

**David Street:
Evaluation**

Data Structure Report

On behalf of: Coltart Earley
11 Clairmont Gardens
Glasgow
G3 7LW

AOC Archaeology Project No: 20,338

NGR: NS 6127 6448

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1. NON-TECHNICAL SUMMARY

- 1.1.1 An archaeological evaluation was carried out on the proposed area of a residential development at David Street, Gallowgate, Glasgow (centred NGR: NS 6127 6448). Ten trial trenches totalling 436 m² were excavated over approximately 8,720 m² of ground most recently used as a park and carpark.
- 1.1.2 The archaeological evaluation identified a series of red brick walls and features associated with both the Campbellfield Brick, Tile & Pottery Works identified on the 1st Edition OS Map (1856-7; AOC 2007, Figures 1 and 2) and the Tramway Depot and tenement buildings represented on the 2nd, 3rd and 4th Edition OS Maps (1896; 1913; 1935; AOC 2007a). Fifteen bags of ceramic fragments including kiln furniture, body, base and rim sherds and pieces bearing the makers' name (*Campbellfield*) were recovered from the backfill/overburden within the excavated trenches. None of the finds were recovered *in situ*.
- 1.1.3 Based on the results of the evaluation, an archaeological excavation was consequently undertaken between Tuesday 7th and Friday 31st August (AOC 2007b). The works comprised the excavation of an area with maximum dimensions of approximately 40 (north to south) by 44 m (east to west). The works identified up to eight kiln structures, part of the workshops, the boiler room and associated pipe system. At least three phases of the ceramic works were identified, although as might be expected, only the buildings of the final phase survived in a meaningful condition.

2. INTRODUCTION

2.1 Project Background

- 2.1.1 A programme of archaeological works was required by Coltart Earley on behalf of their client in meeting the terms of a planning condition on planning consent granted for a residential development on a land parcel at David Street, Gallowgate, Glasgow (centred NGR: NS 6127 6448, Figure 1). The site is bounded by David Street to the east, by Crowpoint Road to the south, by Rochester Street to the west and by Gallowgate to the north. The north of the proposed development area was recently in use as a car park. The surface of the site was covered with a demolition/made ground layer.
- 2.1.2 The proposed development area lies within the administrative area of Glasgow City Council, which is advised on archaeological matters by the West of Scotland Archaeology Service (WoSAS). The work required was in accordance with NPPG 5 (SOEnd 1994), NPPG 18 (SODD 1999) and PAN 42 (SOEnd 1994a), in determining the nature, extent, condition, date and significance of any archaeological remains within the proposed development area.

2.2 Archaeological and historical background

- 2.2.1 Prior to the fieldwork two, possibly three sites, were identified within the direct footprint of the redevelopment works. These included the site of at least one 19th century pottery and a former tram depot.
- 2.2.2 Between 1750 and 1850 an important pottery industry developed in Glasgow, supplying both local and export markets. New establishments were erected, and the productions attained an efficiency which enabled them to compete successfully in both the home and foreign markets, with the well-known Staffordshire ware (Renwick & Lindsay 1921). In 1882 there were about twenty potteries recorded within the city, the largest being at Garngad Hill, where about 1000 workers were employed. The manufactures included every kind of product from coarse earthenware to fine porcelain, and the exports, both coastal and foreign, amounted to over 12,000 tons a year.
- 2.2.3 Of the two potteries, the short-lived history of the Elgin pottery remains elusive, but the Campbellfield pottery is significant as an early example of a 19th century pottery in the Gallowgate area of Glasgow and one of the few that remained successful into the later 19th century. Campbellfield pottery was established within the proposed development area in 1827 to exploit the clayfields surrounding Campbellfield House. The Campbellfield Brick, Tile & Pottery Works are shown on cartographic evidence (AOC 2007) to be an extensive complex with five structures lining David Street and a reverse h-shaped building which presumably made up the main factory complex. A small circular structure marked west of the main complex possibly represents a kiln. In its formative years the Campbellfield pottery focused on the production of Rockingham ware but later added white earthenware to its products. Campbellfield pottery expanded rapidly soon after its establishment and discovered that the David Street site was too small for the volume of trade to which it aspired. The owners of the pottery subsequently looked for an alternative site outside of the rapidly encroaching city. They eventually settled on a site in Flemington Street in 1870 and moved the Campbellfield pottery there where it became known as Springburn Pottery. An advertisement for the Campbellfield Pottery Co. dating to the late 19th century lists the Springburn Pottery as '*manufacturers of general earthenware, sponged, printed and gilt for the home and foreign markets and fancy ware for preserve makers*'. The Springburn pottery went on to be relatively successful until its closure in 1901 and several examples of pottery from Campbellfield Co bearing the 'CP Co' stamp are held by Glasgow museum services. Therefore although the production of pottery within the proposed development area was short-lived, the reason for its removal from site was not one of decline, as was so often the case in this area of Glasgow, but was one of increasing prosperity and expansion.
- 2.2.4 The Elgin Pottery was established between publication of the First and Second OS Edition maps (AOC 2007). The life of this pottery was evidently short-lived,

- perhaps only operating between 1859 and 1875. As the construction and later demolition of this pottery falls between the publishing of the two OS map editions, little is known about its extent, configuration, or the types of wares that it produced. Fleming's book on Scottish Pottery which provides a description of the potteries of Glasgow lists an Elgin pottery at 30-32 Davidson Street south of the development area in operation from 1855-1893. According to Fleming (1923, 143) the factory was erected by James Johnstone in 1855 and sold a few years later to Charles Purves, who had been a potter in the nearby Verreville Pottery. The Elgin Pottery devoted itself to the manufacture of white earthenware and closed in 1893. The Scottish Pottery Society conversely list Elgin and Mile End potteries operating in the vicinity of the proposed development area from 1855-1877. It is evident therefore that there is some confusion in existing records about the exact location and duration of the Elgin pottery works but it is probable that it was located on or in very close proximity to the proposed development area in the latter half of the 19th century.
- 2.2.5 The pottery industry in Glasgow that was so rapid to expand was equally quick to decline. The local clays were coarse and the clay beds were increasingly covered by an advancing urban sprawl. In total almost 30 pottery, clay pipe and fireclay production sites have been identified as being in operation in and around the Gallowgate area in the 18th and 19th centuries. However, most of the Gallowgate potteries were too small to resist English competition and the high demand for land on which they were situated and many went out of business.
- 2.2.6 The first street tramways in Glasgow were authorised by an Act of 1870 and built by the Glasgow Corporation under lease by Glasgow Tramway Company. The first route opened in 1872 and thereafter rapidly expanded. In 1877 the Glasgow Tramway Company had depots in Whiteinch, North Street, Cambridge Street and David Street within the proposed development area. Most tramway buildings were of brick construction and the company depots such as the one at David Street were constructed of red and white brick (Hume 1974).
- 2.2.7 Furthermore, the development lies within the former land of Campbellfield on which a residence has been demonstrated from at least the mid-18th century. There was therefore a possibility that remains associated to the post-medieval or earlier settlement of the Campbellfield area may have existed within the footprint of the proposed development.

3 METHOD

3.1 Evaluation

- 3.1.1 The scale of the trenching was determined at the 5% sample level. The trial trenching was undertaken according to AOC Archaeology Group's standard evaluation practice. Ground reduction was by means of one 13 tonne 360° tracked

excavator equipped with a toothless ditching bucket with a width of 2.0 m. Excavation was carried out in shallow spits until the first significant archaeological horizon or natural subsoil was encountered. All machine excavation was supervised by an experienced field archaeologist.

- 3.1.2 The trenches were altered slightly in the field to avoid site clearance works being undertaken concurrently with the evaluation.

3.2 *Excavation*

- 3.2.1 An area of approximately 44 m by 40 m was stripped to the first significant archaeological horizon by machine excavation. This area focussed in particular on the kiln structure identified during the evaluation phase. No further works were considered necessary around the periphery of the site due to the level of truncation of these areas recorded by the evaluation.
- 3.2.3 The entire site was recorded through a programme of 3D Laser Scanning. This involved an accuracy of sub 10 mm resolution on-site at 1:1 scale with additional photography of the wall-heads and other constructional details.

4 EVALUATION RESULTS

4.1 Introduction

- 4.1.1 The fieldwork was carried out from 16th to 20th July 2007 in dry weather conditions with the results originally being presented in a separate Data Structure Report (AOC 2007 b). Ten trenches were excavated exposing a total basal area of 416 m². The evaluation area was covered in a combination of paving, tarmac, flower beds and a play park. The following section should be read in conjunction with Figures 1-3. The various data gathered from the evaluation is presented in the Appendices: *trench descriptions* (Appendix 1), *context descriptions* (Appendix 2), photographic record (Appendix 3), *small finds register* (Appendix 4) and *drawing register* (Appendix 5).

4.2 Trench 1

- 4.2.1 Trench 1 was excavated in the south-east corner of the site, was aligned north to south and measured 20 m by 2 m. The trench contained a depth of up to 2.20 m of made ground, comprising building debris and modern detritus overlying and cut in to the natural boulder clay. The boulder clay was encountered at a depth of 1 m. Two red brick walls encountered running east to west and north to south respectively (no context descriptions assigned as modern), have been interpreted as the remains of the Tramway Depot represented on the 2nd Edition OS Map (1896, AOC 2007 b, Figure 3). No evidence of the building which occupied the site prior to the Tramway Depot was identified.

4.3 Trench 2

- 4.3.1 Trench 2 was excavated in the south of the site, was aligned east to west and measured 30 m by 2 m. The trench comprised up to 2.60 m of made ground including building debris and modern detritus overlying and cut in to the natural grey boulder clay. The boulder clay was encountered between 0.40 m and 1 m in depth. A red brick wall (no context descriptions assigned as modern) encountered running east to west across the trench probably represents the same feature identified in Trench 1, has been interpreted as the remains of the Tramway Depot represented on the 2nd Edition OS Map (1896, AOC 2007 b, Figure 3). No evidence of the building which occupied the site prior to the Tramway Depot was identified.

4.4 Trench 3

- 4.4.1 Trench 3 was excavated in the south of the site, was aligned north to south and measured 20 m by 2 m. The trench comprised up to 2.40 m of made ground including building debris and modern detritus overlying and cut in to the grey boulder clay. The boulder clay was encountered at 0.50 m in depth. A red brick wall (no context descriptions assigned as modern) running east to west across the trench was probably the same feature as identified in Trenches 1 and 2. A selection of ceramic including pieces of kiln furniture was recovered from the overburden within the trench.

4.5 Trench 4

- 4.5.1 Trench 4, excavated in the southern half of the site, was aligned east to west and measured 20 m by 2 m. The trench comprised up to 2.50 m of made ground including building debris and modern detritus overlying and cut in the grey boulder clay. The boulder clay was encountered at 1.60 m. A red brick wall running north to south across the trench was interpreted as part of the Campbellfield Brick, Tile & Pottery Works identified on the 1st Edition OS Map (1856-7; AOC 2007 b, Figures 2 and 3).

4.6 Trench 5

- 4.6.1 Trench 5, in the eastern part of the site, was aligned north to south and measured 20 m by 2 m. The location of the trench was altered in the field due to the presence of other contractors on site. The trench comprised up to 1.20 m of made ground including building rubble and modern detritus overlying and cut in to the grey boulder clay. The boulder clay was encountered at a depth of 0.40 m. Two

red brick walls encountered running east to west across the trench were interpreted as part of the Campbellfield Brick, Tile & Pottery Works.

4.7 Trench 6

- 4.7.1 Trench 6, in the north of the site, was aligned south-east to north-west and measured 20 m by 2 m. The trench comprised up to 3.20 m of made ground and included various deposits of ash and debris. The trench sectioned a clay pit [011] backfilled with the debris and waste material of industrial processes [012] associated with the ceramic works. No building remains were identified in this trench.

4.8 Trench 7

- 4.8.1 Trench 7 in the approximate centre of the site, was aligned east to west and measured 20 m by 6 m. The trench comprised up to 1.0 m of made ground including building debris and modern detritus overlying and cut in to the natural grey boulder clay. The boulder clay was encountered at a depth of 1.20 m. The trench was excavated across the location of a possible kiln structure identified in the Campbellfield Brick, Tile & Pottery Works from the 1st Edition OS Map (1856-7; AOC 2007 b, Figure 1).
- 4.8.2 Unfortunately due to the extensive phases of re-development on the site only a fragment of a kiln was unearthed – possibly a later example than that illustrated on the 1st Edition OS map (AOC 2007 b). The remains comprised an east to west aligned wall [003], a concrete floor [004] and a brick rail [005]. The wall survived for up to 8 m, was painted white and inclined inwards (to the north) at the top. A red brick wall [002] at the eastern end of the feature formed the southern edge of the entrance to the structure. The wall was abutted by the concrete floor [004] which formed the base of the structure. A single brick rail was built in the centre of the long axis of the structure and may have been used to support vessels during the firing stage of works. The structure was truncated by the later development of the Campbellfield works, which removed the northern and western parts of the building.
- 4.8.3 A series of east to west aligned red brick walls were identified in the trench immediately below the existing ground surfaces. Although the majority of the walls could not be identified on any of the maps it seems likely that they belong to the later phase of the Campbellfield works.

4.9 Trench 8

- 4.9.1 Trench 8, in the approximate centre of the site, was aligned east to west and measured 20 m by 2 m. The trench comprised up to 3.20 m of made ground

abutting a large red brick wall aligned east to west. The made ground overlay the natural grey boulder clay. Various tip lines were observed in the section and it seems likely that a building was built over a disused clay pit [013] with the remaining pit was backfilled with deposits of ash and debris from the industrial processes [014] associated with the ceramic works. No ceramics were observed in the pit.

4.10 Trench 9

- 4.10.1 Trench 9, dug in the north-west corner of the site, was aligned east to west and measured 20 m by 2 m. The location of the trench was altered in the field due to the presence of other contractors on site. The trench comprised up to 3 m of made ground, including building debris and modern detritus overlying and cutting the natural grey boulder clay. The backfilled material was identified between two red brick walls (no context descriptions assigned as modern) aligned north to south - these are interpreted as being the foundations of tenement buildings represented on the 2nd, 3rd and 4th Edition OS Maps (1896; 1913; 1935; AOC 2007 b). Prior to the construction of the tenements no buildings were known to occupy this part of the site.

4.11 Trench 10

- 4.11.1 Trench 10, excavated in the north, was aligned east to west and measured 20 m by 2 m. The location of the trench was altered in the field due to the presence of other contractors on site. The trench comprised up to 3 m of made ground comprising building debris and modern detritus overlying and cutting the natural grey boulder clay. The backfilled material was identified between two red brick walls (no context descriptions assigned as modern) aligned north to south and interpreted as being the foundations of tenement buildings represented on the 2nd, 3rd and 4th Edition OS Maps (1896; 1913; 1935; AOC 2007 b).

4.12 Artefacts

- 4.12.1 Fifteen bags of ceramic including kiln furniture, body, base, rim sherds and pieces with the makers' name (Campbellfield) were recovered from the overburden within the excavated trenches. None of the finds were recovered *in situ* (from parent features) and all represented material which had been dumped when the pottery moved location.

5 EXCAVATION RESULTS

5.1 Introduction

- 5.1.1 The fieldwork was carried out from 7th to 31st August 2007 in dry weather conditions. The excavation area exposed a total basal area of 1,410 m². The following section should be read in conjunction with Figures 1-3. The various data gathered from the evaluation is presented in the Appendices: *context descriptions* (Appendix 2) *photographic record* (Appendix 3), *small finds register* (Appendix 4) and *drawing register* (Appendix 5).

5.2 Buildings and associated structures

5.2.1 Introduction

Due to the constraints of working within an urban context, only a fragment of the entire site was examined fully, further investigation was prohibited by a combination of live services, existing upstanding structures and later truncation.

The rapid growth of the ceramic industry, and in particular the Campbellfield works, ensures that the works would have undergone various stages of development and reconstruction (the 1860s fire which destroyed much of the early factory notwithstanding) prior to the eventual wholesale move to the Flemington Street site in 1870. For this reason the investigation was designed to identify both the final structures and earlier phases of building, if possible.

Despite these limitations the excavation identified the majority of the kiln structures, some of the workshops and boiler room. One main phase of the works was recorded together with limited evidence for later additions and earlier, underlying foundations. In addition, a large ceramic assemblage was recovered, providing examples of the variety of wares produced at the works.

5.2.2 Kilns and associated features

The main component of the excavated works comprised the linear, east to west aligned, parallel brick and concrete constructed kiln structures (Figure 2). In total, the fragmentary remains of eight kilns were identified ([041], [047], [058], [100], [111], [122], [208] & [210]); though it is apparent that these would not all have been in operation at the same time. The large number of kilns in comparison to the 1856-7 works, where only one probable kiln is recorded on the OS 1st Edition reflects both the increase in production and possibly an increase in the wares produced, with differing kiln types required for varying wares.



Figure 3: Detail of Kiln [047], with the enclosing wall [046] and 'inspection pit' [049].

Generally, the kilns survived as a long brick built 'corridor', floored by a concrete surface (Figures 2 and 3). They were built on a concrete base which directly overlay a deposit of building debris, detritus and occasional ceramic sherds [214] and the natural grey boulder clay. The most intact example, Kiln [047], measured approximately 31 m in length by 1.50 m in width and up to 1 m in depth. The walls were generally built of two aligned courses of brick, which had been reinforced by steel pinnings, an important development of this time (George Haggerty pers comm). The walls of the kiln also contained controlling mechanisms to allow gases/heat to move around the structure, which comprised a steel handle which moved an overlying panel. In only one example, Kiln [041], did the kiln walls survive to any height, and in this case the wall was found to curve in towards the middle, suggesting they had curved ceilings.



Figure 4: Detail of 'inspection pit' [036]

A central 'inspection pit' [036] (Figure 4), apparent in four of the kilns ([208], [210], [047] and [043]) comprised an iron setting set in to the floor surface. The pits all contained grates in the western wall face raising the possibility that these served as drainage features. The example identified in Kiln [208], was excavated to reveal that the concrete flooring [014] was built over an iron bogey [067], suggesting that even the apparently simple kilns went through at least two phases of development. The occurrence of the bogey suggests that at one point the ceramic material would have been transported in to the kilns by rail, implying some sophistication in an earlier phase of the works. However, the subsequent concreting over of the bogeys implies that this method became redundant in the later development of the works.

In at least two examples the kilns were truncated by the construction of some sort of workroom - [209] being built over the eastern end of Kilns [208] and [210]. The construction of this room would certainly have ended the functioning ability of the two truncated kilns, but for what purpose is as yet unclear.

The construction of Kiln [041] would have compromised the use of Kilns [210] and [047], creating a structure between the two earlier examples. It seems likely that this development took place either due to the increase of production of ceramic which may have required larger kilns, or due to the technological advances made in the distribution of energy.



Figure 5: Detail of inserted Room [209] built over the eastern ends of Kilns [208] and [210]

The majority of the excavated kilns had red brick blocking walls inserted along their length. These blocking walls were neither tied in to, nor abutted by the underlying concrete floor. For example, Kiln [058] contained three separate inserted walls, which appear to be typical of the rest. Wall [074] was located towards the west end of the structure, while walls [059] and [061] were positioned around 'inspection pit' [060]. The walls were clearly inserted in to the kiln to either restrict access or to decrease its size. When firing certain types of ceramics, the kiln has to be air tight, and so it seems probable these walls were inserted as a sealing mechanism. Alternatively, the walls may have been inserted to reduce the size of the kiln, perhaps as certain examples went out of use. However, neither explanation is without problems.

The implications of these modifications imply that the Campbellfield works underwent various stages of development based on both the rapid expansion of the factory as production increased and as a result of technological innovation.



Figure 6: Detail of Kiln [041] built in between Kilns [047] and [210]



Figure 7: Detail of wall [074] inserted within Kiln [058]

In another example of the restructuring of the kilns, the enclosing wall [108] of Kiln [111] seems to have had an additional skin of bricks added to it (either in the initial construction or at a later date), perhaps as a further measure of insulating the structure. It is likely that this kiln was used to construct ceramics in which a much greater heat was required.

The kilns were built between large concrete foundation pedestals (for example [052], [055] and [056]) and red brick (for example [021]), which would have supported the superstructure of the pottery building. It is likely that the intervening areas would have supported the areas of access around the kilns, as evidenced by the floor level [034] identified in area [051].



Figure 8: Detail of concrete foundation [003]

Although a large area devoid of any structures existed on the western side of the site, to the immediate west of Kilns [208] and [210], the surrounding foundations ([032] and [161]) suggest that this area would have been roofed. Outwith an underlying drain [128] no foundations were found in this area. It is possible, and probable that at one time this area would have been concreted over in conjunction with the area [125] to the south. A large foundation of concrete excavated from this area may represent the fragmentary remains of a chimney or kiln base [213] identified on the 1st Edition OS Map.

5.2.5 Workshops

The workshops were located to the north-east of the complex, to the immediate east of some of the kilns and the boiler room (Figure 2). The excavated area

measured approximately 23 m north to south by up to 6 m east to west, although it is clear that the buildings continued to the east and north.

Clearly a variety of processes would have been performed within the workshops, and just prior to 1870 the majority of them would have been carried out by machines powered by steam (Fleming 1923, 51-70). The processes would have involved the initial treatment of the clay, the production of the ceramics and the decoration of the pieces.

Although much of the workshop space had been truncated, the demolition of the overlying structure seemingly removing the majority of any foundations and divisional walls, we can still suggest possible uses of space for some of the area. The small concrete compartments [130] and [133], the latter of which had a concave base, contained concrete surfaces. A possible, but not conclusive use for such water tight structures may have been as mixing tubs, during the initial manipulation of the clay, where the material is tempered with something like flint and then washed with water (Fleming, 1923, 53-4).

The identification of a set of six pipes [137] suggests that some sort of heat transfer was taking place in the centre of the workshop. The location of the pipes in close proximity to a machine base [138] may suggest that the heat was being used to power some sort of machine as a steam powered wheel. Alternatively, the pipes may have connected to now missing flues which would have underlain or been associated with long drying pans to dry the clay resource (Fleming 1923, 55). Walls ([142], [143] and [145]) may have supported some overlying structure associated with this.

Another machine base identified between the former ends of Kilns [208] and [210], and to the immediate west of the workshop area, may have formed the base of a crane mechanism to move material from the kilns.

Two further areas of obvious interest concern the two features identified within the workshop complex but in close proximity to the boiler room. Feature [159] comprised a 1.5 m by 1.25 m brick setting, lined with white tiles with a small metal pipe running in to it. The surviving part of Room [076] comprised a white tiled area, 1 m wide by 2 m long with a drain [078] running up the middle of the concrete floor [076]. The inclusion of white tiles and methods of either drainage or of water supply in to these features suggest both were used to wash or rinse material with water.

The general construction of the workshop area, functional red brick walls and concrete floors, is in stark contrast to the area identified to the north-east of the complex. Room [212] is accessed through a 1 m wide doorway and contains a red tile surface and white tiled walls. It seems possible that this area marks the point at which the offices or associated factory shop were accessed.

5.2.6 *Boiler Room*

The boiler room was located to the north of the site, to the immediate north of the main alignment of kilns, but was only partially excavated. The boiler room complex comprised a set of adjoining areas assigned the general number of *Room [085]*. The area measured at least 9.50 m east to west, by up to 4 m north to south and in contrast to the workshop areas was floored and walled with a mixture of red and white tiles. At least some of the tiles showed evidence of oil stains which led to the initial interpretation of a boiler room. Further proof of this suggestion was the recognition of metal bolts inserted within the floor, which would have held large elements of machine plant.



Figure 9: Detail of Boiler Room [085] and associated Pipes [099]

5.2.6.2 A conjoined set of pipes [099] up to 15 m in length led in to the eastern part of the boiler room. These probably constituted the method of either distributing heat or gases around the ceramic works. The cast iron pipes were encased in ceramic

tubing, providing further insulation. More specifically, the pipes may have been the means of distributing steam to the Throwing Shops where the clay was prepared (Ms Diana Connell pers comm).

A large iron column set in to a concrete base [214] was identified *in situ* to the immediate south of the main alignment of pipes [099], suggesting that at least this part of the works contained two or more floors.

5.2.7 *Campbellfield works layout*

The results of the archaeological works in conjunction with evidence from existing plans demonstrate the former layout of the Campbellfield works. The most obvious difference between the layout identified in the 1st Edition OS Map (1856-7) and the excavated buildings is size and differing orientation (Figure 2). The Campbellfield Brick, Tile & Pottery Works are shown on cartographic evidence to be an extensive complex with five structures lining David Street and a reverse h-shaped building which presumably made up the main factory complex. A long linear building to the west of the plan probably represents the main kiln structure (George Haggarty pers. comm.). However, prior to the publication of the 2nd Edition map (1896) the works had been rebuilt, with the main alignment of the buildings changing from a north to south alignment to an east to west alignment (Figure 2). Clearly the increase in kiln numbers from 1 to 6-8 was the result of an increase in both production and by implication, obviously demand. This necessitated an increase in the size of the ancillary buildings including the boiler house and workshops.

In only three occasions was the earlier Campbellfield works identified, walls [073] and [163] and surface [119] (Figure 2). All of these features are found to directly underlie existing parts of the surviving structure. The absence of any further evidence can be explained by the intrusive foundations of the later buildings which were sunk to the same depth or lower.

5.3 Pottery assemblage

- 5.3.1 A large assemblage of ceramics was recovered during both phases of the archaeological works. The ceramics were generally recovered from deposits overlying the main structures associated with the ceramic works. No ceramics were recovered from any waste pits.
- 5.3.2 All of the ceramic material has been washed, boxed and has been subject to a preliminary appraisal by Mr George Haggarty (Research Associate of the National Museums of Scotland). The assemblage of c.30 litres of material contains a mixture of stoneware, sponge ware, Rockingham ware and kiln furniture. Furthermore, a sample of the different bricks identified on site as well as roofing tiles and any other material was recovered.

6 CONCLUSIONS AND RECOMMENDATIONS

- 6.1. The archaeological excavations completed over the site of the former Campbellfield Brick, Tile and Pottery Works has revealed a body of information relevant to both the development of the works and more generally to the Glasgow ceramic industry as a whole.
- 6.2. What is clear from both the existing records and the results of the archaeological excavation is that the works underwent a huge change between the publication of the 1st Edition OS Map in 1856-7 and the construction of the new factory (Springfield) at the Flemington Street site in 1870. The increase in demand was such that the existing 1856-7 factory was knocked down, rebuilt to a greater capacity and subsequently reconstructed all before the works were moved to their new location in 1870.
- 6.3. The apparent technological innovations identified in the factory, such as the steel reinforcing and energy distribution methods further suggests an industry in rapid expansion, with new methods being both developed and embraced to increase production. As machinery produced ware more economically and cheaper, demand doubled and employment increased (Fleming 1923).
- 6.4. The almost complete lack of evidence for any underlying structures from the earlier phase of works perhaps indicates the size of the new development, which had to be completely built from scratch on a new orientation. The general lack of waste material from any of the clay pits suggests that they were emptied prior to development, and filled with a more stable material such as clay.
- 6.5. The later development of the Tram Depot on the site was in part responsible for the preservation of the Campbellfield works. Although only fragments of the Tram Depot itself survived (Evaluation Trenches 1, 2 and 3), the requirement of a central yard in the area allowed the works to be levelled and concreted over. While the subsequent construction of surrounding tenements and associated drying greens had a similar preservation affect on the central area, they nevertheless destroyed the Tram Depot, the foundations being excavated to at least 3 m (Trenches 5 and 6).
- 6.6. No evidence of the Elgin pottery was identified and as yet no ceramics bearing its stamp were identified. The likely location of the former pottery, under the Electrical Sub-Station, and to the south of the development suggests that nothing now remains of it.

7. REFERENCES

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1858 Ordnance Survey map, scale 1:10,560, surveyed in 1858.

1858 Ordnance Survey *Lanarkshire* Sheet VI First Edition. Scale 1:2,500.

1896 Ordnance Survey *Lanarkshire* Sheet VI.II NE, Second Edition. Scale 1:2,500.

1913 Ordnance Survey *Lanarkshire* Sheet VI.II SE. Scale 1:10,560.

APPENDIX 1: EVALUATION TRENCH SUMMARIES

Trench 1

Orientation: North to south
Size: 20 m x 2.0 m
Topsoil depth: None present
Excavation depth: 2.20 m (max)
Subsoil: Grey boulder clay encountered at 1 m
Modern features: Red brick wall identified on the 1st Edition OS Map
Significant features: None
Artefacts: None
Interpretation: No significant archaeology present

Trench 2

Orientation: North to south
Size: 20 m x 2.0 m
Topsoil depth: None present
Excavation depth: 2.60 m (max)
Subsoil: Grey boulder clay encountered at 0.40 m
Modern features: Red brick wall identified on the 1st Edition OS Map.
Significant features: None
Artefacts: None
Interpretation: No significant archaeology present

Trench 3

Orientation: East to west
Size: 20 m x 2.0 m
Topsoil depth: None present
Excavation depth: 1.00 m (max)
Subsoil: Grey boulder clay encountered at 0.50 m
Modern features: Red brick walls and concrete flooring
Significant features: None
Artefacts: Kiln furniture
Interpretation: No significant archaeology present

Trench 4

Orientation: East to west
Size: 25 m x 2.0 m
Topsoil depth: None present
Excavation depth: 2.50 m (max)
Subsoil: Grey boulder clay encountered at 1.60 m
Modern features: Red brick walls identified on the 1st Edition OS Map
Significant features: None
Artefacts: None
Interpretation: Probable remains of Campbellfield works

Trench 5

Orientation: North to south
Size: 30 m x 2.0 m
Topsoil depth: 0.20 m of topsoil and turf
Excavation depth: 1.20 m (max)
Subsoil: Orange / yellow sand
Modern features: Red brick walls identified on 1st Edition OS Map
Significant features: None
Artefacts: None
Interpretation: No significant archaeology present

Trench 6

Orientation: East to west
Size: 15 m x 2.0 m
Topsoil depth: None present
Excavation depth: 3.20 (max)
Subsoil: Grey boulder clay
Modern features: Clay pit
Significant features: None
Artefacts: None
Interpretation: The trench cut across a clay pit, backfilled with ash and clay

Trench 7

Orientation: East to west
Size: 20 m x 6.0 m
Topsoil depth: None present
Excavation depth: 3.20 (max)
Subsoil: Grey boulder clay
Modern features: Clay pit
Significant features: None
Artefacts: Eleven bags of ceramic including kiln furniture and printed pot
Interpretation: Remnants of a kiln structure, red brick walls associated with Campbellfield works

Trench 8

Orientation: East to west
Size: 20 m x 2.0 m
Topsoil depth: None present
Excavation depth: 3.60 m (max)
Subsoil: Not identified
Modern features: Red brick wall aligned east to west, built in to a clay pit
Significant features: None
Artefacts: None
Interpretation: Red brick wall associated with Campbellfield works built in to earlier clay pit

Trench 9

Orientation: East to west
Size: 20 m x 2.0 m
Topsoil depth: None present
Excavation depth: 3.00 m (max)
Subsoil: Grey boulder clay
Modern features: None
Significant features: None
Artefacts: None
Interpretation: No significant archaeology present

Trench 10

Orientation: East to west
Size: 20 m x 2.0 m
Topsoil depth: None present
Excavation depth: 3.20 m (max)
Subsoil: Grey boulder clay
Modern features: None
Significant features: None
Artefacts: None
Interpretation: No significant archaeology present

EXCAVATION APPENDIX 2: CONTEXT DESCRIPTIONS

No.	Feature	Type	Description
001	N/A	Overburden	General overburden, comprising modern detritus and building debris, overlying the whole site.
001 a	Kiln [100]	Wall	Red brick wall, aligned east to west, forming northern of Kiln [100].
002	Kiln [208]	Wall	Red brick wall, aligned east to west, forming southern part of Kiln [208]. Same as walls [023], [018] and [015].
003		Wall Foundation	Square shaped concrete structure forming base of wall. Built over three levels over the natural boulder clay. Measuring 2 m by 2 m.
004		Concrete Base	Concrete foundation base of wall foundation [003].
005		Boulder clay	Natural grey boulder clay encountered at base of room [006], underlying concrete [004].
006	Room [006]	Room	General number assigned to an area enclosed by walls [001a] and [002], located between Kilns [100] and [208]. Measuring 4.70 m by 2.70 m and comprising a base of natural [005].
007	Room [007]	Room	General number assigned to a possible machine room enclosed by walls [012], [026], [023] and floored by concrete [007]. A machine base [071] was identified.
008	Room [008]	Room	A red brick built structure, measuring 4 m east to west by 4.25 m north to south. The structure which was built over existing Kilns [208] and [210] is enclosed by walls [012], [002], [013] and [026]. The room has a central setting of red brick foundations [064] and [065] around a sand pit [066]. The room is floored by a concrete base in which an iron bogey rail [067] is clearly visible.
009	Kiln [208]	Room	A small room within Kiln [208] formed by the later insertion of walls [013] and [016] between the existing walls [002] and [015]. Measuring 2.90 m by 1.30 m.
010	Corridor	Corridor	General number assigned to the space between Kilns [208] and [035]. Enclosed by walls [018], [013] and [015] and comprised a base of natural boulder clay [034].
011	Kiln [210]	Wall	Red brick wall aligned east to west, forming southern part of Kiln [210], built over a concrete foundation. Measuring 18.5 m by up to 0.55 m in height.
012	Room [008]	Wall	Red brick wall inserted over the earlier kiln structure [210] and [208], aligned north to south and measuring 4 m in length by up to 0.61 m in height. Abuts both walls [023] and [026] and separates rooms [007] and [008].
013	Room [008]	Wall	Red brick wall, aligned north to south and measuring 3.50 m in length by up to 0.47 m in height, 2 course of brick wide. Inserted over Kilns [208] and [210].
014	Room [009]	Concrete	Concrete floor within room [009].
015	Kiln [208]	Wall	Red brick wall aligned east to west, forming northern edge of Kiln [208]. Comprises two courses of frogged bricks, bonded by grey mortar. Same as [023].
016	Kiln [208]	Wall	Red brick wall, two courses of frogged brick, aligned north to south, inserted in to the earlier Kiln [208] to divide the structure. Built over [014].
017	Kiln [208]	Concrete	Concrete floor within Kiln [208], forming later addition to the

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			structure.
018	Kiln [208]	Wall	Red brick wall, aligned north to south, inserted in to the earlier Kiln [208] to divide the space. Two course of frogged brick measuring 1.23 m by 0.20 m in width.
019			Concrete base identified overlying the natural boulder clay.
020	N/A	Clay	Natural boulder clay identified underlying [017] and [019].
021	Wall Foundation	Wall	Red brick pyramidal wall, aligned east to west, 7.40 m in length. Comprises four courses of red brick built over a concrete base [019]. Measuring 0.48 m in width at widest.
022	Room		Corridor/space between walls [001a] and [021].
023	Kiln [208]	Wall	Red brick wall aligned east to west forming southern edge of Kiln [208]. Cut by service cut [027], same as [015].
024	Kiln [208]	Room	General number assigned to an area at the end of Kiln [208], formed by the insertion of a later wall [018].
025	Infill		
026	Kiln [210]	Wall	Fragmentary remains of the northern edge of Kiln [210] comprising an east to west aligned red brick wall, 14.20 m in length. The wall appears to have been truncated to enable the construction of a larger kiln [041].
027	Cut	Cut	Service cut, aligned north-west to south-east, truncates several walls.
028	Wall	Wall	North to south aligned red brick wall, forming western edge of room [006].
029	Cut		Cut of large clay pit identified between walls [046] and [057]. Filled by [030].
030	Fill		Fill of large clay pit [029] comprising boulder clay, bricks, pipe, gravel and ash.
031			General number assigned to truncated area of Wall [021].
032	Wall		Same as wall [021].
033	Kiln [208]	Inspection pit	General number assigned to a possible inspection pit within Kiln [208], comprising 3 surviving edges, 1.10 m by 0.70 m up to 0.55 m in depth.
034		Wall base	Wall base built over natural boulder clay identified at base of room [010].
035	Kiln [210]	Room	Small room/area created by inserting walls [013] and [037] in to the existing Kiln [210]. Measuring 4.60 m by 1.22 m. Inspection pit [036] is located within this area.
036	Kiln [210]	Inspection Pit	General number assigned to a possible inspection pit within Kiln [210], measuring 1.35 m by 0.70 m.
037	Kiln [210]	Wall	Red brick wall, aligned north to south, inserted in to Kiln [210]. Abutts wall [011].
038	Kiln [041]	Wall	An east to west aligned red brick wall, inserted in to Kiln [210] to create a larger structure. Measuring 7.8 m in length by up to 0.6 m in height. Painted white.
039	Room [007]	Wall	East to west aligned red brick wall, within Room [007].
040		Clay	Natural boulder clay identified between walls [026 and [046].
041	Kiln [041]	Structure	General number assigned to kiln structure comprising walls [046], [038], [044] and a concrete floor [042]. The kiln was constructed by truncating the two earlier structures Kilns [210] and [043].
042	Kiln [041]	Floor	Concrete floor within Kiln [041] truncated by later cut [043].
043	Kiln [041]	Cut	Cut through the concrete floor [042] of Kiln [041], measuring 7 m in length.
044	Kiln [041]	Wall	Red brick constructed wall base or rail identified running up the middle of Kiln [041]. Measuring 3.1 m in length by 0.23 m in

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			width and up to 0.12m in height. Built over concrete [042].
045	Kiln [041]	Wall	Red brick wall, aligned north to south, inserted between walls [026] and [046].
046	Kiln [047]	Wall	Red brick wall forming entire enclosing wall of kiln [047], surviving to a length of 25.3 m. Abutted by later addition of wall [050].
047	Kiln [047]	Structure	General number assigned to the whole kiln structure comprising an enclosing wall [046] and inserted wall [050], inspection pit [049] and a concrete floor [048].
048	Kiln [047]	Concrete	Concrete surface within Kiln [047].
049	Kiln [047]	Inspection Pit	General number assigned to a possible inspection pit identified within Kiln [047], measuring 1.40 m by 0.70 m by up to 0.50 m in depth. A metal grill was identified on the east facing wall.
050	Kiln [047]	Wall	Red brick wall inserted in to Kiln [047], aligned north to south and built over concrete floor [048].
051	Corridor	Corridor	Construction area located between Kilns [047] and [058].
052	Corridor [051]	Wall	Red brick foundation, overlying pillar foundation [053], aligned east to west.
053	Corridor [051]	Pillar Base	Concrete pillar base, measuring 1.2 m by 1.2 m. Underlying [052] and built over redeposited industrial waste.
054			Red brick structure probably comprising part of a foundation wall.
055	Corridor [051]	Pillar Base	Concrete pillar base, measuring 1.2 m by 1.3 m. Built over redeposited material [030].
056	Corridor [051]	Pillar Base	Concrete pillar base, measuring 1.20 m by 1.20 m and comprising three tiers of concrete.
057	Kiln [058]	Wall	Southern enclosing wall of Kiln [058], same as [062].
058	Kiln [058]		General number assigned to kiln structure, comprising a now truncated enclosing wall [057] and [062], three inserted walls [059], [061] and [074], an inspection pit [060] and a concrete floor [063].
059	Kiln [058]	Wall	North to south aligned red brick wall, inserted in to existing Kiln [058], between walls [057] and [062].
060	Kiln [058]	Inspection Pit	Possible inspection pit within Kiln [058], measuring 1.30 m by 0.70 m. Same as [049], [036] and [033].
061	Kiln [058]	Wall	North to south aligned wall inserted in to existing Kiln [058], between walls [057] and [062].
063	Kiln [058]	Concrete	Concrete floor within Kiln [058].
064	Room [008]	Wall	North to south aligned red brick wall inserted over existing Kilns [208] and [210]. Forms eastern wall of Room [008].
065	Room [008]	Wall	North to south aligned red brick wall within Room [008].
066	Room [008]	Setting	Setting within concrete floor measuring 1.2 m by 1.5 m in Room [008].
067	Room [008]	Iron Bogey	Concreted over Iron rail for a bogey identified within Room [008].
069	Room [007]	Concrete	Concrete floor within Room [007].
070	Room [007]	Concrete	Concrete floor within Room [007].
071	Room [007]	Machine Base	Machine Base identified within Room [007].
072	Room [035]	Concrete	Concrete floor within Room [035].
073	Wall	Wall	North to south aligned red brick wall, underlying wall [026].
074	Room [058]	Wall	Red brick wall inserted in to Room [058].
075		Room	Area identified between walls [062] and [080]. No obvious uses.

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076			White tiled room, possible representing a toilet or washroom, comprising three sides of white tiles [077], a concrete floor [081] and a drain feature [078].
077	Room [076]	Wall	White tiled wall within Room [076].
078	Room [076]	Drain	Drain feature within Room [076]. Measuring 2.20 m in length.
079	Room [076]	Wall	East to west aligned white tiled wall.
080		Wall	Curving white tiled wall, left unexcavated due to collapse.
081	Room [076]	Concrete	Concrete floor surface within Room [076].
082	Room [084]	Concrete	Concrete alignment lying on top of overburden, measuring 10.80 m by 0.78 m by up 0.10 m in depth. Located between the boiler room area and Room [084]
083	Room [084]	Wall	Fragmentary remains of a wall, comprising white tiled bricks laid next to red brick alignment. The features floats and has no obvious associations.
084	Room [084]		General number assigned to the corridor/area location between wall [062] and concrete level [082].
085	Room [085]	Structure	General number assigned to a set of features thought to be associated with the boiler room of the works. The room contains a central low area, with a red tile floor [092] within a concrete floor [093]. The area is accessed through two apparent entrances [091] and [094] to the east and west.
086	Room [085]	Wall	A north to south aligned red brick foundation set within the concrete floor [087]. Measuring 1.83 m by 0.45 m.
087	Room [085]	Floor	Concrete floor within Room [085]. Small iron pieces were identified protruding from the surface.
088	Room [085]	Wall	North to south aligned red brick wall, separating the eastern and middle sections of Room [085].
089	Room [085]	Wall	North to south aligned red brick wall forming eastern edge of Room [085].
090	Room [085]	Wall	East to west aligned red brick wall with white tiled facing, forming southern edge of Room [085]
091	Room [085]	Entrance	Entrance through wall [088], measuring 0.90 m north to south by 0.55 m east to west.
092	Room [085]	Red Tiled Floor	Red tiled floor of central area of Room [085] measuring 2.10 m by 1.35 m in size.
093	Room [085]	Concrete Floor	Concrete floor within Room [085]; [092] is set in to it.
094	Room [085]	Entrance	Entrance through wall [095], measuring 1.20 m by 0.90 m.
095	Room [085]	Wall	North to south aligned red brick wall, lined with white tiled bricks on the western face.
096	Room [085]	Wall	North to south aligned red brick wall, abutted by concrete floor surface [097].
097	Room [085]	Concrete	Concrete floor surface within Room [085].
098	Room [085]	Wall	North to south aligned red brick wall within Room [085]. Measuring 2.90 m and possibly forming external wall of boiler room.
099	Room [085]	Pipe	Huge set of pipes aligned east to west for at least 10 m. Comprising 5 layers of cast iron pipes within a ceramic case, packed closely together. Measuring 1.28 m in height, overlying a concrete base.
100	Kiln [100]	Structure	General number assigned to kiln structure, comprising walls [101], and [001a], a concrete floor [102] and a secondary feature of a pipe stand [103]. Measuring 26.60 m by 1.22 m.
101	Kiln [100]	Wall	Same as [001a], comprising an east to west aligned red brick wall.

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102	Kiln [100]	Concrete	Concrete surface forming floor of Kiln [100].
103	Kiln [100]	Pipe Base	Secondary addition to the kiln comprising the concrete support for a pipe built over the concrete surface [102].
104	Kiln [100]	Wall	Fragmentary remains of a north to south aligned wall, surviving for only 0.50 m in length by 0.28 m in width.
105	Kiln [100]	Surface	Concrete floor within Kiln [100], associated with Drain [106].
106	Kiln [100]	Drain	Drain pipe running through the base of Kiln [100].
107		Corridor	Corridor/area between Kilns [100] and [111], measuring 1.71 m wide by 19.55 m in length, with a rubble floor.
108	Kiln [111]	Wall	East to west and north to south aligned enclosing red brick wall of Kiln [111]. Partially unexcavated to the east.
109	Room [107]	Wall	North to south aligned wall abutted by concrete surface [110], located at the east end of Room [107].
110	Room [107]	Concrete	Layer of concrete located to the east of corridor [107]. Mostly unexcavated.
111	Kiln [111]	Structure	General number assigned to Kiln Structure comprising enclosing wall [108] and concrete surface [112]. Measuring 18.30 m by 1.20 m.
112	Surface	Concrete Surface	Concrete floor surface of Kiln [111].
113	Structure [113]	Structure	General number assigned to the collection of features lying between Kilns [111] and [122], basically comprising the main foundation of part of the works. The structure comprises two concrete pillar bases [117] and [118], an overlying red brick wall [116] aligned east to west and a layer of concrete [125] at the west.
114	Structure [113]	Room	Number assigned to space between walls [121] and [116].
115	Structure [113]	Room	Number assigned to space between walls [116] and [108].
116	Structure [113]	Wall	East to west aligned red brick wall, 11.60 m in length by 0.77 m in width, built over a concrete foundation and partially overlying concrete [118].
117	Structure [113]	Concrete Base	Concrete pillar base measuring 0.96 m by 0.96 m in size.
118	Structure [113]	Concrete Base	Concrete pillar base measuring 0.90 m by 0.90 m in size.
119	Structure [113]	Red brick Surface	Red brick surface partially underlying wall [108], measuring 2.20 m by 2.30 m. Part of the earlier kiln structure.
120	Structure [113]	Wall	North to south aligned red brick wall, partially underlying walls [108] and [121], but keyed in to neither. Measuring 2.90 m in length by 0.55 m in width and (five courses of brick) and up to 0.55m in height.
121	Kiln [122]	Wall	East to west and north to south aligned red brick wall enclosing Kiln [122]. Measuring 17 m in length by 2 m in width. Reinforced with iron every 2 m. Unusually the wall has an extra coating of bricks giving it extra protection or strength.
122	Kiln [122]	Structure	General number assigned to kiln feature, comprising enclosing wall [121], a later inserted wall [123] and a concrete surface [124].
123	Kiln [122]	Wall	North to south aligned red brick wall inserted in to earlier Kiln [122], measuring 1.20 m by 0.40 m.
124	Kiln [122]	Surface	Concrete surface identified at the base of Kiln [122].
125		Surface	Concrete surface identified to the west of Kilns [111] and [122], covering an area 7.90 m by 10.90 m.

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126		Cut	Modern service cut through concrete [125].
127		Wall	Small section of red brick wall attached to wall [124]. Very fragmentary.
128		Drain	Red brick drain cut through the underlying overburden [129]. Measuring 0.48 m by 0.48 m and constructed of red brick.
129		Deposit	Material identified as redeposited industrial waste, ceramic and detritus.
130	Workshop	Structure	Room bound to the south by wall [168] to the north by [132] and to the west by a concrete surface [169]. Measuring 1.22 m by 3.05 m.
131	Workshop	Surface	Concrete surface
132	Workshop	Wall	East to west aligned red brick wall, measuring 3.5 m by 0.24 m in width, forming division between [130 and [133].
133	Workshop	Structure	Room/area between wall [132] and concrete [134].
134	Workshop	Surface	General number assigned to the concrete located at base of [133].
135	Workshop	Overburden	Layer of overburden comprising grey brown soil with large stone inclusions, identified within various parts of the workshop.
136	Workshop	Wall	East to west aligned red brick wall, measuring 2.90 m by 0.35 m in width.
137	Workshop	Surface	L-shaped red brick surface, aligned east to west for 4.6 m by 3.85 m north to south.
138	Workshop	Structure	Red brick surface/machine base measuring 0.95 m by 0.75 m.
139	Workshop	Structure	East to west aligned pipe complex, comprising 6 exposed pipes underlying a red brick wall [144], lying within a pipe channel 0.60 wide by 0.30 m in depth.
140	Workshop	Wall	Red brick foundation aligned north to south, measuring 5.7 m by 0.85 m.
141	Workshop	Structure	Concrete surface identified between two red brick walls, measuring 2.30 m by 1.25 m.
142	Workshop	Wall	North to south aligned red brick wall, forming part of the pipe [139] complex.
143	Workshop	Structure	North to south aligned red brick wall, forming part of the pipe [139] complex.
144	Workshop	Wall	Internal red brick wall, aligned north to south, possibly forming part of pipe complex [139].
145	Workshop	Wall	Red brick wall/foundation built in to underlying overburden [129]. Measuring 1.50 m by 0.90 m by 0.80 m in height. Abutts concrete [164].
146	Workshop	Wall	Internal red brick wall, aligned north to south, abutts wall [124].
147	Workshop	Wall	North to south aligned red brick wall, adjoined to wall [148].
148	Workshop	Wall	North to south aligned wall between boiler room workshop area.
149	Workshop	Structure	Entrance between room [155] and the unexcavated structure to the north. Measuring 0.95 m in width by 0.50 m in depth.
150	Workshop	Structure	Entrance within wall [153], joining Rooms [211] and [212].
151	Workshop	Structure	Entrance in to Room [212], identified only in the ground plan.
152	Wall	Wall	East to west aligned red brick wall identified within Room [211]
153	Wall	Wall	East to west aligned red brick wall dividing rooms [211] and [212], abutted by [154] and containing entrance [150].
154	Room [161]	Surface	Concrete floor surface within Room [211].
155	Room [161]	Surface	East to west aligned tile floor within Room [211], measuring 6 m by 1.50 m. Possibly positioned in the more formal area of the

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			works such as the offices. Abutted by concrete floor [154].
156	Workshop	Ramp	Concrete ramp accessing Room [155], measuring 0.74 m by 0.70 m.
157	Workshop	Pipes	Set of clay pipes, aligned north-east to south-west, truncated at north-east. Probably relates to boiler room [085].
158	Workshop	Pipe	East to west aligned cast iron pipe, truncated at both ends. Measuring 5.40 m by 0.15 m.
159			N/A
160	Room [051]		Base of support column, partially underlying red brick wall foundation [161]. Measuring 2.5 m by 2.75 m and comprising 3 concrete blocks.
161	Room [051]		Base of red brick wall measuring 6 m by 1 m in width by up to 0.55 m in depth.
162	Kiln [058]		General number assigned to earlier phase of ceramic works comprising north to south aligned wall, 5.20 m by 0.60 m and up to 0.48 m in height. Underlying Kiln [058]
163	Deposit	Deposit	Overburden material underlying entire site.
164	Workshop	Concrete Surface	Concrete surface across the majority of the workshop area.
165	Workshop	Surface	Red brick surface set in to concrete surface [164], measuring 0.70 m by 1.50 m.
166	Workshop	Wall	East to west aligned red brick wall, forming southern boundary of excavated workshop area. Measuring 7 m by 0.32 m in height.
167	Workshop	Room	Room/area between walls [166] and [168], containing grey boulder clay base [169]. Measuring 0.90 m by 3.05 m by up to 0.70 m in depth.
168	Workshop	Wall	East to west aligned red brick wall, located between Rooms/areas [167] and [130]. Measuring 3.05 m (where identified) by 0.36 m in width by 0.19 m in height. Appears to run under concrete surface [164].
169	Workshop	Clay	Grey boulder clay identified within Room [167].
170	Section 1	Natural	Natural subsoil identified in south facing section through site, comprising grey brown silt with charcoal inclusions. Robber trench [173] is cut through this material.
171	Section 1	Wall	Fragment of red brick wall, identified only in section, measuring 1.10m by up to 0.25 m in height. Probably represents the fragmentary remains of the earlier phase of the Campbellfield works.
172	Section 1	Drain	A tile drain built in to wall [171], aligned north to south. Measuring 0.30 m by 0.15 m.
173	Section 1	Deposit	Fill of robber trench [202], comprising red sandy silt, rubble and red tile and black ash. Measuring 2.30 m by 0.35 m.
174	Section 1	Deposit	Deposit of industrial material comprising grey clay mixed with black ash, overlying natural subsoil [170]. Measuring 0.15 m in depth.
175	Section 1	Deposit	Deposit of brown clay with evidence of black ash throughout. Measuring 1.20 m by 0.10 m at deepest. Underlying [176] and overlying [170].
176	Section 1	Deposit	Deposit of yellow/red sand, measuring 0.80 m by 0.10 m in depth. Overlying [170] and underlying [177].
177			
178	Section 1	Deposit	Deposit of brown clay intermixed with small flecks of black ash throughout. Underlying [179] and overlying [173]. Measuring 1.5 m in length by 0.30 m in depth.

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179	Section 1	Deposit	Deposit of brown sandy with grey ash inclusions. Measuring 2.5 m by 0.20 m in depth.
180	Section 1	Deposit	Fill of cut [204] comprising fragments of brick and grey/brown ash. Measuring 1 m by 0.50 m at the deepest point.
181	Section 1	Deposit	Deposit of grey brown ash with few small stone inclusions. Measuring 1 m by 0.30 m in depth.
182	Section 1	Deposit	Deposit of yellow brown sand intermixed with fragments of stone and brick, measuring 2 m by 0.25 m at the deepest point. Underlying [186] and overlying [177].
183	Section 1	Deposit	Backfill of drain cut [206] comprising building rubble, fragments of brick, grey ash. Measuring 0.80 m by 1 m. Underlying [177].
184	Section 1	Structure	East to west aligned red brick wall, measuring 0.60 m in height and up to 0.20 m wide. Almost completely removed by later truncation.
185	Section 1	Deposit	Deposit of brown silt intermixed with grey ash, measuring up to 0.60 m in height by 2 m in length. Overlying [199] and underlying [194].
186	Section 1	Deposit	Deposit of grey ash, measuring 2 m in length by 0.40 m in depth. Overlying [182] and underlying [191].
187	Section 1	Deposit	Deposit of black ash, cut by later truncation [199]. Measuring 1.10 m by 0.20 m in depth. Overlying [185 and underlying [188].
188	Section 1	Deposit	Deposit of brown silt and ash, measuring 0.50 m by 0.10 m. Underlying [189] and overlying [187].
189	Section 1	Deposit	Fill of drain cut [199], comprising black and grey ash, and measuring 0.30 m by 0.10 m in depth.
190	Section 1	Deposit	Fill of cut [203] comprising grey ash waste. Measuring 0.25 m in width.
191	Section 1	Deposit	Deposit of ash, measuring up to 0.80 m in length by up to 0.30 m in depth. Underlying [196] and overlying [186].
192	Section 1	Deposit	Deposit of grey ash, measuring 0.60 m by 0.10 m. Overlying [189].
193	Section 1	Deposit	Deposit of modern gravel used to fill in pipe cut [198].
194	Section 1	Deposit	Deposit of grey ash, measuring 1.40 m in length by 0.20 m in depth.
195	Section 1	Deposit	Fill of cut [207], comprising mixture of grey ash and silt, with some broken clay pipe inclusions. Overlying [181] and [182].
196	Section 1	Deposit	Building rubble overlying [191] , associated with modern detritus.
197	Section 1	Deposit	Building rubble associated with demolition layer.
198	Section 1	Cut	Cut of modern drain measuring 0.80 m by 0.30 m. Cuts [188] and [187] and filled by [193].
199	Section 1	Cut	Cut of Drain measuring 0.40 m by 0.30 m in depth. Filled by [189].
200	Section 1	Drain	General number assigned to ceramic drain. Fill of [206].
201	Section 1	Drain	General number assigned to ceramic drain. Fill of [198].
202	Section 1	Cut	Cut of robber trench, measuring 1 m by 0.60 m. Filled by [173].
203	Section 1	Cut	Cut of feature, measuring 0.40 m by 0.40 m. Filled by [190]
204	Section 1	Cut	Cut of feature measuring 1 m by 0.40 m. Filled by [180].
205	Section 1	Cut	Cut of brick wall [171].
206	Section 1	Cut	Cut of drain feature
207	Section 1	Drain	General number assigned to ceramic drain feature measuring 1 m by 0.40 m in width.
208	Kiln [208]		General number assigned to Kiln comprising walls [002], [023],

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			[015] and [018].
209			General number assigned to set of features associated with Room [008].
210	Kiln [210]		General number assigned to Kiln [210]
211			Room 160 ?
212			Room 161?
213	Kiln		Disturbed concrete foundations identified through machine excavation, may represent fragmentary remains of earlier structure identified on 1 st Edition OS Map.
214			Underlying layer of building debris and rubbish.
215			Pillar identified overlying area of pipes [099].

APPENDIX 3: PHOTOGRAPHIC REGISTER

Evaluation Black & White Print and Colour Slide 1

Frame	Detail	From
1-2	Registration	
3	Working shot of Trench 5	E
4	Working shot of Trench 4	E
5	General shot of Trench 3	E
6-9	General shot of Trench 6	SW
10-11	South facing section through Trench 7	S
12-13	General working shot of trench	N
14	South facing section through clay pit, Trench 8	S
15-16	West facing section through Trench 9	W
17	South facing section through Trench 10	S
18-20	North facing section through Trench 10	N
21	Shot of overburden lying within Trench 7	W
22-23	Shot of ceramic material in section of Trench 7	N
24-25	General shot of Trench 7	W
26-27	General shot of Trench 7	E
28-29	Detail of eastern part of kiln wall [003]	N
30-31	Detail of wall western of kiln wall [003]	N
32-33	General shot of kiln wall and associated features	W
34-35	Detail of wall [007]	S
36-37	General shot of Trench 7	E

Excavation Black & White Print and Colour Slide 1

Frame	Detail	From
1-2	Registration	
3-4	Detail of material underlying Kiln foundations	N
5	Working shot of Kiln base under machine excavation	E
6	Working shot of Kiln wall under excavation	NW
7	Working shot of wall [001a] and column base [003]	NE
8	North facing section of wall [001a]	N
9-10	General working shots of wall [116]	NE
11-12	South facing section through dumped demolition layer	SW
13-14	South facing section through dumped demolition layer	SE
15-16	Robber trench	S
17-18	Detail of column base [003]	W
19-20	Detail of Room [006] including features [003], [001a] and [002]	W
21-22	General shots of walls [021], [022] and [020]	W

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23-24	Detail of possible inspection pit [033] within Kiln [208]	W
25-26	Detail of Room [009] within Kiln [208] including walls [016] and [002]	E
27-28	Detail of Wall [016] inserted in to Kiln [208]	E
29-30	Detail of Room [008], built over Kilns [208] and [210]	W
31-32	Detail of square setting [066] within Room [008]	W
33-34	Detail of disused and concreted over bogey rails [067] within Room [008]	W
35-36	Detail of room/area between Kilns [208] and [035]	W

Excavation Black & White Print and Colour Slide 2

Frame	Detail	From
1-2	Registration	
3-4	Detail of a possible Machine Room [007] including walls [012], [026] and [023]; a concrete floor [007] and a machine base [071]	E
5-6	Detail of wall [012], inserted over the earlier Kilns [208] and [210]	E
7-8	Detail of Kiln [210] including inserted walls [012], [013] and [065]	E
9-10	Detail of Inspection pit [036] within Kiln [210]	E
11-12	Detail of inserted wall [037] within Kiln [210]	E
13-14	Detail of Kiln [041] including wall [044] and cut [043]	E
15-16	Detail of Kiln [041] including wall [045]	W
17-18	Detail of earlier phase of works comprising north to south aligned red brick wall [171]	E
19-20	Detail of Kiln [047]	E
21-22	Detail of Inspection Pit [049] within Kiln [047]	E
23-24	Detail of column base [056] within Corridor/area [051]	E
25-26	Detail of column base [055] within corridor/area [051]	E
27-28	Detail of surviving floor [034] within room [010]	S
29-30	Detail of wall base [052] and column base [053] within Corridor [051]	E
31-32	Detail of pillar [053] within Corridor [051]	W
33-34	Detail of wall [059] inserted within Kiln [058]	E
35-36	Detail of Inspection Pit [060] within Kiln [058]	S

Excavation Black & White Print and Colour Slide 3

Frame	Detail	From
1-2	Registration	
3-4	Detail of wall [061] inserted in to Kiln [058]	S
5-6	Detail of Inspection Pit [060] within Kiln [058]	W
7-8	Detail of Room/area [075] identified between walls [062] and [080]	E
9-10	Detail of White tiled room [076] including drain [078] and concrete floor [081]	W
11-12	General shot of possible boiler Room [085]	E
13-14	Detail of walls [086] and [088] and floor [087] and entrance [091] within Room [085]	E
15-16	Detail of entrance [094] and wall [095] within Room [085]	E
17-18	Detail of wall [096] and [098] within Room [085]	E
19-20	Detail of pipe system [099] within Room [085]	E
21-22	General shot of Kiln [100]	E
23-24	Detail of pipe base [103]	S
25-26	General shot of Room [107]	E
27-28	Detail of wall [109]	W
29-30	Detail of Corridor area [107]	E
31-32	Detail of column base [117] within Corridor [107]	E
33-34	Detail of [118] concrete base [118] within Structure [113]	E
35-36	Detail of red brick floor surface [119] within Structure [113]	E

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Excavation Black & White Print and Colour Slide 4

Frame	Detail	From
1-2	Registration	
3-4	Detail of wall foundation [032] within Structure [113]	E
5-6	General shot of concrete surface [125] to the west of Kilns [111] and [122]	N
7-8	Detail of concrete surface [125] built over deposit [129]	E
9-10	Detail of earlier phase of red brick structure [120] and wall [121]	S
11-12	Detail of wall [123] inserted in to Kiln [122]	S
13-14	General shot of concrete surface [124] identified at the base of Kiln [122]	E
15-16	Detail of feature 125	N
17-18	General view of brick wall [126]	W
19-20	Detail of wall [127] and deposit [129]	W
21-22	Detail of brick wall [128]	N
23-24	General shot of Structure [130]	W
25-26	Detail of brick wall [132] within the workshop area	S
27-28	General shot of Room [133] and overburden [135] within Boiler Room	N
29-30	Detail of brick wall [137] within workshop area	N
31-32	Detail of machine base [138] within workshop	E
33-34	General shot of drain [139] within workshop area	W
35-36	General shot of concrete structure [141] within workshop area	S

Excavation Black & White Print and Colour Slide 5

Frame	Detail	From
1-2	Registration	
3-4	General shot of structure [141] and associated overburden [135] within workshop	S
5-6	Detail of brick wall [142] within workshop	W
7-8	General shot of walls [142], [143] and [144] within workshop area	W
9-10	General shot of brick wall [140] within workshop area	W
11-12	Detail of brick wall [145] within workshop area	N
13-14	General shot of brick wall [147] within workshop area	S
15-16	Detail of concrete ramp [156] within workshop area	N
17-18	General shot of pipes [157] and [158] within workshop	E
19-20	Detail of [159]	E
21-22	Detail of brick wall [152]	E
23-24	Detail of entrance passage [149] within workshop	S
25-26	Detail of tiled floor [155] within workshop	W
27-28	Detail of brick wall base [153] within workshop	W
29-30	Detail shot of pipes [157] and [158]	NE
31-32	Detail of wall [148] within workshop	E
33-34	General view of site	N
35	General view of site	W
36	General view of site	SW

Excavation Black & White Print and Colour Slide 6

Frame	Detail	From
1-2	Registration	
3-4	General shot of site	NW
5-6	General shot of site	S
7-8	General shot of site	E
9-10	Detailed shot of pipes [157]	NE
11-12	General shot of ventilation/access points	NE

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APPENDIX 4: SMALL FINDS

Small Find	Trench	Description
Evaluation		
001	7	10 lire bag of ceramics
002	7	10 lire bag of ceramics
003	7	10 lire bag of ceramics
004	7	10 lire bag of ceramics
005	7	10 lire bag of ceramics
006	7	10 lire bag of ceramics
007	6	10 lire bag of tile
008	7	10 lire bag of ceramics
009	7	10 lire bag of ceramics
010	7	10 lire bag of ceramics
011	7	10 lire bag of ceramics
012	6	10 litre bag of clay tiles and pipes
013	7	10 litre bag of ceramics
014	6	10 litre bag of tile
015	6	Brick

Excavation

Small Find	Trench	Description
x001	148	Sample Brick
x002	046	Sample Brick
x003	unstratified	Ceramic
x004	163	Sample Brick
x005	005	Rim of storage vessel
x006	001	Bag of ceramic storage vessels
x007	001	Saga lids
x008	001	Rim
x009	001	Waster pot
x010	028	Brick

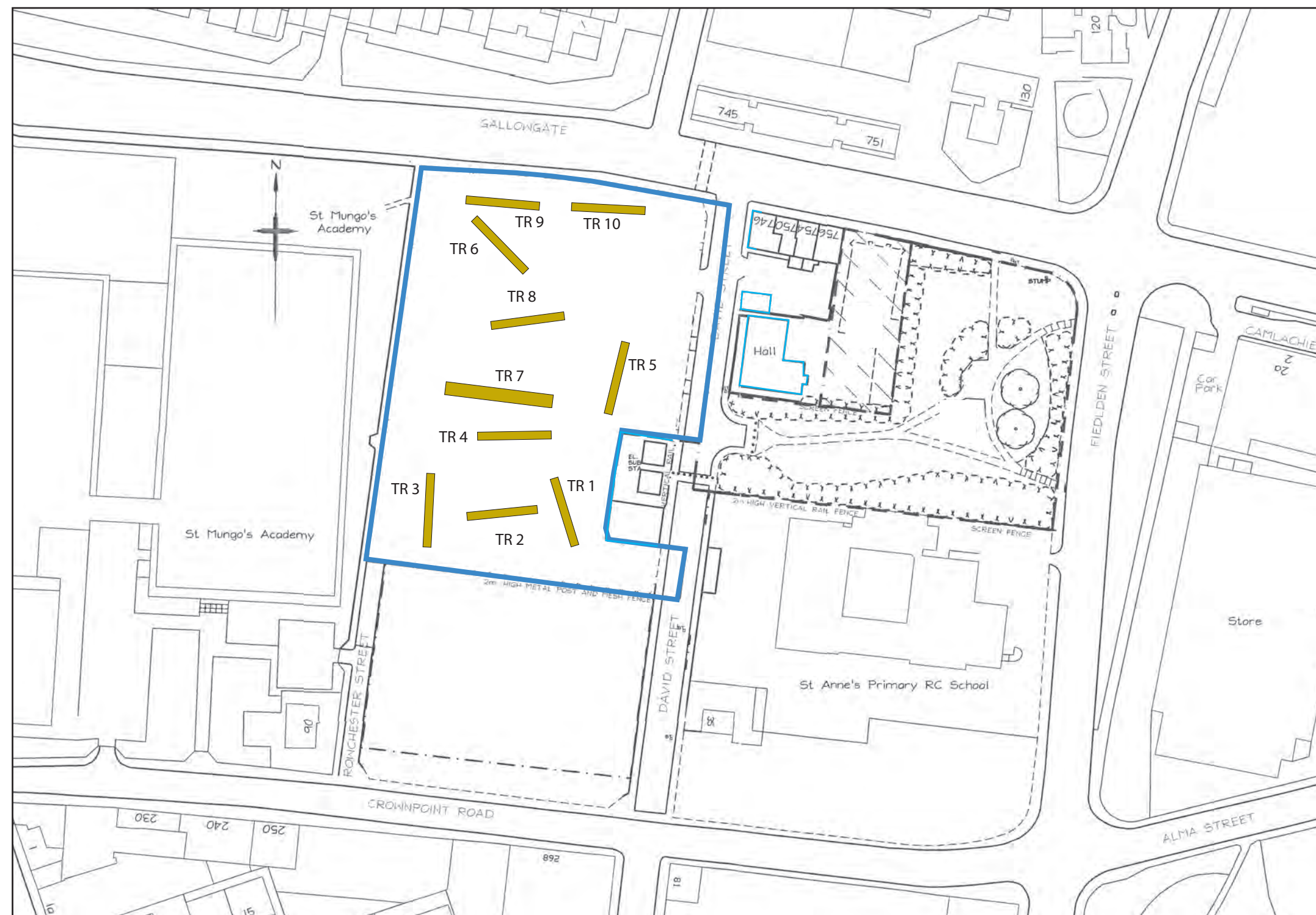
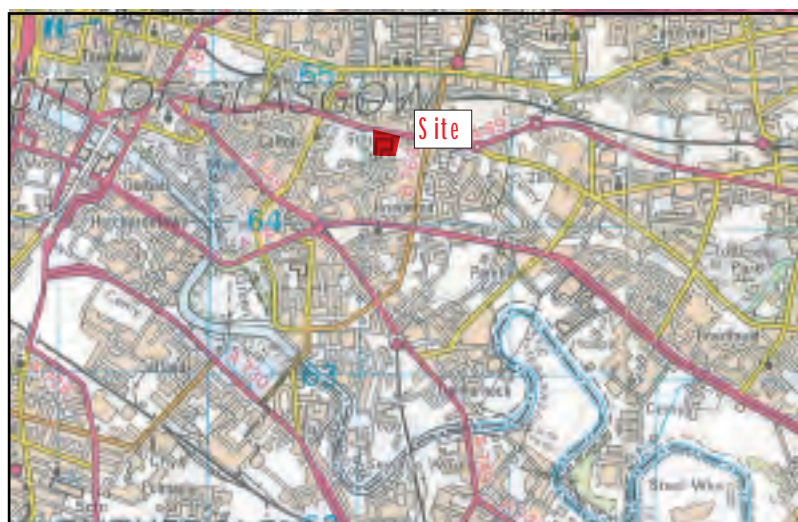
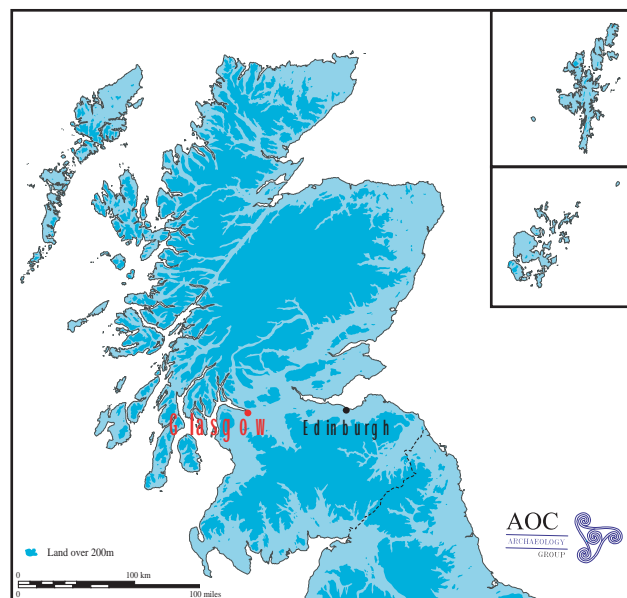
APPENDIX 5: ILLUSTRATION REGISTER

Drawing Number	Description	Scale
Evaluation		
1	Area Plan of Trench 7	1:50
2	North facing section through Trench 7	1:50
Excavation		
1	Area Plan of Excavation Part 1	1:50
2	Area Plan of Excavation Part 2	1:50
3	Area Plan of Excavation Part 3	1:50
4	Area Plan of Excavation Part 4	1:50
5	South-facing section of Overburden	1:20

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APPENDIX 6: DISCOVERY AND EXCAVATION IN SCOTLAND

LOCAL AUTHORITY:	Glasgow City Council
PROJECT TITLE/SITE NAME:	David Street
PROJECT CODE:	AOC 20338
PARISH:	Glasgow
NAME OF CONTRIBUTOR:	Martin Cook
NAME OF ORGANISATION:	AOC Archaeology Group
TYPE(S) OF PROJECT:	Archaeological Evaluation and excavation
NMRS NO(S):	None
SITE/MONUMENT TYPE(S):	Campbellfield Brick and Tile Works
SIGNIFICANT FINDS:	Ceramics
NGR (2 letters, 6 figures)	NS 6127 6448
START DATE (this season)	August 2007
END DATE (this season)	August 2007
PREVIOUS WORK (incl. DES ref.)	Evaluation
MAIN (NARRATIVE) DESCRIPTION: (May include information from other fields)	An archaeological evaluation was conducted over the site of the former Campbellfield pottery works prior to its redevelopment in relation as a residential complex, in June 2007. The evaluation identified the remains of the works and a subsequent excavation over the course of August. Evidence was recovered for a series of kiln structures, the workshops and the boiler room. A large amount of pottery was also recovered. The excavation revealed that the site has undergone various changes, developing from a small local pottery to a much larger industrial complex prior to its wholesale move to Springfield, in 1870.
PROPOSED FUTURE WORK:	To be confirmed with WoSAS
CAPTION(S) FOR ILLUSTRS:	n/a
SPONSOR OR FUNDING BODY:	Coltart Earley
ADDRESS OF MAIN CONTRIBUTOR:	C/o AOC Archaeology Group
EMAIL ADDRESS:	ronant@aocscot.co.uk
ARCHIVE LOCATION	Archive to be deposited in NMRS



- Key
- Proposed development area
 - Evaluation trench

Figure 1: Location map showing position of evaluation trenches

