were mainly found in underfloor deposits of Rooms 1 to 5 of the Woolpack Inn. The overwhelming majority (45.6%) were from the Room 2 underfloor (7324), with some also incorporated into the fill below (7379). This probably occurred during renovations. Due to the nature of the activities within the Woolpack the high number of pipe fragments (791) found below the floors was not unexpected. Most were long-stemmed pipes known historically as ‘Churchwardens’ or more exactly for this assemblage ‘Short Churchwardens’. With few exceptions they were of identical form with a small plain bowl, short spur, distinctively trimmed narrow stems and simple mouthpiece (Figure 5.60). They have been broadly dated from c.1830 to c.1880 on morphological grounds. A far smaller number of this type of pipe was also found in Area B and C contexts of the same period, notably the underfloor deposit of Room 1 at No. 710 (7444) (Table 5.1).

The maker of these plain ‘Churchwardens’ is unknown. The ball clay with tiny inclusions of red ironstones had occasionally been fired to a buff colour or had uneven grey to red surfaces. Similar impure clay was also noted in the pipes made by the Elliott family in Sydney during the 1820s to 40s, as well as three pipes with a plain bowl and large spur marked ‘W/M’. The latter was perhaps produced by William Morgan of Liverpool with known dates of c.1767-96 and 1803, but is more likely to have been made by William Murray of Glasgow (perhaps early in his career before his mark became standardised on the stem). Murray operated from 1830-1861 and was favoured by several smokers in Areas A and C. Curiously the underfloor deposits of Room 3 did not contain any of these specific ‘Churchwardens’ but another slightly different model was found made by the large Glasgow firm of Duncan McDougall from 1846-1967. Both Murray and McDougall, along with several other Scottish manufacturers represented here exported widely to Australia and New Zealand.\textsuperscript{55}

Extremely long-stemmed pipes known as a ‘yard of clay’ were introduced in c.1819. They measured up to 36 inches or 900mm in length and were straight to slightly curving. Although a passing phase they became popularly known as ‘Churchwardens’ and led to the marketing of more practical-sized versions or ‘Short Churchwardens’. Due to their size and fragility these pipes could only be smoked by people at their leisure and definitely not those undertaking manual labour. They were commonly held at or owned by public houses such as the Woolpack in order to be shared amongst their clientele. In contrast personally-owned robust and short-stemmed Scottish ‘Cutty’ or Irish

\textsuperscript{54} This section on tobacco pipes was written by Robyn Stocks
\textsuperscript{55} Oswald 1975: 179; Bradley 2000: 118; Davey (ed.) 1987; Jack 1986.
‘Dudeen’ types (specifically made to be held in the mouth while working) were found in much fewer numbers below the hotel floors.56

The length of the main plain ‘Churchwarden’ type, estimated at 275mm or almost 11 inches with the stem alone being 240mm, created a special challenge during assessment of actual minimum pipe numbers. The most numerous fragments were from near-identical narrow stems which were time-consuming to rejoin although an attempt was made for all contexts, especially those in the same or adjacent squares of underfloor deposits. Far less bowl fragments than mouthpieces were found showing that not all parts of every discarded ‘Churchwarden’ pipe represented in the assemblage had been deposited on the site or managed to survive within the archaeological record, even in below floor contexts. Therefore, while only fragments of 62 mouthpieces of this type of pipe were found in the underfloor deposit of Room 2 in the Woolpack (Table 5.2) a more realistic total estimate would include a proportion of non-joining bowl and stem fragments up to a maximum of 320 items.57

<table>
<thead>
<tr>
<th>Area</th>
<th>House</th>
<th>Room</th>
<th>Description</th>
<th>Context</th>
<th>#MIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>WP</td>
<td>1</td>
<td>UF</td>
<td>7323</td>
<td>57</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Construction</td>
<td>7320</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Construction</td>
<td>7392</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2</td>
<td>UF</td>
<td>7324</td>
<td>227</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Constr or fill</td>
<td>7379</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4</td>
<td>UF</td>
<td>7331</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5</td>
<td>Redep topsoil</td>
<td>7333</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7</td>
<td>UF</td>
<td>7337</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mortar level</td>
<td>Below 7379</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PH</td>
<td>Fill</td>
<td>7384</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7362</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>7398</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>WP</td>
<td></td>
<td>AREA A TOTAL</td>
<td>370</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>712</td>
<td>Rear PH</td>
<td>Fill</td>
<td>7608</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>712/714</td>
<td>TT17</td>
<td>Various</td>
<td>7575</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>714</td>
<td>Cesspit</td>
<td>Fill</td>
<td>7632</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>716</td>
<td>PH</td>
<td>Fill</td>
<td>7539</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>All</td>
<td>Cleaning</td>
<td>7457</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>?</td>
<td>Fill (Ball)</td>
<td>7461</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>718</td>
<td>Cut</td>
<td>Fill</td>
<td>7474</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PH</td>
<td>Fill</td>
<td>7475</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>St of fireplace</td>
<td>Fill 7395</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tree bole</td>
<td>Fill</td>
<td>7473</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>?</td>
<td>Fill (Ball)</td>
<td>7460</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>AREA B TOTAL</td>
<td>22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>710</td>
<td>1</td>
<td>Demolition</td>
<td>7313</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>710 UF</td>
<td>Fill below UF</td>
<td>7519</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rear Cleaning</td>
<td>7396</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Well Fill</td>
<td>7567</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>AREA C TOTAL</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>SITE TOTAL</td>
<td>400</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 5.1: Location of all plain Churchwarden pipes c1830-80 on the site. Note UF are underfloor deposits; (Ball) indicates redeposited wasters and kiln debris from Thomas Ball’s pottery.

56 Harley 1963:15; Ayto 1999: 6, 10 dates the introduction of Churchwardens to c1850 and states that the name was perpetuated and possibly invented by Charles Dickens.

57 Length estimated using fragments 7320/#96019-20, 7324/#96363, #96490-90.
Table 5.2: Positively identified plain Churchwarden pipes c1830-1880 in different rooms of Woolpack Hotel in Area A.

<table>
<thead>
<tr>
<th>Room</th>
<th>Context</th>
<th>Mouthpiece</th>
<th>Bowl</th>
<th>Stem</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7323</td>
<td>11</td>
<td>2</td>
<td>42</td>
<td>55</td>
</tr>
<tr>
<td>2</td>
<td>7324</td>
<td>46</td>
<td>33</td>
<td>145</td>
<td>224</td>
</tr>
<tr>
<td>3</td>
<td>7335</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>7331</td>
<td>5</td>
<td>1</td>
<td>30</td>
<td>36</td>
</tr>
<tr>
<td>5</td>
<td>7337</td>
<td>0</td>
<td>2</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>62</td>
<td>38</td>
<td>220</td>
<td>320</td>
</tr>
</tbody>
</table>

Figure 5.60: Area A (Short) ‘Churchwarden’ type pipe reconstructed from fragments in 7320 and 7324, three mouthpiece tips at extreme right. Front row: bowl 7324/#96363, stem 7320/#96020 (4 fragments). Second row: mouthpiece 7320/#96019. Third row: stem 7320/#96020 (2). Fourth row: bowl 7324/#96490. Fifth and sixth rows: two mouthpieces 7324/#96491 (8). Russell Workman, 10cm scale.

Other popular forms of pipes smoked at the Woolpack included those with naval or shipping decorative motifs. One of these had an unusual cannon-shaped mouthpiece (Figure 5.61). Several pipes demonstrate political and other interests of their owners, such as the ‘Garibaldi’, celebrating the final liberation of Italy in 1860; the ‘Harlequin’ with depictions of two different clowns or jesters; and the ‘Masonic’ with ‘friendship, love and truth’ on the bowl, a slogan also used by the Society of Oddfellows.58

58 A ‘Garibaldi’ pipe with a similar stem mark is listed as model number 34 in McDougall’s price list 1860-62 was found at Casseldon Place, Melbourne in GML 2004: Section 3: 180. Pipes with heart in hand and other symbols of the brotherhood of Oddfellows were found in Area C, for general information about these and Masonic pipes of the late eighteenth and nineteenth-century see Harley 1963: 18, GML 2004: 178 and Wilson 1999: Type 122.
Notable pipes from Area A include the ‘Armorial’ and ‘Effigial’ types made in Australia during the 1820s through 1840s; and those made in Britain for the local colonial market, such as the ‘Lachlander’ and the ‘Squatters Budgeree’ (Figure 5.62). A limited number of small businesses moulded pipes in Sydney before c.1850, often starting out as convict workers at Government brick yards or as servants to private potters. While many pipes were plain, several local makers represented in this assemblage (such as William Cluer, Jonathan Leak, Joseph and Samuel Elliott, John and Anson Moreton, and possibly William Davis) marked their pipes or had distinctive decorative styles.59

59 Gojak and Stuart 1999; Stocks 2009; Wilson 1999. Bowls with identical drilled leaf seam decoration to that in Figure 5.61 7323/#96213 were found in waster material from the Jonathan Leak kiln off Elizabeth Street, Sydney during excavations by Graham Wilson in 2007. These distinctive pipes were noted in photographs used for an exhibition at the National Museum of Australian Pottery, when Geoff and Kerrie Ford visited Casey & Lowe on 17th August 2011, see http://www.australianpottery.net.au/index.php
The five marked William Cluer pipes from Area A are potentially the earliest remaining at the site. Cluer began manufacturing in Sydney in 1802 and was successful enough to export to Britain. His wife Mary (Morgan) Cluer who died in 1832 reportedly ran the family business during William’s absence overseas in 1821-2 and after his death in 1824; the pipeworks continued until c.1846. His pipes are often found in blackened and worn condition due to the addiction and poverty of the owners as well as what appears to have been a scarcity of pipes in the colony before the 1820s. Three of the four Cluer pipes from the underfloor deposits (7324) of the Woolpack and one from the middle of redeposited kiln wasters & debris (7648) from Thomas Ball’s pottery were characteristically well-used (Figure 5.62).60

Armorial pipes with the Hanoverian Coat of Arms or Prince of Wales feathers and Effigial pipes with bowls moulded in the shape of different male heads were found in similar numbers in Areas A and B. As they were made by a small number of local makers such as the Elliott family or Jonathan Leak from the 1820s to 40s they are able to be easily distinguished from British versions. Unfortunately these pipes are often unmarked. Only one Effigial bowl/stem from an underfloor deposit (7395) in Area B was able to be tentatively attributed to Jonathan Leak. Leak worked from 1822-1839.61

60 Cluer’s history in Gojak and Stuart 1999: 44-45.
61 These pipes have been found at many sites in Sydney and Parramatta, and carried by whalers or traded to remote parts of Australia and New Zealand, see Dane & Morrison 1979 Plate VI. The nearby pipeworks of Jonathan Leak has been recently excavated by Graham Wilson in Sydney. Early Sydney pipemaking and potting history see Casey 1999; Ford 1995.
A relatively rare example of a marked pipe stem with leaf vine decoration made by John Moreton was found in the underfloor deposit (7324) of Room 2 of the Woolpack (Figure 5.64). Moreton was a convict and emancipated potter from 1822-1844 and father of Anson Moreton who started work in 1829 and ran their local family pottery and pipe-making business until 1847. The similarity of the lettering and decoration on the John Moreton pipe stem to those of the more ubiquitous ‘MPP’ points to a common maker as do the general dates for the contexts in which they were found at the site. Most marked MPP pipes were found in Area A underfloor deposits of all rooms of the Woolpack as well as the construction debris of Room 1 (7320); and in Area B contexts relating to brickfield or early redevelopment activities after the closure of Thomas Ball’s pottery such as fill (7305), drain fill (7432) and the backfill (7475) of an eastern cut (Table 5.3).62

<table>
<thead>
<tr>
<th>Area</th>
<th>Manufacturer</th>
<th>Context</th>
<th>#MIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Moreton, A</td>
<td>7323</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Moreton, J</td>
<td>7324</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>MPP</td>
<td>7320</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7323</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7324</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7331</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7333</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7335</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7337</td>
<td>1</td>
</tr>
<tr>
<td>B</td>
<td>MPP</td>
<td>7305</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7432</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7475</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TOTAL</td>
<td>30</td>
</tr>
</tbody>
</table>

Table 5.3: Locations of Moreton and MPP marked pipes.

The analysis of the pipes from the assemblage has revealed another British pipemaker to the list of those known to have made ‘Squatter Budgeree’ pipes for the Australian market. Fragments of four of these pipes were found in Area A below the floors of Rooms 2 and 5 of the Woolpack but two slightly different varieties were found in Area C. The most common version from the backfill (7567) of the well and the underfloor deposit (7444) of No. 710 in Area C was marked by the Edinburgh pipemaking firm of Thomas White who operated from 1823-1882 (Figure 5.66).

There were 89 pipes with known pipe manufacturers from underfloor deposits at the Woolpack. Some of these are rarely seen in Australia, such as the unrecorded James Gilmour of Kilmarnock, Scotland (7324). However, most were made by large or long-term Scottish or English businesses like William Southorn, which operated from 1802 until 1961 and was one of the last to operate in the vicinity of Broseley, Shropshire. Broseley pipes (contexts 7321 and 7323) were the first in Britain to be widely exported to the colonies, in particular eighteenth-century America, but later out-produced by other cities. They were thought to be among the best quality items produced in Britain.63

Large European pipemaking businesses, such as Louis Fiolet of St Omer, France, Desiree Barth of Andenne, Belgium and pipemakers from Gouda, Holland are also represented but in few numbers.

These exporters were more popular in the latter part of the nineteenth century and many Barth Pipes were found in Area C (Figure 5.64, 5.65).64

5.7.2 Area B
Far fewer pipes were recovered from Area B, the predominant types were the ‘Churchwardens’ and those with leaf decoration on the bowls and stems similar to those found in Area A. The black ball clay bent pipe was the most significant with the bowl carefully moulded as the head of an indigenous American woman. This type was associated with eighteenth to early nineteenth-century Dutch depictions of east-coast native Americans on tobacco packaging. By c.1850 these depictions had developed into cross-cultural caricatures that blended African and Native American features. Artefact #97,772 shows an African woman with feather headband and pierced ears characteristic of Native Americans (Figure 5.63). They are an important resource for research into the Transatlantic slave trade. Interestingly this bowl appears to have been painted in red and yellow, perhaps when reused as a toy by a child living in No. 718, before then becoming part of the backfill (7387) in cesspit 7347.65

![Figure 5.63: Tobacco pipe with ‘Effigial Negro’ type bowl from Area B. Moulded head of an indigenous American woman that has through time evolved into an African American with painted feather headband and pierced ears 7387/#97772. Russell Workman, 1cm scale divisions.](image)

64 Louis Fiolet pipes see Duco 2004: 31-37. For similar Fiolet and Barth pipes from Cumberland and Gloucester Streets Site, The Rocks see Wilson 1999.
5.7.3 Area C
The well at the rear of House 710 contained numerous pipes in the three lower fills. They were possibly discarded during occupation but were more likely to have been dumped during general demolition and clearance at the end of the nineteenth century. The wet and anaerobic soil conditions in the well had stained some of the pipes, obscuring evidence of use. The same conditions softened the glaze on mouthpieces and corroded the few and unusual small cylindrical iron holders. They included a large range of types with many multiple examples which were mostly imported from Britain or Europe. The assemblage differed from those in Areas A and B with no identified Australian makers and a higher proportion of ‘Cutties’ and ‘Dudeens’ than ‘Churchwardens’. At least several pipes appeared not to have been smoked and it is very possible that a proportion may have been discarded stock from a shop at the front of the property rather than those personally owned by the residents (Figure 5.51).

The most popular known pipemaker in Area C was Desiree Barth of Belgium (1855-1890) with 72 examples of well-made plain, fluted and ship-themed varieties. The pipes had distinctive carefully hatched seams, mottled ball clay and large bore holes (Figs 5.64, 5.65). Pipes sold by Hugh Dixson from his Sydney tobacconist shop (trading from 1839-1904) were found in all areas of the site with 67 pipes found in Area C alone. Local tobacconists like Dixson, Edwin Penfold and Thomas Saywell had their names marked on the pipe stems by commissioned British makers.

Interesting pipes from Area C include the two ‘Squatter Budgeree’ varieties described above (Figure 5.66), one of several types that were made for the colonial market, such as the eight ‘Ship & Advance Australia’ (7444, 7466, 7567), and one Lachlander’ (7389/#97889). Pipes evoking the nineteenth-century interest in technological achievements and industry were also found, such as one bowl showing the Crystal Palace of the 1851 London Great Exhibition (7459/#98312) and the two examples of a ‘Steam Engine and Paddle Steamer’ (7444/#97960, 7568/#98406).

![Figure 5.64: ‘Thistle and Ship’ pipes made by Desiree Barth, Belgium from Area C. Left: 7466/#98323, right: 7466/#98322. Russell Workman, 10cm scale.](image-url)
During the nineteenth century pipes were increasingly used to advertise products as well as showcase famous people such as the ‘Swedish nightingale’ Jenny Lind (7569/#98245), who was well known from 1838 to 1887 and toured America with P.T. Barnum in 1850. Major royal occasions were commonly celebrated on pipes, for example the two different Victoria and Albert 1840 wedding commemoratives sold by Hugh Dixson in Sydney (7466/#98346, 7567/#98384), one with royal portraits and a crude depiction of Buckingham Palace (7313/#97876, Figure 5.67). Representations of significant literature or art was also used to sell pipes, such as the ‘Uncle Tom’s Cabin’ type in well fill 7466/#98327 (Figure 5.69) made by William Murray, Glasgow after it was written by Harriet Beecher Stowe in 1852 and before he ceased production in 1861.66

Figure 5.67: Area C unusual pipes. Left and centre: ‘Fluted Jenny Lind’ pipe bowl 7569/#98245. Right: bowl commemorating the 1840 wedding of Victoria and Albert 7313/#97876. Russell Workman, 1cm scale divisions.

Figure 5.68: ‘Uncle Tom’s Cabin’ 7466/#98327. Russell Workman, 10cm scale.
6.0 Response to Research Questions

6.1 Research Questions
A range of research questions were identified in Section 1.4 and 4.1.1. The focus of this section is a brief overview response to the research questions relating to the Thomas Ball Pottery. These questions have been rewritten to address the results of the detailed analysis in Section 4 which also must be read in relation to this response to the research questions. The research questions addressed below are:

- Type of products being made in the Brickfields?
- Manufacturing Techniques and Processes.
- How does Thomas Ball’s Pottery change our understanding of the type of pottery being manufactured in colonial NSW?

6.2 Response to Research Questions relating to Thomas Ball’s Pottery

6.2.1 Type of Products being made in the Brickfields
While we did not find evidence of direct brickfield manufacture we were able to identify a number of Sydney sandstock bricks that were used to construct the kiln and clay roof tiles reused as kiln furniture. In addition, we can now attribute the manufacture of a wide range of pottery, and some recreational items such as clay tobacco pipes, marbles and perhaps a bird whistle to Ball. The pottery is discussed by Mary Casey and Nick Pitt in Sections 4.1 to 4.6, and the other items by Robyn Stocks in Sections 4.8 to 4.10.

6.2.2 Manufacturing Techniques and Processes
Section 4.8 to 4.10 discusses the nature of pottery and ancillary product manufacturing used by Thomas Ball. The redeposited debris from Thomas Ball’s Pottery shows that he fired his wares in a wood-fuelled updraught clamp or possibly Scotch-type kiln sunk into the ground surface. It had a (near) permanent lower sandstock brick wall bonded and lined with clay and at least one corbelled flue. The temporary domed or curved superstructure was made of hand-applied layers of clay containing fragments of previous walling, clay furniture (bobs) and lined on the interior with pottery sherds to provide extra strength and better thermal retention. The shape of the kiln base built by Ball is not known but may have been oval or circular similar to a probable circular kiln shown on an adjacent allotment in the c.1831 Hallen’s Survey Fieldbook. The only excavated near contemporary wood-fuelled clamp or Scotch kiln in Sydney, built between c1830-1852 in Albion Street, Surry Hills, was rectangular, multi-flued and used to fire bricks. Both sub-circular and rectangular kilns were used to make contemporary or earlier pottery in Britain, Europe and America, their forms often built to conform to the surrounding landscape and available materials. Bottle kilns were used to fire pottery in larger towns but were not universally adopted for earthenwares at the time of Ball’s departure from England and there was no evidence for one on the site.

Most of the bricks used by Ball to build the kiln were moulded and then fired in wood-fuelled clamp kilns by government gangs or small independent brick and tile manufacturers who operated at Brickfield Hill. The few denser bricks that had been shaped by Ball to create one or more corbelled flues as well as one of the specialised ‘kiln bricks’ were possibly imported from Britain. The chamber floor was made using kiln bricks with cells and pierced holes to efficiently transfer heat up from the wood-fired flue(s). Ball would have reconstructed the upper part of the kiln after every firing and when the bricks had seriously deteriorated after a number of firings it would have been rebuilt from scratch, reusing whatever materials were viable.
Although he does not appear to have been a large producer Ball may have had more than one kiln operating at one time, perhaps for large orders or experimental firing when attempting to make new types of pottery, glaze colours and other items. Part of the analysis being undertaken is to discover whether different firings and perhaps a sequence of manufacture can be discerned in the artefacts. Examination of the bricks from the kiln debris showed a sequence of physical changes to the fabric which after a number of firings resulted in the vitrification and then marked deterioration with a build-up of slag and splashed lead glaze on the surfaces closest to the heat.

To stack the pottery and other products in the firing chamber Ball used a wide range of kiln furniture. These fall into three categories: formal wheel and hand-shaped and pre-fired forms; informal clay forms some of which were hand-shaped; and reused broken fired pottery and recycled sandstock clay roof tiles.

The first category included placing rings with small applied points and thick cylindrical saggars which were made on the wheel using the same fine and coarse local earthenware as the pottery and fired in the kiln before use. This furniture conforms to types Ball probably used in Britain and for which there is ample evidence from excavated contemporary and earlier sites. Ball also made two versions of a formal rectangular ‘spur’ type that he may have adapted from triangular or tripod forms used in Britain and America. These rectangular forms were unique to Ball and made from rolled flat fine earthenware that had been impressed with a dowel then cut to shape. The narrow sides of the main spur subtype used to support pottery in the chamber were cut to create four narrow points on the second subtype. The rings and spurs were used to support finer glazed wares in the kiln, their narrow points lessening the possibility of accidental fusing of the vessel with the furniture. These types of pottery were also more protected in the firing chamber by being placed or stacked in saggars, or the better base setters.

The second category was the most numerous in the assemblage and in the main comprised five types of clay ‘bobs’ defined by their manufactured shape: amorphous, bars, rolls, pinches and flat. The other rarer furniture type was flattened clay slabs used as horizontal setters, either below or above a pot or saggar. All these types were still damp when placed in the chamber as the pottery and other items were being quickly positioned during stacking. Although most were broken when the kiln was dismantled the distortion of their shapes and other surface changes that occurred in during firing has enabled the compilation of a type series based on stacking evidence. It is hoped that this data will enable a better understanding of how and where Ball stacked different wares and products in the kiln.

The third category comprised reused broken pottery vessels and sandstock roof tiles. Ball was able to recycle or reuse many items within the production cycle. Pottery broken during manufacture could be ground down and included as grog in coarser wares, or included in the kiln superstructure. The larger sherds were reused as kiln furniture with the bases in particular providing a convenient and economic alternative to standardised saggars which were individually potted. To prevent the glazed vessels from adhering to the bottom of setters and saggars Ball smeared wet clay and scattered small fragments of fired clay instead of flint chips and ground quartz commonly used in Britain. The roof tiles were probably broken discarded fragments or second-hand stock made in the nearby brick kilns. Their hard flat shapes with sanded surfaces made ideal setters, lids or shelves for the kiln chamber.

Prompted in part by economic motives Ball appears to have used a wide range of kiln furniture to stack his kiln. The presence of wheel-thrown pre-fired saggars, spurs and placing rings; informal unfired clay setters and bobs; and reused broken pottery and roof tiles in the kiln debris indicates that Ball used a combination of closed and open-stacked firing depending on what products were in the chamber. The range of kiln furniture may also suggest that Ball may have begun his trade in
Sydney with formal pre-made types and then due to changes in what products he made, economic pressure and scarcity of available materials and labour, introduced the other forms as replacements.

6.2.3 How does the Thomas Ball’s Pottery change our understanding of the type of pottery being manufactured in colonial NSW?

- What does the pottery tell us about Ball’s training, skills, materials, techniques and understanding of pottery manufacturing techniques and technology?

Sections 4.1 to 4.6 discuss the extensive variety of pottery manufactured by Thomas Ball ranging from the utilitarian wares, already known from many pre-1850 archaeological sites in Sydney and Parramatta, to medium and finer wares including table and finer wares. Thomas Ball produced at least 59 different handpainted decorative patterns (probably made with a slip or blowing pot through a single quill) as well as a few incised, rouletted and a single sprigged decoration (Appendix 4.2). Many of the decorated vessels were tablewares but some were also utilitarian. The utilitarian forms produced related to typical daily household and domestic activities but we had not found all of these shapes previously. Some of the simpler decorated forms had been found on other sites, such as nearby Pitt and Campbell Street site, the old DMR site, Cunningham Street site, as well as those in other parts of the Sydney CBD: the Conservatorium site, First Government House site, and the Cumberland and Gloucester Streets site. See Section 4.7 for discussion of site comparisons. These are mostly identified by decorated vessels as it is difficult to identify his undecorated and utilitarian work from catalogue description alone.

A new utilitarian style made by Thomas Ball which we had not previously seen had mulberry-coloured glaze and was found on 350 vessels, including 337 utilitarian and 13 medium quality. This glaze was found on 25 differently shaped vessels, including bowls (41), crocks (31), jars (39), pans (58), plates (10), dish (7), chamber pots (7) as well as fragments of a teapot (Appendix 4.1: Table 17). Mulberry or dark red glaze was the most common glaze found on utilitarian vessels, a total of 20 per cent (Table 41). Thirty-six vessels were decorated with incised (26) and rouletted (10) decoration.

The decorated vessels are a stylistic descendant of British traditional and factory-made slipware. Detailed analysis of the reasons behind this is presented in Section 4.6. While we already knew that the utilitarian lead-glazed earthenwares followed in the tradition of British country potteries and those post-medieval traditions of Surry Hampshire Borders near London, there was little comprehension of the variety of decorated wares available in Sydney nor who had manufactured them.67

We know from historical resources that Thomas Ball arrived in Sydney in 1799 and had been trained at Staffordshire and may have worked in Warwickshire at a pottery as he was convicted at Warwick in 1796 but further research is required at both these locations to understand who he was working with and the nature of his work. Much of his decorated pottery suggests a familiarity with decorating vessels using a lathe so he could turn the vessels to roulette or incise the decoration onto the leather hard body as well as apply single slip decoration through a quill or in some cases with the aid of a nail. There is no evidence that he had exposure to developments in decorative technology of a three-coloured slip cup which was patented in 1811 which accords with the skill set

67 Casey 1999.
he had upon his arrival in NSW in 1799. He appears to have been familiar with a single coloured slip cup but was not very skilled.

The influence of slip-style decoration on the hand-decorated vessels is derived for his clear desire not only to produce utilitarian pottery but also to produce decorated table and serving wares as well as recreational items such as smoking pipes and children’s toys. This would have put him in direct competition with contemporary decorated wares, Mocha and slipped creamware and pearlware as well as early transfer printed creamwares and Chinese export porcelain imported into Sydney. The influence of both traditional and factory-made slipwares on his work, the manufacture of which was contemporary with the operation of his Pottery, between c.1801 and 1823, also probably relates to their being the cheapest decorated pottery produced in Britain. Most of the archaeological evidence from archaeological sites in Sydney during this period testifies to the presence of the other three wares but rarely slip decorated creamware or pearlware. It is likely that Ball was trying to produce the cheapest decorated vessels, pipes and toys he could to be sold during the early period of infrequent deliveries of imported ceramics and other goods on ships. The production of a unique form of clay pipes was perhaps intended for a niche market when the main local producer may have been struggling to keep up with demand.

Examination of the pottery suggests that Ball was a reasonably skilled potter but lacked some skill as a decorator or his family may have assisted with the pottery decoration, as was common in country potteries in Britain. Examination of the finer wares, those simple imitation creamwares with reeded lines with green slip found on other sites, suggest that Ball had experience as a fine potter working in Staffordshire and knew how to make refined-bodied fabrics such as creamwares or pearlware. He was able to achieve this despite the problems he would have faced with transforming the local clays, which initially he had no expertise with, into a product which was of a fine or medium quality and about which originally we were uncertain were locally made or imported. As the quality of the decoration indicates his lack of skill with the slip decoration it is likely that he worked as a potter in the Staffordshire factory system rather than as a decorator. His familiarity with and use of horizontal patterns on hollow vessels and the use of a lathe or wheel to create them testifies that he was familiar with this type of technology and its application in decoration of hollow vessels, such as mugs and chamber pots.

His use of a single firing is also odd in terms of refined wares but was standard for country wares. The tradition of more than one firing was a development of the production of finerwares during the eighteenth century. I note that our identification of a single firing is based on the absence of biscuit fired vessels rather than clear evidence of a single firing.

The discovery of Thomas Ball’s Pottery has radically changed our understanding of what was being made in colonial Sydney, the stylistic context in which he practiced his pottery manufacturing and how it may or may not have related to imported pottery available in the Sydney marketplace. Further work on this will be presented in a forthcoming publication of the pottery. For now we can begin to develop our understanding of locally-made pottery and recreational items found at other sites and begin to expand our understanding of the value placed on this pottery by residents of colonial Sydney and Parramatta.
7.0 Bibliography

7.1.1 Primary Sources

Council Rate Assessments, on-line City of Sydney, Historical Atlas of Sydney.
Historical Atlas of Sydney, various on-line maps and plans, City of Sydney, Historical Atlas of Sydney.
Historical Records of NSW.
Hallan, Ambrose Field Books, Survey of the City of Sydney, A. Hallen, c1831, SR Reel 2628 (2/5195), Item 347, p5. SRNSW.
Jevons, W. 1858 Remarks upon the Social Map of Sydney, 1858. ML Album ID: 823804.
Legislative Council Votes and Proceedings (New South Wales) 1891 Report of the Royal Commission on alleged Chinese gambling and immorality and charges of bribery against members of the police force, 1891, (Gambling Commission report).
The Monitor
Public Records Office, HO 11/1 pg. 12, Australian Convict Transportation Registers – Other Fleets & Ships 1791-1868.
Sands Directory
Sydney Gazette
Sydney Herald
Sydney Morning Herald

7.1.2 References

Archaeological & Heritage Management Solutions Pty Ltd 2007 Historical Archaeological Impact Assessment: 61-65 Wentworth Avenue, Surry Hills, NSW, unpublished report for Eastview (Australia) Pty Ltd.
Attenbrow, V., T. Doelman, T. Corkhill 2008 ‘Organising the manufacture of Bondi points at Balmoral Beach, Middle Harbour, Sydney, NSW, Australia’ Archaeology in Oceania, 43: 104-119, 105.


Brown, O. & M. Hincks 2009 *Aboriginal Archaeological Investigation and Artefact Collection at Site #45-5-385, Oppy Reserve, Quakers Hill, NSW*, Total Earth Care for Blacktown City Council, NSW.


Casey & Lowe

1995a *Archaeological Assessment, 430-450 Pitt Street, Sydney*, unpublished report for Metro D Architects Pty Ltd, October 1995


1998 *Archaeological Assessment: 35-41 Reservoir Street, Surry Hills*, unpublished report for May & Swan Architects Pty Ltd on behalf of the NSW Teachers Federation.


In prep *Archaeological Investigation, 19-41 Reservoir Street, Surry Hills*, unpublished report for the NSW Teachers Federation and NSW Teacher’s Health Society, in preparation.


Copeland, R. 2009 Manufacturing Processes of Tableware during the Eighteenth and Nineteenth Centuries, The Northern Ceramic Society, UK.


Cunningham, P. 1827 Two years in New South Wales: comprising sketches of the actual state of society in that colony; of its peculiar advantages to immigrants of its topography, natural history, &c. &c, 2 Vols, Henry Colburn, London.


Francis, P. 2010 A Pottery by the Lagan: Irish Creamware from The Downshire China Manufactory, Belfast, 1787-c.1806, The Institute of Irish Studies Queen’s University Belfast in association with National Museums and Galleries of Northern Ireland, Ulster Museum, Belfast.


Gemmell, W. 1986 And So We Graft From Six To Six: The Brickmakers of New South Wales, Angus & Robertson, Australia.


Haslam, J. 1978, 1984 Medieval Pottery, in Britain, Shire Archaeology, Princes Risborough, UK.


Jo McDonald CHM. 2005 Archaeological salvage of eight landscapes in the Second Ponds Creek Release Area, RHIP (Stage 3), unpublished report for Rouse Hill Infrastructure Pty Ltd and Landcom, vol. 1, p.141.


Kelly, M. (ed.)


Kerr, J.S.K. 1990 The Haymarket and the Capitol, National Trust.


La Trobe University and Industry Partners 2006. EAMC Archaeology Database, Access database produced by the Exploring the Archaeology of the Modern City Project, conducted by La Trobe University and Industry Partners the Historic Houses Trust of NSW, the Sydney Harbour Foreshore Authority, Godden Mackay Logan, the Heritage Office of NSW, the City of Sydney and Heritage Victoria.


Linge, JGR 1979 Industrial awakening : a geography of Australian manufacturing 1788 to 1890, Norwalk, Conn. : Australian National University Press


Mider, D. 1994 An Archaeological Assessment of the Watkins Terrace Block (Nos 730-742 George St) and Parker Street, Haymarket, Sydney.


Oswald, A. 1975 *Clay Pipes for the Archaeologist*, BAR 14, Oxford.


Stocks, R. 2006 ‘Miscellaneous, Metal & Building Materials Report’, in Casey & Lowe 2006a *Archaeological Investigation, Parramatta Children’s Court cnr George & O’Connell Streets, Parramatta*, report for NSW Department of Commerce on behalf of the NSW Attorney-General’s Department, Section 8.3.

2009a Miscellaneous, Metals & Organics Report, Parramatta Hospital Site, Marsden & George Streets, Parramatta, report for Casey & Lowe Pty Ltd, September 2009, Sydney.


Sussman, L. 1997 Mocha, Banded, Cat’s Eye, and Other Factory-Made Slipware, Studies in Northeast Historical Archaeology, No. 1.


Wade-Martins, P. 1983 Two Post-Medieval Earthenware Pottery Groups from Fulmodeston, near Fakenham, Norfolk, East Anglian Archaeology Report No. 19, Norfolk Archaeological Unit, Norfolk Museums service, Norfolk.


White, C. E. 2008 Manufacturing Identity, the archaeology of colonial earthenware manufacture and consumption in Sydney, ARPH Honours Thesis, University of Sydney.

Willsteed, Smith & Bourke 2006 Eora: Mapping Aboriginal Sydney, 1770-1850, State Library of New South Wales, Sydney, N.S.W.

Wilson, G.


2009 Draft ‘Thomas Ball (1765(?)-1827)’, copy provided by the author.
