UNIVERSITY OF BIRMINGHAM

birmingham archaeology

ST JOHN'S STREET
Coventry

PN 1776

Post-Excavation Assessment

VERSION NO: 1J

Project No. 1776

February 2008

St John's Street

Coventry, Excavations 2008

POST EXCAVATION ASSESSMENT

By
William Mitchell and
Kevin Colls

	Name	Position
Edited by/ Reviewed by:		
Approved by:		
	Signature:	
Version: v1h	**Version Date:** 01/04/09	
File location: *P:\PROJECTS BY NO\1700-1799\1776 St Johns Street, Excavation\05_Post Excavation\01_Reports\02_PX Assessment report*		

for
Halcrow Group Ltd
On behalf of Stoford Development Ltd
For Severn Trent Water

Birmingham Archaeology
The University of Birmingham, Edgbaston, Birmingham B15 2TT
tel: +44 (0)121 414 5513, fax: +44 (0)121 414 5516, email: bham-arch@bham.ac.uk
www.barch.bham.ac.uk/bufau

St John's Street, Coventry, Archaeological Excavation 2008
Post-Excavation Assessment

CONTENTS

Appendices

List of Tables

List of Figures

List of Plates

SUMMARY

This report provides a detailed assessment of the results of excavation, salvage recording and watching brief undertaken at the site of a former car park located between St John's Street and Much Park Street, Coventry (NGR SP 33687866), in 2008. The results have demonstrated that this represents one of the most important medieval sites to have been excavated in Coventry and is of national significance.

Whilst the earliest phase of activity at the site dates to the 12th-13th century, more intensive activity occurred during the 13th-14th century. The features identified were primarily large pits which varied considerably in their form and presumably function. A deliberate and regulated construction programme was introduced in the 14th-15th century. This was defined by the regularisation of plot boundaries, numerous pit cutting events and the construction of stone building foundations. The 15th-16th century saw a dramatic increase in the level of activity across the site. The pits were located in long rows orientated east to west, in an arranged layout consistent with plots running back from Much Park Street. During the 16th-17th century there was a reduction in the frequency of pit cutting across the site. The same trend can be observed during the later post medieval and 19th and 20th century period with far fewer intrusive features were identified.

Medieval evidence provides a rare insight into the development of Coventry highlighting its role in craft production, trade and industry. A highly important and varied artefactual assemblage has been recovered from the excavations including pottery, CBM, metalworking waste, animal bone, textiles, palaeoenvironmental evidence, wood, glass, clay pipe and a large quantity of small finds, including artefacts and material types which are of national importance. Specialist assessments of the artefactual evidence have demonstrated the great potential that this assemblage has to enhance our understanding of the site and the history of the City of Coventry.

Full analysis and research would undoubtedly and would provide evidence relating to the development of the City and its place and status within England in the medieval period. The results from the combined historic, cartographic, archaeological and artefactual resources can be used to provide an extensive and detailed picture of Coventry's medieval plots and the activities contained within, including the structures and backplots. The successive lack of major development on the site had preserved an area of medieval Coventry which in other more developed towns and cities would otherwise have been lost.

1 INTRODUCTION

1.1 Background to the Project

1.1.1 This report provides a detailed post-excavation assessment of the results of excavations undertaken at the site of a former car park located between St John's Street and Much Park Street, Coventry (NGR SP 33687866), in 2008 (Fig. 1), hereafter referred to as 'the site'. The report includes assessment of archaeological findings, including structures and features recorded and environmental and artefactual evidence recovered. An updated project design is given alongside a publication outline, with details of further work necessary for completion. The structure of the report is based on guidelines provided by English Heritage (1991; 2006a).

1.1.2 The work was commissioned by the Halcrow Group Ltd on behalf of Stoford Developments Ltd. The work was required as a condition of planning consent by Coventry City Council Development Directorate in advance of the construction of an office development with basement car parking on the site. This requirement was in accordance with Planning Policy Guidance note 16, *Archaeology and Planning* (DoE 1990) and the Coventry City Council Development Plan Built Environment Policy (BE: 15). The site was subject to an archaeological desk-based assessment carried out by Worcestershire Historic Environment and Archaeology Service in 2007 (Rogers 2007a). Following this, an evaluation was carried out in November 2007, again by Worcestershire Historic Environment and Archaeology Service (Phear 2007b). Significant archaeological remains were confirmed within the site which would be adversely affected by the proposed development. As a result, the Coventry City Archaeologist requested a staged programme of archaeological excavation, salvage recording and watching brief to be undertaken ahead of, and during the construction of the proposed basement car park.

1.1.3 The first stage of open area excavation was undertaken within the footprint of the proposed basement car park between May and August

2008 (Fig. 2). This conformed to a brief set out by Coventry City Council (Patrick 2007) and a Written Scheme of Investigation (Halcrow 2008) which was approved in advance by the Coventry City Council Development Directorate and was in accordance with the *Standard and Guidance for Archaeological Excavation* (IFA 2001). This excavation was undertaken in various phases which reflected the logistical restrictions, topography and stratigraphy of the site.

1.1.4 The second stage of fieldwork, in the form of salvage recording, was undertaken during October 2008, in the northeastern corner of the proposed building within an area of the access route to the basement car park (Fig. 10). This consisted of a archaeological strip, map and record strategy and conformed to the brief and Written Scheme of Investigation outlined above. It was undertaken in two stages, the first was a recording exercise undertaken within the piling guide wall trench, and the second was in the area of reduced ground within the area of the basement car park.

1.1.5 The third and final stage of fieldwork was a watching brief undertaken in the area proposed as a ground level car park in November 2008 (Fig. 10). The overburden in this area was reduced down to the natural ground into which archaeological features had been cut. The area was then recorded in plan. A representative sample of this area was recorded, although, much had been lost due to later truncation and modern disturbance. The un-phased and preliminary results of the salvage recording and watching brief elements are briefly outlined in this report and will be amalgamated with the results of the open area excavation within the forthcoming final publication. Preliminary results suggest that features which were recorded within the open area excavation continued into the salvage recording and watching brief areas. The surviving structural features from within the northeastern corner of the previous excavation were again identified and there were further pit features situated within the backyard plots.

1.2 Location and Geology

1.2.1 The area of archaeological investigation was located to the south of the city centre on a former dual level car park. It was bounded to the north and west by St John's Street, to the south by the stretch of the inner ring road (Ringway St John's) and to the east by Much Park Street. The car park was divided by a retaining wall between a lower level and a higher level, these levels reflected the past usage of the site, as in the later history of the site a building had occupied this lower level.

1.2.2 The underlying geology consists of Upper Carboniferous red brown mudstone and sandstone with subordinate lenticular conglomerates and thin limestone's of the Keresley member (British Geological Survey, 1994). The underlying subsoil was reached at a depth of >1m, it sloped gradually from west to east.

2 HISTORICAL AND ARCHAEOLOGICAL OVERVIEW

2.1 General Background

2.1.1 The background of the site has been summarised in an archaeological desk-based assessment prepared by Worcestershire Historic Environment and Archaeology Service (Rogers 2007a).

2.1.2 Limited Prehistoric and Roman activity of a transitory nature has been recorded in the area of Coventry city centre, but no settlement dating to these periods has been identified.

2.1.3 There is very little documentary evidence prior to 1043 when Leofric, Earl of Mercia, founded a monastery, later the Priory of St. Mary's. There was probably already a decent sized settlement here at this time, although little is known about the nature of it (Demidowicz 2003, 9). By the time of the Domesday survey in 1086, 60 households were recorded for Coventry, although they may not all have been within what is now the city (Rogers 2007a).

2.1.4 By the 12th century the town that grew up around the Benedictine priory (which had by then become Coventry's first cathedral) had

gained considerable commercial importance. Coventry's wealth, gained from trading in the high-quality wool from Warwickshire flocks, attracted other religious orders, including the Franciscans in the 13th century and the Carmelites and Carthusians in the 14th century. By this time, the church dominated life in the city, and remains of all the monastic houses can be seen above ground today (Soden 2005, 51-98).

2.1.5 Despite the whole city having been granted to the Earls of Chester in 1088, the priory was claiming roughly half of Coventry as its own by 1113. The city was supposedly divided into two, from this time, with what became known as the Prior's Half lying to the north (excluding the castle), and the Earl's Half to the south. Within the city the two halves were divided, according to Earl Hugh (II)'s charter to the priory of c.1161–1175, by a line running east to west across the city. Both halves extended beyond the area later contained by the city walls. Growth on the southern edge of town was limited in this early period by the Earl's manor, Cheylesmore Park. The site lay within the park, south of the boundary. It was only when this boundary was discarded in the mid 13th century that Much Park Street and Little Park Street became usable thoroughfares. Much Park Street became a major route out of the city towards London and it developed accordingly (Rogers 2007a).

2.1.6 Coventry's riches were founded on the cloth trade, which was flourishing by the 14th century (Soden 2005, 143-147) and at this time, the city was the fourth largest in the country (Demidowicz 2003, 11-13). Other industries such as ceramics, glazing and metalworking thrived in this period. Much Park Street developed in the 14th century and substantial timber houses built upon stone footings replaced existing buildings. The excavation area is located at the centre of the part of the city where the cloth manufacturers, metalworkers and merchants may have lived and worked. These buildings were likely to house a mix of industrial and domestic activity (Rogers 2007a).

2.1.7 The Dissolution of the Monasteries in the 1540's and the decline in the wool trade seen during the 16th century caused economic stagnation in the city until long after the Civil War. It was not until the early 19th century that the city saw real economic growth again. The population

rose as new industries such as silk weaving and watch making emerged. There was pressure on land outside of the city boundaries and there was growth of the use of back tenement blocks encouraging the construction of 'court' style housing. The lack of growth during the early post-medieval period has been a factor in the survival of a large number of standing medieval buildings within the city, along with the good survival of below ground archaeology (Demidowicz 2003, 13-14). The manufacturing industry of Coventry meant that it was a target during the Second World War and much of the fabric of the city centre was destroyed during bombing raids of 1940 and 1941. The area of St John's Street and Much Park Street avoided much damage and retained the medieval street line. The Post-war reconstruction and redevelopment, completely altered the nature of the site and of Coventry as a whole (Rogers 2007a).

2.2 Cartographic Evidence

2.2.1 In common with the rest of the city, the main cartographic evidence for the excavation area is as follows:

- 1610 John Speed
- 1656 Dugdale (from J. Speed)
- 1748 Samuel Bradford
- 1807 Thomas Sharp
- 1851 Board of Health (1:528)
- 1888 Ordnance Survey 1st edition (1:500 and 1:2500)
- 1906 Ordnance Survey 1st edition revision (1:2500)
- 1913-14 Ordnance Survey 2nd edition (1:2500)
- 1921 Auction Plan (George Loveitt & Sons)
- 1937 Ordnance Survey 3rd edition (1:2500)
- 1950 Ordnance Survey (1:500)
- 1955 Ordnance Survey (1:2500)
- 1963 Ordnance Survey (1:2500)
- 1977 Ordnance Survey (1:2500)

2.2.2 John Speed's map of 1610 provides the earliest representation of the centre of Coventry. It shows Much Park Street, St John's Street and Little Park Street extensively built up on both sides. The street frontages are lined with long buildings and there are occasional structures situated within the expansive backplots. Plot boundaries and regular rows of trees (perhaps representing orchards) are also depicted. The site itself was situated within the area of these 17th century backplots. An outbuilding is present in the northeastern corner and within the backplots there are linear boundaries running east to west.

2.2.3 Samual Bradford's map of 1748, shows subtle developments of the site, with the street frontage buildings shown extending into the backplots, but with gardens and outbuildings still prominent, perhaps reflecting the wealth of this area of town. The regular burgage plot divisions are clearly visible and there are considerably more buildings within the backplots, in the northeastern corner of the site area in particular. In the northeast of the site is an area labelled as Tenter Close. The regular rows depicted within the backplots at various positions may be representations of the 'tenter racks' required for the processing of cloth.

2.2.4 The first detailed and accurate map representation is the 1852 Board of Health map. This shows the development of the buildings in the area and also the reorganisation of the backplot area. Within the northern part of the site a group of buildings are shown aligned north to south, separate from the frontages, but attached by lengthy boundary walls. These buildings are present on all of the later maps up until the 1950's and it can be argued that they are also present on the preceding maps, albeit in a stylised form. The extant Greyhound Pub and Greyhound Yard are labelled, the backs of which run into the excavation area. Within the southern part of site, formerly comprised of strips of individual plots, a large area of landscaped gardens/ open parkland, covered by occasional trees is depicted. The picture that this map presents is one of prosperity, but it is perhaps a over simplified. By the time of the first Ordnance Survey map in 1888 this landscaped area appears to have reverted back to the earlier plot divisions, and much of the site area is reoccupied by buildings and yards.

2.2.5 The Ordnance Survey maps of the 19th and 20th centuries show major reorganisation and development of the site, a trend mirrored across the city. A timber yard is present in the southern part of site and some larger buildings were constructed upon the open land. The tenement blocks show increased redevelopment and alteration and they become known as 'Courts'. A large building marked as the Ribbon Dye Works appears on the early 20th Century Ordnance Survey map editions. This building was situated north of the excavation area but was later extended to cover a large portion of the former timber yard. Many of the tenement buildings are labelled as being in ruin by the time of the 1950's Ordnance Survey map and they have all been cleared for the layout of the car park by the 1950's Ordnance Survey map.

2.2.6 The structural evidence identified in the archaeological excavation is confirmed in the cartographic evidence, and while there are discrepancies in the locations and layouts, clear comparisons can be made. Building matches are confirmed across the site and dates of construction can be attributed to certain buildings, by comparison with the cartographic sources. The structures identified on the southern side of site are attributed to the Ribbon Dye Works. This can be identified as having been constructed in two phases. The first of these was during the period between 1888 and 1906 and the second phase of construction was between 1921 and 1937, this is the phase identified in the archaeological evidence.

2.2.7 The rectangular building foundations identified to the south of the Ribbon Dye works can be dated cartographically between 1852 and 1888. The stone built foundations identified in the northeastern corner of site are likely to date from the 15th century. There are buildings present in this area on the 1610 and 1748 maps and they can be clearly identified on all of the maps from the 1852 edition until the 1950's whereupon they were demolished. This map regression exercise has been used alongside the stratigraphic evidence to inform the phasing of the site.

2.3 Archaeological Background

2.3.1 No archaeological work had taken place on the St John's and Much Park Street backplots prior to the current development projects. There

have however, been several relevant projects undertaken in the immediate vicinity.

2.3.2 Three archaeological excavations carried out between 1970 and 1974, (Wright 1982) exposed the medieval street frontages, and illustrated a pattern of development in the 12th and 13th centuries characterised by small-scale metalworking and non-intensive, though increasing domestic occupation (Rogers 2007a). Particular evidence included features such as bowl hearths and quenching pits (7-10 Much Park Street), and a smithy with hearths (122-3 Much Park Street). Several phases of construction and clearance were evident and were broadly in similar across the three sites. All three sites produced evidence of timber structures in the early period but it was not until the 13th century that more substantial buildings appeared. The 14th century saw the clearance and rebuilding of existing buildings and occupations and the establishment of the first substantial buildings: timber houses on stone foundations (Wright 1982). The use of these buildings continued throughout the 15th to 18th centuries, upon which there was further intensive rebuilding within this area of the city.

2.3.3 An archaeological evaluation was carried out on the development site in November 2007 by Worcestershire Historic Environment and Archaeology Service (Phear 2007b). Five trenches were excavated sampling approximately 3.2% of the site. Archaeological deposits dating from the 14th to 17th centuries were present in all five trenches. Widespread evidence of occupation and industrial activity in the form of metalworking was identified across the site. The predominant medieval features were pits, postholes linear features and sandstone foundations.

2.3.4 Significant archaeological remains were recorded within the site which would be affected by the proposed development. Subsequently the Coventry City Archaeologist specified that a programme of archaeological excavation and salvage recording was carried out in advance of the proposed development (Griffin, 2008).

3 AIMS AND OBJECTIVES OF THE INVESTIGATIONS

3.1 The principal aims of the investigations were:

1. To recover as much data as possible pertaining to the origins, chronology, development, phasing, spatial organisation, character, function, status, significance and the nature of social, economic and industrial activities on site.
2. To examine, excavate and preserve by record all archaeological features, deposits and structures within the area and to assess their potential for analysis and to produce a report, archive and publication.
3. To enhance our understanding of life in Coventry during the transitional period of the 16th and 17th centuries.

3.2 More specific objectives were:

4. To enhance our understanding of land use prior to the creation of Much Park Street and Little Park Street.
5. To explore the chronological and spatial development of the tenements along Much Park Street, particularly the rear western boundary.
6. To establish what activities may have been undertaken in the back lands along Much Park Street, specifically industrial or manufacturing activities such as metal working and cloth manufacture, in the medieval and post-medieval periods.
7. To use environmental sampling to provide information on the past environment of Much Park Street and the lifestyles of its past populations.
8. To provide comparative material to contribute to our understanding of the site within the city as a whole. This will be possible through the examination of environmental and other data from other locally excavated sites and available documentary sources.
9. To place the site in context, both within a regional setting and in terms of its national significance.
10. To allow access to the results to the people of Coventry and the wider public through publication and presentation.

4 METHODOLOGY

4.1 The main area of open-excavation was located within the footprint of the basement car park. These excavations were completed in several phases. Tarmac, topsoil and modern overburden were removed by a 360 degree mechanical excavator using a toothless ditching bucket. The initial machining removed modern surfaces and overburden to the uppermost archaeological horizon. Subsequent cleaning, excavation, and recording continued by hand. Once completed, and with approval from the City Planning Archaeologist, a second phase of machining was then undertaken to remove this upper stratigraphy and strip the site to the natural geology in order to identify and record further archaeological activity. The systematic process of recording then followed.

4.2 All stages of work were undertaken in consultation with the Planning Archaeologist, and conformed to a detailed methodology as set out in the form of a Written Scheme of Investigation (Griffins 2008).

4.3 The following sampling strategy for hand excavation was employed during the excavation:

- Floors, structural elements, hearths, ovens, kilns and furnaces were fully excavated.

- All pits and postholes of 18th century or earlier date were half-sectioned. Where the pit was discrete or where the contents had a specialist waste function it was fully excavated. Full excavation also took place if a pit group contained obvious primary deposits of pottery or where a pit sealed underlying deposits.

- Ditches, gullies and other linear features of 18th century or earlier date were sampled at regular intervals. Sampling amounted to not less than 20% by length.

- Stone-built wells were excavated to a maximum depth of 2m in order to find a construction date and a date for disuse.

4.4 All stratigraphic sequences were recorded, even where no archaeology was present. Features were planned at a scale of 1:50, and sections were drawn through all cut features and significant vertical stratigraphy at a scale of 1:10 or 1:20. All plans and sections were surveyed in using an EDM which was located into the Ordnance Survey base mapping. 3D locations of special finds and spot heights were also recorded using this method. A comprehensive written record was maintained using a continuous numbered context system on pro-forma context and feature cards. Written records and scale plans were supplemented by monochrome, colour slide and digital photography.

4.5 Finds were cleaned, marked and remedial conservation work was undertaken as necessary. Treatment of all finds conformed to guidance contained within *'A strategy for the care and investigation of finds'* published by English Heritage (English Heritage 1995).

4.6 The salvage recording area was located to the east of the main area of open excavation, in the area of the access route to the basement car park. For the salvage recording element all pits and post holes were quarter sectioned and recorded in plan only. Ditches, gullies, surfaces, floors and structural elements were recorded in plan only.

4.7 Within the salvage recording area the tarmac, topsoil and modern overburden was removed to the first archaeological horizon, whereupon exposed features were plotted and sample excavated. Much of this archaeological work consisted of recording the continuation of walls and features identified in the open area excavation phase.

4.8 The watching brief element required a standard strategy as outlined by the Institute of Field Archaeologists (IFA 2001). It was located to the northwest of the main area of open-excavation in the area proposed as a ground level car park or open courtyard.

4.9 The full site archive includes all artefactual and/or ecofactual remains recovered from the site. The site archive will be prepared according to guidelines set down by the Archaeological Archives Forum,

Archaeological Archives; a guide to best practice in creation, compilation, transfer and curation (Brown 2007), Appendix 3 of the *Management of Archaeology Projects* (English Heritage 1991), the *Guidelines for the Preparation of Excavation Archives for Long-term Storage* (Walker 1990) and *Standards in the Museum Care of Archaeological collections* (Museum and Art Galleries Commission 1992). The archive will be deposited with a suitable museum (subject to permission from the landowner)

4.10 Dateable deposits were sampled where they were thought to have environmental potential. The environmental sampling was directed towards discrete, well-dated pits containing animal bone and/or pottery, or where environmental evidence could provide clues to function.

4.11 Birmingham Archaeology consulted with the Planning Archaeologist for Coventry City Council via the Archaeological Consultant during the excavation to ensure an appropriate environmental strategy was in place. An environmental specialist was available to provide advice on a dedicated strategy, once a range of features had been exposed. Lisa Moffett, the Regional Archaeological Science Advisor for English Heritage, also visited the site. The environmental sampling policy followed the guidelines contained in the Birmingham Archaeology Guide to On-Site Environmental Sampling and the '*Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation'* (English Heritage 2002).

4.12 It was therefore agreed that 20-40 litre soil samples, or 100% of the contents of features which did not hold that amount, were collected from datable and well-defined features. Features were sampled in order to ensure that representative material was collected for the full range of biological remains. Samples suitable for radiocarbon dating were collected.

5 RESULTS

5.1 Introduction

5.1.1 The phasing used in this report is informed by spot dating of the pottery from the site and subsequent data collected through the assessment. Stratigraphic matrices have been created and used to define the overall site phasing and to highlight any obvious residual finds. A full list of contexts and spot-dates is provided in Appendix 1.

5.1.2 The phases are based on the chronological distinctions observable from initial spot dating of the pottery and artefactual material, map regression information and stratigraphic relationships. The nature of the site, with large areas of densely inter-cutting pits, deliberately backfilled in a succession of episodes, indicates there is a high potential for instances of residual finds. Further pottery analysis, together with analysis of other finds assemblages, environmental and metallurgical data from the site may, however, provide a sharper resolution for the phases of activity here, and in addition provide detail regarding the functions of features and associated activities. Presently, the function of the majority of the pits remains speculative at best, but with further analysis and comparative studies a clearer picture may present itself. A general discussion of the nature of these features is included below.

5.1.3 The natural geology, consisting of mixed red sandy clay was identified across the excavation area. This natural ground was not uniform across the site. Towards the western side of site sandy geology was more prevalent; this became more clayey towards the north and east. The underlying sandstone bedrock was encountered in the base of several pits across the site. The natural ground was revealed at approximately 83.5m AOD across the site, gradually sloping towards the northeast to 83m AOD, roughly 2-2.5m below modern ground level.

5.1.4 The site can be separated into two distinct parts. The northern part of site was characterised by stone constructed building foundations, arranged in regularly spaced plot divisions. These buildings appear to have been constructed in the 14th to 15th centuries and occupied until the 19th centuries, albeit in a much altered form. The southern part of site was characterised by extensive cutting into the natural geology in the form of, pits, postholes and ditches. This would have been the area of backplots behind the tenement buildings. There was also evidence of a levelling layer in the southwestern area of site into which the same type of feature were cut. This layer appeared to have occurred over a short space of time during the 15th and 16th century perhaps as a deliberate attempt to cover and fill previous extensive activities. Again, general plot divisions were evident in this southern area of site, which can be interpreted from the arrangements of pits and boundary ditches.

5.2 Summary of Phases

5.2.1 The archaeological activity across the site has been divided into eight phases, with each being summarised, in chronological order, below. These phases are:

- Phase 0: Pre-medieval
- Phase 1: 12th to 13th century
- Phase 2: 13th to 14th century
- Phase 3: 14th to 15th century
- Phase 4: 15th to 16th century
- Phase 5a: 16th to 17th century
- Phase 5b: post 1550
- Phase 6: 17th to 19th century
- Phase 7: 19th to 20th century

5.3 Phase 0- Pre-medieval

Description

5.3.1 One flake of worked flint was found within the fill (2572) of a 13th-14th century pit 2570. This provides residual evidence of flint usage, usually associated with the prehistoric period, this may not necessarily originate from site but may derive from an imported soil.

5.3.2 Residual evidence of Anglo-Saxon occupation was present in the backfill of two separate features. Two sherds, present in the fill (1870) of ditch 1846 and the backfill (2473) of structure 2328, represent further confirmation, albeit inconsequential, of the presence of Anglo-Saxon occupation within the area of Coventry.

5.4 Phase 1- 12th to 13th century (Fig. 4)

Summary

5.4.1 The earliest phase of archaeological activity was during the 12th-13th century. Few features were identified and no definitive structural remains were encountered but there was possible evidence for foundation trenches or beam slots.

Description

5.4.2 During this early period there appears to have been very little surviving activity. Six main features were exposed cutting the natural geology, these were pits, foundation trenches or beam slots (1133, 1245, 2173, 2470, 2563 and 2529; Figs. 4 and 8). The purpose of these features was unclear, two of these however (2470, 2563), situated in the north eastern corner of site, were thin shallow linear features with squared corners and may have been foundation trenches or beam slots. Only one of the features (2529) was of any significant size. Within the northeastern corner of site were the truncated remains of layers possibly originating from open land cultivation.

5.4.3 There appeared to have been no organised pattern of layout, perhaps suggesting the site was not laid out in any formalised fashion at this period, there was also no firm evidence of structural features. The documentary sources suggest that the site was within the boundaries

of Cheylesmore Park during this period and this would explain the low density of intrusive features. The apparent lack of features may also be attributed to the frequency of later activity.

5.5 Phase 2- 13th to 14th century (Fig. 4)

Summary

5.5.1 Evidence for increased activity was apparent across the site with the greatest concentration located at the northeastern corner. The features identified were primarily large pits which varied considerably in their form and probably function, ranging from circular or ovoid to rectangular in plan. Approximately 17 pits are firmly datable to this phase, many of these were non-discrete and they had later intrusions cutting them (Fig. 4).

Description

5.5.2 These pits are representative of the pits encountered in the later phases. Each pit would have served a unique purpose, many of which shall never be identified, so generalisations have been made by looking at patterns in morphology, location and the nature of fill deposit. Known and likely primary purposes of these pits include; storage (some of the pits contained abandoned storage pots), retting or tanning (some pits showed evidence of lining) or test quarry pits (for the purpose of investigating the quality of the underlying geology for the intended extraction of raw materials). There must also have been a large percentage of the pits for which their primary purposes were latrines, or rubbish/ cess disposal. The majority of pits were filled with homogenous material and often with re-deposited natural. There were frequently inclusions of ceramics, animal bone and demolition materials (including tile and slate). There was clear evidence of rapid and gradual filling events rather than the slow silting of open pits. The deliberate backfilling of many of the pits confirms their use as repositories for rubbish, allowing for the fact that this may have been their secondary purpose.

5.5.3 These pit features were widely distributed but the greatest concentration was in the northeastern corner of site. It is possible that many of the features relating to these early phases were truncated by the extensive pit cutting activity on site during the 14th to 16th centuries. In the northeastern corner of site, earlier activity was preserved beneath the construction of the buildings, this may represent the sort of activity taking place elsewhere on site, which was later lost.

5.5.4 Several pits (1251, 1400 (Fig. 8), 1407, 2035, 2150, 2240, 2301, 2305, 2418, 2492 and 2570) were circular or ovoid in shape and there was no definitive evidence of their purpose. The same can be said of the more rectangular or square shaped pits (1462, 1509, 1745, 1746 and 2517). These pits contained a variety of homogenous fills containing animal bone, ceramics and building materials such as slate and tile. Each of these pits had cut through the natural geology. The basal fills of one of the pits (2570) contained organic and greenish cess like deposits and was likely to have been a cess waste pit.

5.5.5 To the west of this pit towards the far northeastern corner of site was small square, stone-lined pit (cess pit A, within plot/ building group C). By comparison of the similar later structures it is likely that this was originally a square stone lined cess pit which predated the main phase of building construction on site. This cess pit (2582) was partially obscured by the construction of one of the plot boundary walls (2359) and therefore predated the main building construction phase. Of the five cess pits present on site, it was the furthest east. The fill (2585) was dated to the 13th-14th century.

5.5.6 Two of the pits showed evidence of contemporary re-cutting. Both pits 2035 and 2301 had their form altered during this period. There was also a regular rectangular pit (1462), which may have had a deliberate industrial function and a shallow linear cut feature (1509) which may have been a foundation trench or beam slot.

5.6 Phase 3- 14th to 15th century (Fig. 4)

Summary

5.6.1 The two distinct areas of activity are identifiable during this phase (Fig. 4). There appears to have been a deliberate and regulated building programme evident in the form of laid out plot divisions defined by ditches and walls. Within these plots, buildings were constructed and pit cutting activities were undertaken on an organised scale and increased frequency. The northeastern area of site was occupied by the foundations of several well preserved buildings and the southern area of site contained numerous pits and evidence of boundary ditches defining the plot boundaries. Evidence of activity appeared to have been formally regulated and laid out during this phase and this confirms the known historical information for Coventry which suggests this period was one of prosperity and urban growth. A minimum of 35 pits were identified from this period, of which several had been significantly re-cut. Rectangular, circular and irregularly shaped pits were all cut during this period.

Pits

5.6.2 The distribution of pits became more concentrated during this phase; these pits began to appear in regular concentrations and rows within the newly conceived plot divisions. Some of these pits were densely inter-cutting and there was increasing re-cutting of these. The homogenous nature of the pits suggests that sucessive reworking of the pits probably occurred over a relatively short periods of time.

5.6.3 Situated along the southern edge of site were a row of sub-square and circular pits (1128, 1202, 1367 and 1871), each was relatively shallow being 0.25-0.4 in depth and their dimensions in plan ranged between 1.8 and 2.7m and they may have primarily been used for use in industrial processes. These pits appeared to show gradual silting episodes and greenish deposits towards in the basal fills perhaps suggestive of linings or later reuse for cess.

5.6.4 There was a concentration of pits in the northeast of site, situated to the south and west of the buildings. These pits (2108, 2174, 2178, 2186, 2193, 2218, 2225, 2230, 2242, 2251, 2252, 2277, 2296, 2319,

2326, 2327, 2328, 2329, 2384, 2408, 2431, 2442, 2513, 2520 and 2524) ranged in shape and dimensions, and all were filled with homogonous deposits. Two areas in particular showed evidence of excessive re-cutting events, which become the common feature of the later 15th to 16th century phase.

5.6.5 Situated among this conglomeration of pits in the northeastern part of site was a small, shallow pit 2176, filled with a dark black charcoal filled deposit. Within this fill was the upper half of a broken jet crucifix decorated with a carved figure of Jesus (Plate 13). It was likely to have been a personal possession, perhaps obtained on a pilgrimage. The lack of any other artefactual evidence from within this pit is significant, perhaps indicating the deliberate deposition after breakage of this treasured possession. No ceramic evidence was available from this pit but due to its location and similarity to its surrounding features it has been placed within this 14th to 15th century phase.

Ditches

5.6.6 Two ditches (1063, 1553 and 1880/1846) spot-dated to this phase of activity were identified. Each were preserved to a length of 20m, orientated east to west and were shallow u-shaped features. The pits of this period were situated either side of these ditches showing regulated patterns of activity. Two further, undated and less substantial ditches (1053 and 1196), also orientated east to west, were identified in this southern area of site. Each of these ditches appeared to be approximately spaced at 5 metre (16 feet) intervals. Although no datable artefacts were recovered, these ditches are likely to date to this phase, due to their comparative nature.

5.6.7 The other plots on the site may have been marked by more ephemeral boundaries such as small banks, fence lines or path ways which would have left little or no physical traces. The lack of boundary markers in some areas may also be explained by the fact these plots were not necessarily regularly spaced. Some of the plots may have been larger and incorporated into neighbouring plots.

5.6.8 All the boundary ditches were aligned east to west, many of the pits also had this orientation, this is the orientation expected for plots between Much Park and Little Park streets which was further west. The distances between the measurable plot boundaries were all similar and were on average 16+ feet across (or 1 perch (16 feet six inches) in medieval dimensions).

Sandstone Structures (Plate 5)

5.6.9 The northeastern area of site was characterised by a series of well preserved stone building foundations and associated structures (2359, 2360, 2361). These buildings lie within the area of more intensive activity identified in phase 2. The foundations represent a range of buildings/ burgage tenements, separated by boundary walls, which extended back from plot numbers 119-121 from the original Much Park Street frontage. Three separate plots/ buildings could be recognised; these remained on the same east to west orientation and were again spaced just over 16 feet apart, conforming to the regular plot boundaries identified elsewhere. Ceramics taken from directly beneath the foundations suggest a construction date between the 14th to 15th centuries. They were constructed upon earlier medieval occupation layers, cultivation deposits and cut features, including large pits . None of these underlying features were datable to later than the 15th century.

5.6.10 The arrangements of the foundations roughly reflect the layout of buildings identified in the later mapping evidence. The cartographic evidence suggests that these buildings survived, albeit in a significantly altered form, well into the 20th century. They are present on the first accurate and complete map representation on the 1852 Board of Health map and still exist on the 1950 3 inch Ordnance Survey map. It was clear that the extant 19th century Greyhound Pub was constructed upon the same plot divisions held throughout the medieval period. The rear wall was on a similar alignment to that of one of the 14th-15th century walls found in the northeastern corner of the excavation (Plate 7).

5.6.11 The stone walls exposed on site represent the basal foundations of the buildings which were likely to have been timber framed in their construction. They were composed of locally quarried rough-cut red sandstone blocks, laid irregularly to form a platform upon which a course of chamfered and faced blocks would have sat. Several of these chamfered blocks were recovered from the rubble, none however, remained *in situ*. The timber base beam which would have supported the timber frame would have been placed upon these. The average block size was 0.5m x 0.3m x 0.25m, they were dry stone bedded and randomly coursed.

5.6.12 The layout of the buildings was identified as having the main structures situated along one side of the plot and a walkway situated along the opposing side. There were stone built cess pits both within the buildings and attached to the back of these properties, these represented three phases of cess pits. Two lengthy boundary walls were also attached to the rear of these properties probably superseding insubstantial property boundaries, like those encountered elsewhere on site. These buildings, although not clear, can be split into three defined plots and are illustrated on Figure 11 and described below.

Plot/ building group A

5.6.13 Plot/ building group A consisted of two main east to west walls situated approximately 3m apart (2589 and 2590) and surviving to a depth of 0.5m and a western north to south wall (2361). This latter wall appeared to be shared by plot B (and possibly even plot C) suggesting that this was the furthermost western wall of the plots leading back from Much Park Street. There was also fragmentary evidence of an eastern north to west wall within this plot (2591). A further sub-rectangular sunken stone structure (2328) was identified within this plot outside of the main buildings, the purpose of building is conjectural, but it could have been a small outbuilding (Plate 8).

Plot/ building group B

5.6.14 There was a greater survival of structures and structural elements within plot/ building group B. Including the boundary wall along its

southern edge (2592), the structures survived to a length of 20m. The main western external north to west wall survived as a continuation of 2361 from plot/ building group A, as did an eastern north-west wall (2593), this may have had a doorway on its northeastern edge. These two walls may have made up the external walls to a building. There was also fragmentary evidence for an internal stairwell contained within (2405). Southern boundary wall 2592 was partially masked by a later rebuild across most of its length (2311). Along the northern boundary there was evidence of a walkway with a possible doorway at both the eastern and the western end which led out through the north to south shared external wall. There was evidence of a stone lined drain (2342) running along the southern edge of the walkway, this led out through the westernmost wall and out into a rubble sump. A further stone lined drain (2414) was attached the westernmost wall, this may have been for use with a down-pipe. There were two cess pits within this plot; cess pits C and D, one of these appeared to be outside of the main buildings (cess pit D).

Plot/ building group C

5.6.15 Plot/ building group C was very similar in layout and structure to plot B. Again there was a long southern boundary wall (2359i) which survived to a length of 20m. There were two truncated north to south walls one of which (2359ii) may have again been the westernmost external wall of the buildings. There were three cess pits within this plot, cess pits A, B and E, cess pit E was outside of the main properties. West of the main construction was a circular stone lined well (2399), probably contemporary with the main construction, it had been abandoned and filled in during the 18th-19th century. Like plot B Along the northern side there was evidence of a walkway with a possible doorway on the eastern side.

5.6.16 No obvious purposes for these buildings can be defined and it is likely that they assumed both domestic and industrial status. Given their location and proximity to the cess pits they could have originally been reserved for workshops and privy outhouses. No floor surfaces survived as only the very base foundations were represented, and therefore no further information about what activities could have

occupied these buildings was available. An element of status could be observed in construction of these buildings. Plot C had a well constructed faced stone boundary wall, which would have required a significant amount of investment. The scale of the stone built cess pits and the quality of the stone lined well also suggests a statement of wealth. These may also reflect a necessity for communally built water and waste structures.

The cess pits

5.6.17 At the far end of these plots, presumably well away from the main residences along Much Park Street, were five well built, square stone structures, the largest of which was 3m x 3m and 2m+ in depth. The base of these pits was natural clay. There was no surviving evidence of clay or timber linings but these may have once existed. It is a possibility that these structures may have had different primary industrial uses, such as liquid storage for use in quenching, material or leather processing. However, they had certainly all been used as cess pits, as all of these structures had had clear decomposed cess deposits which had accumulated at their bases. Once they were filled to their maximum capacity, there was an attempt to seal and backfill them with demolition material, whereupon they went out of use, and in some cases another was built in their place. The sequence of cess deposits, between the surviving cess pits, suggests these were likely to have had a limited lifespan. Due to the similarities in surviving deposits, the sequence of use and abandonment and comparative similarity with structures of a similar nature on other sites (Schofield and Vince 2003, 82-83), these structures have been classified as cess pits.

5.6.18 These cess pits appear to have been constructed and used in successive phases, beginning in the 13th to 14th century, and terminating in the late 16th century. According to Schofield and Vince *'..stone privies of the thirteenth and fourteenth centuries were commonly towards the edges of properties often deep within them'* and these *'..stone privies often replaced timber predecessors in the same locations (as is demonstrated on several London sites)'* (Schofield and Vince 2003, 82-83). The first and earliest of the five cess pits was the

furthest east of these structures (cess pit A: Phase 2). The later cess pits were then appeared to have been systematically constructed in a westerly direction (cess pits B and C- Phase 3, cess pits D and E- Phase 5b), at the back of the properties, presumably when their predecessors had gone out of use.

5.6.19 The anaerobic conditions of the cess pits (in particular cess pits C and E) had preserved artefacts composed of organic material otherwise not present across the site. These included wood, leather and fabric and represented an exceptional collection of material from well dated. It is reasonable to assume that the fill of the cess pits can give a clear indication of its chronology, that is, unless the cess pits were not cleared out at various intervals.

5.6.20 Two of these cess pits appeared to date to this primary construction phase. Cess Pits B (2391, plot/ building group C) and C (2403, plot/building group B) were located within the main building blocks. They had been built into the main walls and were probably constructed contemporarily. The backfills of both cess pit B and C were dated to the mid 14th to 15th century. Within the fills of cess pit C (2477, 2490, 2491, 2496, 2497, 2508 and 2509) there were various finds ranging from cottage industries to personal possessions, bone button blanks, a spindle whorl and wooden bowl were all recovered.

5.7 **Phase 4- 15th to 16th century** (Fig. 5)

Summary

5.7.1 The 15th-16th century saw a dramatic increase in the level of activity, in particular pit cutting across the site (Fig. 5). The archaeological horizons were characterised by many substantial inter-cutting pits with homogenous fills rich in discarded material, typically including ceramics, animal bone, worked bone, metalwork, organic deposits and demolition materials such as tile. There were clusters of inter-cutting pits and groups of discrete pits of a similar size and shape which may have had a similar use, some very large deep pits with clearly defined waste disposal layers, and other smaller indistinct pits. Possible

functions of these pits included storage, test quarry pits, tanning pits, waste pits, post-hole pits and pits providing other industrial functions. One large pit was confirmed as being an open cast quarry pit with contemporary access ramp. There were over 100 distinct pits provisionally dated to this phase.

Description

5.7.2 The pits were located in long rows oriented east to west, in an arranged layout consistent with plots running back from Much Park Street. This suggests pits were excavated within defined boundaries determined by ownership (Pryor 2007, 197). Approximately four discrete plots could be identified using this method. Some of these pits however, crossed where there were supposed boundaries, perhaps indicating a more fluid arrangement of plots, later division, amalgamation or abandonment. These alterations occurred during the 15th to 16th century phase when there was a significant upsurge in pit cutting activity. The pits were of various types and were set in inter-cutting clusters and groups of discrete pits. Some of these had cut existing plot boundaries which presumably meant that these boundaries were no longer used, became less significant or their form was changed. Plots could also be identified by the distribution of material, in one plot in particular there was a high concentration of dumped metalworking waste including forging hearth bottoms and hammerscales, suggesting forging was undertaken within the buildings of this plot.

5.7.3 The archaeological evidence suggests that this period was likely to have been the most economically prosperous for the residents of Coventry and the historical information confirms this assumption. This prosperity continued the trend begun in the preceding phase. No new plot boundaries were constructed during this phase.

5.7.4 The lines of pits suggest a deliberate layout alongside existing or newly created boundaries. Some of these pits however, (1206 (Fig. 7), 1230, 1349, 1548 and 1553) were dug over existing plot boundaries (ditches). This presumably meant that these boundaries were no longer used, or became less significant. The type of boundary may also

have changed, becoming a more subtle boundary such as a fence (Pryor 2007, 197).

Levelling Layer

5.7.5 There was evidence of a levelling layer in the southwestern area of site into which the same types of feature were cut. Features both within and beneath this layer were datable to the 15th to 16th century, suggesting this layer was introduced over a short space of time, perhaps as a deliberate attempt to cover and fill previous extensive activities.

Pits (Plates 2 & 3)

5.7.6 The majority of pits from this, and the preceding phase, were subject to a high degree of re-cutting, obscuring their original forms in plan, however, a number of distinctive pits were excavated where their form was clear and less disturbed by truncation. These pits may have greater potential to contribute to the understanding of the types of activities on the site, and it may be possible to discern a specific function for these features, other than for refuse disposal.

Quarry Pit

5.7.7 Towards the southern edge of site was a large rectangular open cast quarry pit (1922) approximately 8m x 4m x 2m in plan orientated, east to west (Plate 6). Cut into one end of the pit was a contemporary access ramp, which was presumably used for removal of materials during its construction. The pit was cut through the natural mixed sand and clay, down to the level of bedrock. This sandstone bedrock was utilised as building material and there was evidence that this had been deliberately quarried. There was evidence of tool marks on the bedrock where the stone had been chiselled away and removed in blocks. The overlying deposits may also have been used as for building materials, such as hardcore.

5.7.8 The backfill of the pit (1921 and 2086-2088) confirmed the sequence of excavation and abandonment events. The pit had been excavated and, once removed, the natural material was stacked on one side, then, shovelled back in. This material was unmixed confirming the

quarry pit did not remain open for a long period. Provisional dating suggests it was cut in the 14th to 15th century and filled in the 15th century.

5.7.9 Another potential quarry pit was identified in the southeastern corner of site (2053). The full extent of this pit was obscured by later layers and features but it appeared to be of the same dimensions and date. It was located within the same plot on an east to west alignment.

Test Quarry Pits

5.7.10 A number of the pits were potentially used to survey the quality of the underlying bedrock, and provide an educated guess for the best place for quarrying. A group of discrete, sub-square, straight sided pits (1938, 1947, 1981, 1982 and 2057) were identified towards the southeast corner of site. In view of the uniformity of these pits and their homogenous backfills these pits may have been test quarry pits where the natural ground had been reduced down to the level of the bedrock, in order to inspect the quality of the underlying stone in preparation for quarrying.

Storage Pits

5.7.11 The preservation of organic material across site was limited, due to the ground conditions, and therefore very few of the pits provided unequivocal evidence of the material used to line the pits. Such lining material would have served to waterproof and preserve the productivity and longevity of the pit and is generally madde up of wood or clay. Pits could then have been used for the storage of liquid, or for industrial processes such as retting, tanning or dying etc. One of the pits in particular (1902) appeared to have the fragmentary remains of a greenish clay lining, which may have been stained as a result of the presence of organic or chemical material within this pit (Fig. 7). Several other pits had evidence of green staining within them, further analysis and comparison of these pits may provide a clearer interpretation of these features.

5.7.12 One of the smaller regularly cut pits (1821) contained the remains of two large, almost complete, storage jars. These jars, although disturbed, may have been broken *in situ* perhaps suggesting that this

was a storage pit for holding large ceramic vessels, their situation in the ground would have kept the contents (now lost) cool and well protected (Plate 4).

Tanning pits

5.7.13 The conditions for preservation of organic material was generally very poor across the site which meant that direct evidence for the use of pits for tanning did not survive. However, several of the pits were of a similar shape and dimensions (trapezoidal, rectangular) and may have been used for leather processing. A group of pits in particular (1086, 1263, 2010, 2249) situated within the central part of site were very similar in form. These were trapezoidal in shape, with a stepped section on one side which may have been used for access. Each pit was between 1.8m and 2.7m in length and between 0.2m and 0.4m in depth. These relatively shallow pits would have been of a type suitable for tanning.

Waste Pits

5.7.14 The secondary use for the overwhelming majority of these pits was for the disposal of waste materials and products. The pits of this phase showed the most alteration in terms of re-cutting events, and in some cases the re-cutting had created a mixed conglomeration on un-definable pits. The waste materials from within these pits revealed clues to the processes undertaken nearby and a detailed quantification would provide a clear picture of what processes and industries were being undertaken within each plot. The high concentration of forging waste recovered from the pit fills (pits;1206, 1347, 1349, 1644 and 2104) of one particular plot suggested small scale forging industries present in the immediate area. Hearth bottom slags, ferrous and non-ferrous slags and hammerscales were the bi-products of these processes, no primary evidence was exposed.

5.7.15 All of the pits contained domestic refuse waste and demolition material. Animal bones, ceramics, cess deposits and tiles featured heavily within the fills of these pits and they were present in large quantities during this period. The amounts of demolition material, in

particular, ceramic and slate tiles, suggest that this was a period of major reconstruction and development.

'Tenter' post-hole/ pits

5.7.16 As mentioned above, the sources agree that cloth manufacturing was a contributor to Coventry's wealth during the medieval period and it seems feasible that much of the available land would have been given over to accommodate the features needed for processing this cloth. Pits for dying the materials in may have been necessary, as would the posts necessary for the 'tenter' racks. Tenter racks are present in the immediate locality in the later 18th century map evidence and it is reasonable to suggest this remained largely unchanged. Some of the pits and post-holes identified on site may relate to this cloth processing function. Several thin and moderately shallow pit features (1473, 1616, 1675 and 2212) may have held posts. Each was rounded at either end, which may have where the posts were set, the middle section being the location of a stabilising horizontal beam. One of the pits (2212) had a readily identifiable post-hole set into the end of it (2220).

5.8 Phase 5a- 16th to 17th century (Fig. 5)

Summary

5.8.1 During the 16th to 17th century there was a reduction in the frequency of pit cutting. The pits were widely distributed across the entire site, again in a random fashion, although they were largely absent from the northeastern part of site. There were over 16 discrete pits belonging to this phase (Fig. 5). Clearly, during this period, the function of the plots changed from being heavily worked for industrial use or refuse disposal to being infrequently used for pitting. Many factors may play a part in this such as regulated waste disposal, change of ownership or function, or social factors such as the Dissolution.

Pits

5.8.2 Two of the pits from this period (1079; Fig. 7, and 1805) were very large and distinct from any other pits of the period. Both were cut to a

depth of over 1.5m and were filled with homogenous deposits and a high frequency of artefacts such as ceramics and animal bone. No definitive purpose could be assigned to these features. The remainder of the pits were indistinct and did not present any conclusive purpose.

Post-hole alignment

5.8.3 Towards the southern edge of the site were a series of post-holes (1011, 1013, 1015, 1105 and 1107) arranged in a line and equally spaced. The outline of a rotted square post set into a red clay packing was present in several of these post-holes. These post-holes were on the line of 14th to 15th century ditch (1880), but constructed during the 16th to 17th century. This suggests the later reconstruction of a plot boundary. It may also be evidence of an adjustment in the type of boundary used, being that of a fence rather than ditch.

5.9 Phase 5b- post 1550 (Fig. 5)

Pits

5.9.1 Only one, small oval pit (1017) was securely dated to the later 16th century. This pit was shallow and cut by a later post-hole.

Cess pits D and E

5.9.2 As mentioned above, two of the cess pits (D and E) appeared to have been constructed (or filled) considerably later than that of the other cess pits.

5.9.3 Cess pits D (2402, plot/ building group B) and E (2338, plot/ building group C) were the furthest west and largest of the five cess pits encountered on site. They were situated outside of the main external walls which formed the western limit of the buildings. Cess pit E (Fig. 9, Plate 8) revealed a clear picture of its usage through the distribution of deposits and finds. The deposits (2309, 2310, 2388, 2432, 2433, 2458-2464, 2489 and 2510) were primarily composed of layers of cess, deliberately sealed by demolition deposits and were dateable to the 15th to 16th century. The distribution of finds within these layers and the structural evidence suggests that it had two means by which it

could be accessed, each designed for a different purpose. On the eastern side of the cess pit there was a small sloping chute, this may have been the side dedicated for the disposal of organic domestic waste such as food scraps. At this end of the cess pit there was a large quantity of complete or nearly complete pottery vessels and pewter spoons perhaps having been accidentally dropped during the disposal of food scraps (Plates 12 & 13). There was a beam slot set into the north wall which may suggest a timber construction to support a privy was built on the opposite western side. The artefactual evidence from within the fills of this pit, including leatherwork, metal and wood objects displayed the types of cottage industries and personal artefacts that would have occurred within this plot at this period. There was also a large quantity of metal wire waste which may suggest wire drawing taking place in the immediate vicinity.

5.9.4 The best preserved cess pit 2338 (cess pit E) survived to a depth of 3.6m (at least 15 courses) and was constructed directly upon solid clay (Plate 8). This construction was typical of the stone lined cess pits identified on site. The scale of this particular cess pit may suggest it was used communally. The pit was large enough to have an area of waste for a significant group of people and its size and quality suggest it would have required a considerable investment to construct. There was also evidence that it may have been larger as there was no solidly constructed wall on the southern edge, suggesting the original southern wall had lain beneath the reconstructed main wall (2359).

5.10 Phase 6- 17th to 19th century (Fig. 5)

Summary

5.10.1 During the 17th to 19th centuries there were far fewer intrusive features and there was clearer evidence for a renewed building programme. The historic mapping shows several groups of buildings dating to the 18th, 19th and 20th centuries but complete examples of these buildings was not forthcoming. The most complete and extensive later post-medieval building was that of Ribbon Dye works of which the majority of the ground floor brick surface was identified.

Pits

5.10.2 Very few of the pits were datable to these later periods, only four clearly defined pits were present (1027, 1039, 2065 and 2339). Each was relatively small being just over 1m in size and they were randomly scattered across site. The purpose of these pits was not clear, and they had been filled with a mixture of demolition material and domestic waste, like that of the earlier pits.

5.10.3 One of these pits (2339) was located against the main north to south orientated wall (2361). There was fragmentary evidence of a stone lining, but much had however, been truncated. There was evidence of deposit staining on the west facing elevation and it is possible that this was once a stone lined waste pit, constructed against the wall. The basal fill of this pit contained a large assemblage of clay pipes, a relatively complete pipkin and scalloped dish.

Post-medieval structures

5.10.4 Extensive evidence of structures dating to the 18th, 19th and 20th century periods was not forthcoming. The historic mapping shows several groups of buildings within the site area, mainly extending from the street frontages along Much Park Street. Increased construction is apparent on the maps of 1748 until the 1950s, but these buildings had been scoured-out. There appears to have been thorough demolition and removal of many of these buildings, perhaps in the period preceding the construction of the car park. The structures which had survived were of a very fragmentary nature.

5.10.5 A long section of wall of mixed construction (1266) was situated towards the eastern edge of site. The structure probably represents several phases of walling, which had become truncated. It was constructed of brick, sandstone and crushed brick and concrete foundations, and was primarily orientated north to south. The overall length of the structure was 16m, but it was interrupted or truncated in several places. It is likely that these are the foundations of buildings which had been redeveloped over a long period, and it may represent part of the western external wall of the large building situated within the timber yard first identified in the 1888 Ordnance Survey map.

5.11 Phase 7- 19th to 20th century (Fig. 6)

The Ribbon Dye works (Plate 10)

5.11.1 The Ribbon Dye works is known from cartographic and historical sources to have been constructed in the late 1800's and occupied until the 1950's before being demolished (See 3.3). The cartographic evidence reveals the Ribbon Dye works was constructed in two phases. The first of these was during the period between 1888 and 1906 and the second phase, which consisted of significant building extensions, was between 1921 and 1937. This is the phase identified in the archaeology. Evidence of the machines used in the processing and dying of ribbons were preserved in the archaeology, and the internal layout of part of the ground floor could be identified.

5.11.2 The ceramic evidence from the levelling layers in the northeast of site confirms a date of the second half of the 19th century for the reorganisation of the buildings in this area and levelling consistent with a construction phase. This is the period when the site was prepared for the construction of the Ribbon Dye Works.

5.11.3 The ground floor surface, external walls, and pillar foundation pads of this building were exposed (Fig. 6), these lay directly beneath the modern tarmac car park surface. The floor surface (1080) was made up of machine-cut, unfrogged 9 x 4¼ x 3 inch engineering bricks set within in a cement based mortar in a stretcher bond. It covered an area of 29m x 11m and extended beneath the excavation edge on its northern and western sides. The brickwork was orientated in a several different directions, probably reflecting the internal arrangement of the building. There was also evidence of machine bases, as there were regularly spaced holes and ware-marks in the brickwork where the machines would have been positioned. These machines are likely to have performed functions related to the manufacturing of dyed ribbon and there was also limited evidence of dye staining in the mortar of the brickwork. Wooden room partitions, iron rails and drainage channels were also set into the floor surface. The ceiling of this building was likely to have been supported by regularly spaced columns (1756), the bases of which were identified, situated in three rows orientated east to west within the building. These pillar bases appeared to have

spanned the northern and southern edges and the central line of the exposed building. They were evident as both crushed brick/concrete foundation pads and as negative features where these foundations had been removed. The insertion of these had truncated the underlying medieval archaeology. The location of removed features identified in the floor surface gave a clear indication of the arrangement and function of the building. It is likely that the space was arranged into at least three separate areas within which various processes related to the processing and dying of ribbon were undertaken.

5.11.4 One large expanse of external walling was identified on the southeastern side of this building. This wall (1768) was constructed of machine-cut, unfrogged, 9 x 4 ¼ x 3 ½ inch red bricks set in a cement based mortar, orientated northeast to southwest. The foundations of the wall were of a crushed brick and concrete bedding type like that of the pillar bases. This wall was present on the cartographic sources of 1921 onwards.

5.11.5 A further contemporary structure was situated to the southeast of the floor surfaces. This small truncated square structure (1057) was composed of machine-cut, unfrogged orange bricks set within a cement based mortar in a stretcher bond. The structure was 4m x 2m and a brick surface (1056) filled the interior space. This small structure may represent an outbuilding associated with the Ribbon Dye works. Further remains of the Ribbon Dye works were expected to be preserved beneath the northern and western areas of extant tarmac, as the building appeared to have only been demolished down to foundation level.

Buildings south of the Ribbon Dye works

5.11.6 The foundations of a building, or buildings, were exposed to the south of the Ribbon Dye Works along the southern edge of the excavation area. These buildings had been demolished down to their foundation bases and they had been constructed upon a significant amount of post-medieval levelling material.

5.11.7 The foundations were constructed of crushed brick and concrete, the overlying brickwork was severely truncated and only remained on a

couple of stretches of wall. The bricks used were of a machine-cut unfrogged 9 x 4 ¾ x 2 ½ inch type.

5.11.8 The buildings were 12.5m in length by 5.5m in width overall and they appeared to make up two distinct buildings or rooms. The rectangular foundations of a building (1046) made up the western side of this group of structures, these were 4m in length and 5.5m in width. To the east of these were foundations (1047, 1049 and 1050) laid on the same east-west axis, these covered a further 8.5m in length. Adjacent to these were two substantial crushed brick and concrete machine bases (1048, 1051). The presence of these suggests that these buildings were used for light industrial purposes.

5.11.9 The construction of these buildings can be dated cartographically between 1852 and 1888 when the surrounding area was a timber yard. It is possible that these buildings served some related purpose.

5.12 The Salvage Recording and Watching Brief Areas

5.12.1 This section of the report remains unrelated to the main phasing of site, this will be done at a later stage when all of the in formation can be collated. The features identified within these salvage recording and watching brief areas are, as yet, undated. There is an ongoing process of spot dating, but comparative analysis of the dated structures identified in the northeastern corner of the open area excavation, would suggest a date of construction for the main structures around the 14th to 15th century. A gradual process of upgrade and rebuilding would have followed. The features identified in the watching brief area followed the pattern of cutting identified in the main excavation area. This confirmed the notion that the features identified within the watching brief area were a continuation of the features identified in the main open area excavation.

The salvage recording area (Plate 11)

5.12.2 Situated within the northeastern corner of the site was an area defined as the salvage recording area. This area was recorded using an archaeological strip map and sampling strategy and it was undertaken in two stages, the first was undertaken within the piling guide wall

trench, the second was in the area of reduced ground within the site of the proposed basement car park.

5.12.3 Many of the features had been truncated by later developments, particularly underground services such as pipe trenches. Some of these were continuations to those identified in the main excavation area. This phase of archaeological recording represented the area closest to Much Park street and the area most likely to contain preserved structures.

5.12.4 This area contained a series of walls orientated northeast to southwest (100, 101, 102, 104, 105, 112 and 118) a number of which had L-shaped returns. This suggested that some of these walls may have been internal or main property walls. The walls were composed of rough-cut red sandstone wall foundations which survived to only one or two courses. Some (100, 112) had been partially rebuilt using handmade 2" red bricks with roof tiles used as levelling materials.

5.12.5 Some of these walls were continuations of the property boundary walls identified in the main excavation area. Wall 112 was a continuation of wall 2406, and it is clear that the arrangement of regularly spaced burgage plots noted elsewhere was repeated in this area.

5.12.6 A stone-lined well (103) and two truncated stone-lined cess pits (116 and 129) were present. The method and materials of construction and backfill were closely matched to that of the other well and stone-lined cess pits identified in the excavation and it is likely that they were contemporarily built. These cess pits in particular, are an accurate comparative control measure for the dating of the structures identified in this area.

5.12.7 The well (103) was constructed using squared red sandstone blocks, bonded randomly within a loose sandy mortar, and packed within a re-deposited natural clay. It was filled during the later part of the 19th century with demolition rubble including brick, tile and crushed mortar. An attempt had been made to seal the well, either with organic material or timber planking, which had since degraded leaving a large void beneath the rubble packing. The date of filling may suggest that the well stayed in operation for some years.

5.12.8 The cess pits (116 and 129) were likely to have been square or rectangular in their construction and very similar to those identified

elsewhere on site. They were constructed using rough-cut red sandstone blocks set into a re-deposited natural clay. Limited excavation of the backfill was undertaken, but the upper fills (130 and 117) of each were composed of mixed silt and demolition rubbles including high quantities of roof tiles. These backfill deposits were identical to the upper fills of the various other cess pits present on site, suggesting a deliberate and defined method of sealing and filling abandoned cess pits. The lower fills were waterlogged deposits again similar to those found elsewhere on site.

5.12.9 Further contemporary structures were identified, these included a small area of a truncated cobble floor surface (133) and a possible fireplace ash pit (110). Both of these features confirmed internal and external layouts of the surviving building foundations.

The watching brief area

5.12.10 Situated within the northwestern corner of site within the part of site proposed for the underground car park was an area defined as the watching brief area (Fig. 10).

5.12.11 The use of the land as an area for extensive pit cutting was again present. All of the features were aligned east to west within the area previously identified as the backplots.

5.12.12 A total of 28 pits were identified (162, 164, 166, 168, 170, 172, 174, 176, 178, 180, 182, 184, 186, 188, 190, 505, 508, 510, 513, 515, 517, 519, 521, 523, 525, 528, 530 and 532) these were predominantly irregularly shaped, others were more regularly shaped being either circular or sub-rectangular. There was a certain amount of inter-cutting which obscured the form of some of these features and further features were present, however the methodology employed did not require full excavation of these features, so areas which appeared to have been layers may have been further pits.

5.12.13 There was one possible ditch feature (503), only part of which survived. This was orientated east to west and may represent a plot boundary ditch of which several others were identified on site.

5.12.14 Some of the pits were very similar in size and shape and were located close to one another. Pits 162 and 164, 176, 182 and 184, 519 and

525 were examples of these. These pits were also regularly aligned, along a east to west orientation, like those identified across the rest of the site.

5.12.15 Preliminary spot dating suggests these pits were contemporary with those encountered elsewhere on site and dated from the later medieval to post-medieval period. Similar finds were identified from within the fills of these pits, pottery, animal bone, slag, and tile was all present in numerous quantities. The purposes of these pits were presumably similar to those elsewhere on site.

6 THE FINDS

6.1 Summary

6.1.1 The finds from St John's Street represent one of the largest and well-stratified groups of material culture recovered from the city of Coventry. The material forms one of the most important collections of finds pertaining to the city, its development, growth and character from the 12th century and into the post medieval period. The group needs to be examined in relation to other sites in the city (specifically for example, ecclesiastical objects at Whitefriars and the Priory of St Mary (eg Woodfield 2005; Rylatt and Mason 2003) and the very similar mixed industrial and domestic assemblage recovered at Much Park Street (Wright 1987), Priory Street (Halstead 2008 and Bayley Lane (Colls and Hancox 2008).

6.1.2 The following section provides an assessment of each material groups and outlines further work necessary for the successful completion of the project. The group includes a diverse range of well preserved and hugely informative material culture with the potential to shed light on social, industrial and ecclesiastical aspects of life in the medieval and post medieval city. As a result of the presence of waterlogged deposits, the group also includes objects such as wooden bowls, textile and leather, all rare finds in Coventry. A further major strength of the assemblage is its relationship with the site. Many of the small finds and the ceramics have been locationally recorded on-site giving us the

opportunity to really examine the spatial and chronological distribution of the evidence.

6.2 Pottery assessment by Stephanie Rátkai

6.2.1 An extensive assemblage of pottery was assessed, consisting of some 4309 sherds, dating from the post-Roman period up to the 19th century. The pottery from each context was quickly scanned and grouped into known fabric types, where possible (Appendix 2). Unusual medieval fabrics were classed as 'miscellaneous medieval'. Oxidised wares of the 15th-16th centuries were categorised as late medieval oxidised wares. Most of the post-medieval pottery consisted of blackware, yellow ware and coarseware. Other post-medieval wares such as mottled ware, white salt-glazed stoneware etc were categorised as 'miscellaneous post-medieval'. Pottery of the 19th and 20th centuries was categorised as 'miscellaneous modern'.

Post-Roman to pre-Conquest

6.2.2 Two probable early to middle Saxon sherds were found residually in fill 1870 of ditch 1846 and in 2328 (fill of pit 2473). Such early material is rare in Coventry, although a small number of Roman sherds were recently found on Priory Street (Halstead 2008).

6.2.3 Despite documentary evidence for late Saxon occupation in Coventry, artefactual evidence for this period is also poorly represented. In Warwick, late Saxon occupation is characterised by the presence of St Neots ware, oolitic limestone tempered ware and Stamford ware (eg Brook Street, Rátkai 1992). At St John's Street oolitic limestone tempered ware was found residually in one feature, pit 1086. Likewise a possible Stamford ware sherd was found residually in one feature, pit 2418. No St Neots ware was identified. As both Stamford ware and oolitic limestone tempered ware continued to be made after the Conquest, and as St Neots ware was absent, it seems most likely that there was no late Saxon occupation in this area.

Post-Conquest

6.2.4 The earliest medieval pottery consisted of shelly ware, Coventry ware cooking pot, Coventry tripod pitcher ware and Coventry glazed ware. Shelly wares are notoriously difficult to source but Northamptonshire is probably the most likely. Blinkhorn (1996) remarked on the presence of Coventry ware in Brackley, Northamptonshire, which he thought may well have been connected with the wool trade. If such contact existed, it is more than likely that pottery from this area of Northamptonshire found its way to Coventry, although there was also at least one sherd which appeared to be from Lyveden Stannion in the north of the county. The Coventry wares and the shelly wares seem largely to pre-date the mid 13th century in Coventry.

6.2.5 Most of the earlier post-Conquest pottery was found residually. There were some exceptions; layer 2358, pits 1133, 1245, 2173, 2361, 2368/2348, 2470, 2563, 2569 and drain 1636 only contained Coventry wares and/or shelly ware. Although these features are relatively few in number there is sufficient pottery overall (i.e. including the residual material) to suggest that there was definitely occupation here in the early 13th century and very probably in the 12th century.

6.2.6 The next ceramic horizon is represented by sandy whitewares. These seem to first become available around the middle of the 13th century. Many, if not the majority, of these whitewares were made at Chilvers Coton but it is important to be aware that there are potentially other sources for some of the whitewares found in Coventry (Rátkai 2008). Chilvers Coton whiteware (Chilvers Coton A and Ai, Mayes and Scott 1984) is dated to c 1250 to c 1325. However, it is by no means clear that the A fabrics ceased to be produced after c 1325. Whitewares made in south Staffordshire (eg Rátkai 2004) appear to be in use throughout the 14th century and by the 15th century Tudor Green copies in a finely sandy white fabric were made at Chilvers Coton. There is therefore a case to be made for continued whiteware production at Chilvers Coton after 1325, even if the greater proportion of the output was in the Chilvers Coton C fabric. Some further evidence to support this is provided by what appears to be a base of a chafing dish (a form which in the West Midlands post-dates the 14th century)

in a Chilvers Coton A fabric. The vessel was found in the fill of pit 1864.

6.2.7 Chilvers Coton A was found in most medieval contexts, from which it can be inferred that domestic occupation and industrial activity began to expand after c 1250. The majority of the whitewares were found residually but some features contained only whitewares, and these date to c 1250-1300. Instances of Coventry wares and/or shelly wares being found with whitewares are few, unless they are all residual in much later contexts. Chilvers Coton B, which has a general 13th century date, was noted but was very uncommon.

6.2.8 A third ceramic horizon was provided by Chilvers Coton C ware, which had its *floruit* in the 14th and 15th centuries. The ware was very common, far more so than the more local Cannon Park ware (later 13th-14th centuries). The end of the medieval period is marked by the use of wheel-thrown red and orange wares with tan, brown or purplish-brown glazes. Some of these may have been made at Chilvers Coton, some may be more local to Coventry and some may derive from Wednesbury, Staffordshire, which was an important potting area in the late medieval and post-medieval periods.

Later medieval to early post-medieval

6.2.9 Two very distinctive wares which occur in the later medieval and early post-medieval period are Tudor Green/Tudor Green-type ware and cistercian ware. The former date from about the mid 14th to the 15th. Tudor Green ware was first made on the Surrey-Hampshire border. These wares could be traded quite long distances but were also copied more locally. Tudor Green-type ware is known from Chilvers Coton (Mayes and Scott 1984). It is quite possible that these wares were in use in Coventry by the late 14th century. However, at St John's Street, they have been dated to the 15th c because they generally seem to be found with material that looks 15th or later, although careful curation of the Tudor Green vessels may mean that they had a longer lifespan before discard. It is noticeable that very rarely do Tudor Green and cistercian ware occur together, so there seems to be reasonable grounds to suggest that, by and large, cistercian ware replaces Tudor

Green. This also seemed to be true at Sandford Street, Lichfield (Rátkai 2004).

6.2.10 Cistercian ware was first made sometime in final quarter of 15th century. It continued to be popular until about the middle of the 16th century when it had probably largely been replaced by blackware but it is possible that some continued to be made in the second half of the 16th century. Blackwares were certainly very much in evidence at Hales School at the Whitefriars, Coventry (Woodfield 1981) which was in use c 1545 to 1557/8.

6.2.11 Other late 15th or 16th century wares were represented in the assemblage. Of the Rhenish stonewares, of which there are quite a few, all but one appears to be Siegburg and are associated with the early 16th century. The exception is a drinking jug decorated with with oak leaves, acorns and portrait medallions, from cess pit 2338. This is a Cologne piece and should belong to c 1525-1550. The rim of the vessel was worn from having had a metal mount, so it may have been 'treasured' or 'curated' for a while before deposition. There is a large collection of later Rhenish stonewares in Coventry's Shelton collection, so their absence at St John's Street is probably significant. There are also some Martincamp flask sherds, a north French import. These are Type I and should belong to the 1475-1550 period.

Post-medieval and modern

6.2.12 Pottery dating from the mid- or later 16th century onwards such as blackware and yellow ware was very much less common and material of the 17th, 18th and 19th centuries forms a very small percentage of the whole assemblage. Wares dating to the 17th and 18th centuries are coarseware, mottled ware, white salt-glazed stoneware, creamware, tin-glazed earthenware, brown salt-glazed stoneware, slip-decorated ware and slip-coated ware. Late 18th to early 19th century pearlware sherds were noted along with 19th century industrial slipware (e.g. Mocha ware) and transfer–printed wares. Late 19th century or early 20th century stoneware flagons and ginger beer bottles, probably associated with the Greyhound public house were found in (1889) and (1890).

Pottery sources

6.2.13 During the medieval period pottery supply was mainly local, focussing on Coventry itself or on Chilvers Coton. Exceptions were shelly ware (Northamptonshire), oolitic limestone tempered ware (Cotswolds) and Stamford ware (Lincolnshire). In addition, sherds in Deritend ware and reduced Deritend ware (Birmingham), Boarstall-Brill ware (Buckinghamshire) and possibly Grimston ware (Norfolk) and Worcester glazed ware were noted. Sherds from Potterspury (Northamptonshire) and possibly Nettlebed (Oxfordshire) were also present.

6.2.14 Continental imports dated mainly from the early post-medieval period. Rhenish stonewares and Martincamp flasks were present. The former are comparatively rare on West Midland's sites and the numerous examples from St John's Street are testament to the wealth and trading contacts of Coventry. A possible sherd of *cuerda seca* from Spain was noted in 2087, a fill of quarry pit 1922. Other links to the Mediterranean were provided by a possible Spanish or Italian maiolica from the fill of pit 1085 and a sherd with a pale turquoise alkali glaze from the fill of pit 1579.

Quality of the assemblage

6.2.15 The pottery was generally in good condition with a good proportion being made up of large sherds, substantial sections of pots or complete vessels. There is, therefore, every chance that many of the groups are primary depositions. This corresponds to the provisional site interpretation that many of the pits were backfilled quickly once they had gone out of use. Several complete or near complete vessels were recovered from the stone-lined cess pits (Plates 12 and 13, 2338 and 2408). A complete, small earthen ware drinking jug (Small Find 209) had its contents (probably cess) removed for analysis. The contents of four other vessels dating to the 15th or 16th centuries were also sampled (Small Finds 45, 208, 294, 291).

Cross joins

6.2.16 Even during a relatively swift scan of the pottery, several cross-joins (ie sherds from the same vessel found in different contexts/features) were apparent. Examples that were noted linked pit 2503 and pit 2418, pit 1572 and pit 1202, pit 1813 and pit 1572, and pit 2197 with pit 2275, although it was clear that there were many further examples which it was not possible to record at the assessment stage.

Statement of recommendations

6.2.16 Despite substantial numbers of archaeological interventions in Coventry over the years, there are few assemblages which are as good as this. Although the first century and a half after the Conquest is not so well represented, from c 1250-1550 there are abundant pottery groups, many apparently good closed groups, which may help present a clearer picture of pottery usage in an important medieval city than has hitherto been possible. Chronology on the site is potentially good because of the closed nature of many of the groups. It may therefore be possible to refine date ranges for some of the pottery types, in particular Chilvers Coton A ware and Tudor Green/Tudor Green-type ware.

6.2.17 Substantial sections of vessels have survived which means that a good form series can be established. This in turn will lead to the opportunity for good functional analysis, which is less possible where there is a high level of residuality or where sherds are very fragmentary. Scientific analysis of the remains from within several vessels may also help elucidate the uses to which some vessels were put.

6.2.18 Thus far it has been very difficult to undertake functional analysis and refine chronologies. So, for example, on neighbouring Much Park Street (Wright 1980) problems of residuality and disturbance, limited the range of analysis and interpretation which could be undertaken, although, despite this, Wright (*op cit*) produced a good summary of certain aspects of the pottery, in particular a discussion of pottery supply to Coventry in the medieval to early post-medieval periods, which in the intervening years has largely stood the test of time. More recently, excavation off Priory Street and close to the Herbert Art Gallery and Museum (Halstead 2008, Colls 2008) has produced

excellent comparanda for the later medieval and early post-medieval periods in the same area of Coventry. A further well stratified assemblage was found at Bond Street (McAree and Mason 2006) to the north-east of the city centre, which Blinkhorn (*ibid*, 38) describes as 'arguably one of the most important ever excavated in Coventry'. Apart from these sites there are numerous other published Coventry sites for comparison.

6.2.19 The medieval structural remains which survived on St John's Street seem to indicate middling to high status occupation and there are exceptionally good artefactual assemblages also associated with the site. Both these aspects are particularly important since the pottery assemblage can be studied in relation to the structures and artefact classes, allowing an integrated approach and a more balanced and rounded interpretation of the site.

Research Aims

6.2.20 Further analysis and reporting on the pottery recovered will provide invaluable insight into the nature of the site and help shed light on its function and occupation. In order to fully achieve its potential, the following areas will need to be addressed;

- Provenance of the pottery
- Chronology of the assemblage and of the site
- Functional and spatial analysis of the pottery
- Highlight and interpret taphonomic factors
- Socio-economic significance of the pottery
- Highlight regional and national significance of the assemblage

Research objectives and methodology

6.2.21 In order to fully address the above research aims, a clear strategy has been defined.

- Identification of pottery fabrics and comparison with Warwickshire County Pottery Type Series.
- Identification of vessel forms, styles of decoration and manufacturing techniques
- Scientific analysis of contents of selected complete vessels and residue analysis of selected large sherds
- Record and map cross-joins
- Relate pottery data to the stratigraphic record
- Provide a breakdown of the chronological framework represented by the pottery and its relationship to the site
- Discussion of pottery assemblage in relation to other artefact classes recovered.

6.3 Building material assessment by Phil Mills

Introduction

6.3.1 A total of 8262 fragments of ceramic building material (CBM), weighing a total of 1649 kg were recovered from the excavation, of which 2925 fragments of diagnostic tile were retained. This assessment is based on a sample of 923 fragments of washed material retained from the excavations (and 3 fragments of mortar). These were rapidly characterized by fabric group and form, with quantification by count.

6.3.2 The quantities by fabric group in the assemblage are shown in Table 1, and the main form classes are shown in Table 2. The majority of the material is in fabric TZ54, also common in Birmingham. There are also examples of material from other sources, including a reasonably significant quantity of early medieval material. The forms indicate that the largest group of material is roof tile, with a small quantity of brick and floor tile. There is also a single example of a possible drain pipe.

Fabric	No	No%
TZ54	832	90.14%
Yellow	29	3.14%
Grey	44	4.77%
Early Green Glaze	7	0.76%
Stone	11	1.19%
Number	***923***	

Form	No%
B/T	0.43%
Brick	0.54%
Drain Pipe	0.11%
floor tile	2.16%
Mixed	1.84%
Nib tile	10.91%
pan	0.32%
PT	5.62%
Ridge Tile	1.73%
Tile	76.35%
Number	***923***

Table 1 (Top), the main CBM fabric groups and Table 2 (right), the main CBM form types

Class ST00 Stone

6.3.3 The majority of stone material examined comprised slate Peg tile. However there were also a few examples of sandstone tile and one example of a sandstone brick. There was also a possible limestone tessera.

Class LZ00 Bricks

6.3.4 There was very little building brick in the sample selected for examination, and this would seem true for the material collected as a whole. This class also included some 2% of floor tiles. These were generally square in shape with a plain matt of gloss glaze on the upper surface. However there are two examples of early decorated tile. These are likely to have dated from the 12th-16th century, and associated with a high status, probably ecclesiastical structure.

Class TZ00 Roof Tile

6.3.5 The majority of the material recovered was roof tile, mainly nib tile, but also with quantities of peg tile and hybrid nib and peg tiles. Considering the amount of roof tile the numbers of ridge tile is very small. This would indicate that this material is not primary dumping of

a demolished or refitted roof. Additionally, the majority of the ridge tiles are glazed, suggesting their origin from an earlier, probably ecclesiastical structure perhaps of the 13th – 15/16th century.

Discussion

6.3.6 The assemblage has a significant quantity of residual roof tile and decorated floor tiles which probably derive from a high status, probably ecclesiastical structure of the 12th – 15/16th century. The rest of the material is mainly roof tile which cannot be dated more precisely than the 14th century. However the relatively large proportion of ceramic peg tiles is suggestive of a significant 16th century component. The fabrics noted suggest that a variety of supply to the site occurs over time.

Statement of potential

6.3.7 CBM is bulky find which can be recovered in large quantities from archaeological excavations. This makes it a very useful tool for characterizing the taphonomic development of a site. The material collected here should be compared with other medieval sites around the UK in order to inform our understanding on the nature of deposits in on the site.

6.3.8 The reuse of ceramic building materials in domestic and industrial situations is well documented and the comparisons of use wear, such as sooting, in comparison with other sites can be informative about the levels and different types of activities on the site. Specific industrial processes may also leave evidence on individual examples of an assemblage.

6.3.9 The study of the CBM from phased groups will increase our understanding of the development of the local brick and tile industries, an important aspect of the medieval economy.

6.3.10 Light development and repairs to roofing can often leave evidence of the changing nature of the appearance of structures over time which

can be compared to other parts of the city, as well as the social status of specific structures within the site.

6.3.11 Discarded material can be an excellent resource for outreach projects associated with this project or others in the area.

6.3.12 The supply of brick and tile and the development of the building materials industry is an important component for understanding the medieval and later economy of the city. An important part of the CBM supply is very regional in its nature, but should not be assumed to be necessarily that local, so the study of provenance of CBM found at a site is an important adjunct to other data sources for the economic context of the site, and the city as a whole.

Statement of recommendations

6.3.13 The assessment suggests the presence of four main fabric groups, including one (TZ54) which is important component of the regional industry, as well as a group of early medieval floor tiles and roof tiles. In order to fully understand the relationship between these groups, and the wider region and perhaps their provenance, it is recommended that a program of thin section petrological characterization be carried out. This can be compared to work already carried out on material from Coventry (Vince 1996). It is suggested that 4 samples of each fabric group undergo thin section in order to determine variations and suggest probable provenances.

6.3.14 Targeted CBM material should be recorded in full, by context, in sherd family's defined by fabric and form code. Attributes to be recorded will included: No of fragments, No of Corners, Minimum no of tile by context, 'tile equivalent', the presence of any decoration, or other markings or deposits and any further comments as required. All work will be carried out following the IFA Standard and Guidance on the collection documentation, conservation and research of archaeological materials (IFA 2001), The Guide to best practice produced by the Archaeological Archives Forum (Brown 2007) and the Current Guidelines for studying CBM (ACBMG 2000).

Discard policy

6.3.15 The current guidelines produced by the Archaeological Ceramic Building Materials group (ACBMG 2002) recognize that the bulky nature of CBM can cause major problems for storage, and suggest that only a small sample of fully recorded CBM need be retained in the physical archive. This should only be done with the full knowledge and agreement of the relevant accessioning bodies. Material recommended for retention would include: a fabric series, the form series, examples with complete dimensions (other than thickness), decorated, stamped or otherwise marked examples, unusual or uncertainly attributed pieces.

6.4 **Small finds assessment** by Quita Mould and Rebecca Beardmore

Introduction

6.4.1 The range of materials and quantity of finds dictated that a strategy be devised to ensure that both assessment and analysis phases of the finds work be undertaken in the most effective manner. It was immediately apparent that the finds assemblage was large, mostly well preserved, and contained a relatively high proportion of independently datable and interesting material. For this reason the finds were briefly scanned and diagnostic features noted for assessment with the understanding that the majority of the necessary work be undertaken during the analysis stage. Over two hundred and fifty small finds were recorded during the course of excavations, with materials ranging from copper alloys, iron and bone, to rarer objects of jet, wood, and gold. The small finds catalogue is given in Appendix 3. The small finds assemblage offers the potential to refine provisional dates, as well as offering a rich insight into the commercial, domestic, industrial and personal lives of those who lived and worked at this site. The finds described below seem to offer evidence of both high-status and low-status activities and occupants, with writing implements and possible rosary bead manufacture hinting at Coventry's ecclesiastical past. Evidence of what appears to be small scale cottage industries of button

and pin making has been found in addition to potential evidence of copper casting.

6.4.2 This assessment divides the objects first by material type, and then by function. In addition to small finds discussed below, diagnostic ceramic sherds were also given unique small finds numbers. Although they appear in the small finds catalogue (Appendix 3), they are not included in this section of the report (but see Rátkai above).

Worked bone and horn

Manufacturing debris

6.4.3 Evidence for small-scale button manufacture was present in the form of 9 fragments of bone button blanks, which were found in fill 1228 of pit 1202, fill 1252 of pit 1251, fill 2346 of pit 2326, fill 2439 of pit 2431, context 2496, which was a fill within the four walls of structure 2403, and fill 1676 of pit 1675. Two partially finished and broken bone buttons were recovered from fill 2099 of cut 2104. The contexts in which the button blanks and buttons were found have been given spot dates ranging between the 13th to 16th centuries. The flat nature of the bone waste indicates that buttons rather than beads were being produced. The medieval spot dating would appear to be rather early for button making and it may be that the dating of these particular contexts will be refined as a result of further work.

6.4.4 In addition to button manufacture, a pinner's bone found in fill 1438 of pit 1381 indicates that pin making was potentially a 'cottage industry' activity on this site. This context has been spot dated to the 15th – 16th centuries. Bundles of copper alloy wire and finished and partially finished pins (discussed below) in similarly dated contexts strengthen the hypothesis that pins were being manufactured on site.

Textile working

6.4.5 The fairly thick tip of a textile-processing tool, apparently broken in antiquity, was found in fill 1123 of rubbish pit 1122, spot dated to the 15th century and may be residual in this context. It bears clear working and shaping marks, and is likely to be a weaving tool. In

addition, a piece of fish bone was found in fill 2499 of the structure 2408. This piece possibly bears some working at either end, but requires further identification to confirm whether this is indeed a piece of worked bone, and whether it was used for textile working or some other purpose.

Dress accessories

6.4.6 A small bone bead was found in the residue from a sample taken from fill 1428 of pit 1381.

Personal possessions

6.4.7 A fragment of a comb was found in a context dated to the late 18th century, in the rubble backfill 2344 of a stone lined well 2400.

6.4.8 Two worked bone knife handles were found. One is a small 'pocket knife' from context 1820 that appears to have been broken off at the blade end, leaving the iron blade clearly visible between the bone handle, although it is much corroded in the rest of the handle. This knife needs to be x-rayed, and conserved. The other knife handle is much larger, and consists of a curved piece of worked bone, which tapers sharply at one end to a rounded end in which a corroded copper alloy rivet is clearly visible to the eye and in the x-ray. It seems that this knife had a hinged blade similar to that of a penknife, as the other, wider end of the handle appears to taper to a closed end in which a corroded rivet is visible. This knife was found in fill 2333 of pit 2340.

Musical instruments

6.4.9 One of the most charming pieces of this small finds assemblage is the bone flute that was found in two fragments in fill 1079 of pit 1189, which has been spot dated to the 16th century. Still retaining the form of the bone from which it was created, the flute consists of 5 front finger holes and one back finger hole, similar to the arrangement found on a recorder, with a D-shaped hole through which to blow in alignment with the front finger holes.

Writing implements

6.4.10 A parchment pricker was found in fill 1342 of pit 1465. The parchment pricker consists of a bone handle with a knop terminal and an iron point. It would have been used to prick horizontal lines on parchment in order to aid writing. In addition to this implement, three pens made of what appears to be bird bones were found in contexts spot dated to the 14th – 15th centuries. The pens were found in fill 2011 of pit 2249, fill 1256 of pit 1214 and fill 1905 of pit 1906.

Unidentified artefacts

6.4.11 Fill 2022 of large quarry pit 1922 contained a horn (?) object, similar in form to a clothes peg with one of the legs broken off. This artefact would benefit from specialist identification for exact material and function.

6.4.12 The other as yet unidentified piece of worked bone came from fill 1253 of pit 1251. It is a slightly curved piece of bone that has been sawn on the inner and smoothed on the outer surface. There are two small holes through each end of the fragment, one of which contains a bone peg, presumably to attach this piece to something. Again, further identification from a specialist is necessary.

Statement of potential and recommendations

6.4.13 The worked bone from the site provides a useful insight into the domestic activities and small-scale cottage industries that took place at St John's Street. As an assemblage, the worked bone adds a rich layer to the overall site narrative, containing as it does several unusual and interesting pieces. The following work is recommended:

- The thick bone needle (SF21 from context 1123) to be identified by form and function and dated.
- The fish bone from context 2499 requires specialist attention to confirm if it is indeed worked and if so what its function was.
- X-radiography is required for the knife from context 1820 (SF449). This object also requires conserving.

- Specialist identification and reporting on the writing implements (parchment pricker from 1342 (SF435) and pens from 2011 (SF232), 1256 (SF29) and 1905 (SF219), the bone flute (SF433), and the unidentified artefacts SF240 and SF 452).
- Correlation of the finds with phasing and updated site evidence.
- Selected objects for illustration and photography as required.

Metal

6.4.14 Most of the metal finds have been x-rayed. The x-ray numbers of small finds are supplied in the small finds catalogue in Appendix 3. Those items that require x-radiography have been bagged and labelled as such, and any conservation work required is indicated here.

Manufacturing debris

6.4.15 2 bundles and 3 rings of copper alloy wire attest to the manufacture of pins in Coventry. The wire bundles were both from contexts with spot dates of the 16th century (2388 and 2310). In addition to pin making, a number of small strips, sheets and offcuts of copper alloy indicate that other cold working of copper alloy was taking place on site. A piece of what appears to be casting run-off from fill 1587 of pit 1347 was found. This may require specialist analysis in the light of the recovery of ceramic crucibles from the site. The context will be checked to establish any possible association and potential significance of the waste material.

Textile working

6.4.16 A copper alloy thimble was found on the site, but is unfortunately unstratified. This object has been conserved. The pits are individually drilled, and its early form requires specialist identification and dating.

Dress accessories

6.4.17 Brass pins with wire-wound heads and pin stems were found in at least twenty-five contexts, most of which have been given spot dates between the 14th and 16th centuries. Two annular brooches are independently datable to the 14th century (SF 50, context 1342 and SF

67, context 1495). In addition, aiglets, strap ends, a twisted wire ring, a small hook, buckle and annular brooch parts were found in contexts of similar date. The straps are independently datable, one was found occurring intrusively in a context spot dated to the late 18th century. A buckle, plate and rosette studs from a belt SF207 were found in context 1814. A copper alloy trefoil fitting of apparently later date was found, but is unstratified.

6.4.18 Several more unusual dress accessories were found that will require further identification by a specialist. A crushed but apparently complete rumbler bell was found in fill 2388 of cess pit 2338. Also from this context was a copper alloy button found with a piece of fabric. These items have been sent for stabilisation by a conservator, but further analysis by a specialist is required.

Musical instruments

6.4.19 A Jew's harp, or jaw harp was found in fill 2210 of pit 2212, given a spot date of the 15th century. The tongue of the instrument is missing, but its form and size would allow identification and dating by a specialist.

Fixtures and fittings

6.4.20 Various iron nails and shanks were found in contexts that have been spot dated to the 14th – 16th centuries. Three iron handles were found in contexts of similar dates. An iron window bar was found in fill 2374 of pit 2380. What appears to be a stake (context 1357) and a bracket, also of similar dates, complete the architectural metal finds from Coventry.

Security equipment

6.4.21 Two escutcheons of sheet copper alloy were found. One was unstratified, but the other, hexagonal in shape, came from fill 1231, spot dated to the 15th century. It appears to be complete and inlaid, investigative conservation to identify an inlay will be necessary.

6.4.22 A copper alloy key was found in fill 2145 of pit 2141, which has been spot dated to the 16th century. It requires cleaning and conservation. Additionally, an iron key was found in fill 2058 of pit 2063. This has been x-rayed, and appears to have been plated or decorated. Addition radiography or investigative conservation may be required to aid dating and identification of any plating.

Coins and Jettons

6.4.23 Nine possible coins and one jetton were found. The much eroded coin or possible stud-head found in fill 1348 of pit 1349 requires cleaning by a conservator before it can be identified by a numismatist. All the other coins and the jetton require identification by a numismatist. The majority of the coins came from 15th – 16th century contexts, with the jetton found in fill 1459 of pit 1458. One possible coin came from early 19th century fill 2398, and a late 18th century coin was found in fill 2344 of the same feature 2400.

Arms and armour

6.4.24 A copper alloy sword or dagger chape was found in fill 1461 of pit 1460. This appears to be a poor quality product. The context was spot dated to the 15th – 16th centuries.

Knives and Blades

6.4.25 A possible copper alloy blade was found in fill 1679 of pit 1572. However, it is very badly corroded and appears to have organic matter adhering to it. This object requires cleaning by a conservator in order to identify the organic material, and identification by a specialist.

6.4.26 Two iron knife blades were found. One was in fill 1576 of clay-lined pit 1518, and is tanged and seemingly complete. The other knife was in fill 1253 of pit 1251 and has what appears to be a wooden handle. These knives require x-radiography. Two riveted knife handles were found. One, from context 1089, has a decorative copper alloy end plate and appears to have associated organic material. This item requires investigative conservation.

Kitchen and other domestic equipment

6.4.27 The handle mount for a skimmer was found in fill 1679 of pit 1572. It is very badly corroded and appears to have organic matter adhering to it likely to be associated with the back fill of the well. The organic material will be briefly examined to establish whether it is anything other than random organic material. A copper alloy vessel handle was found in fill 2041 of pit 2249, spot dated to the 15th – 16th centuries. A possible copper alloy spoon bowl was found in fill 1318 of pit 1315, but requires specialist identification.

6.4.28 Three pewter spoons were found in fill 2310 of cess pit 2338, spot dated to the 16th century. One of the spoons (SF 286) has an interesting terminal with a touch mark. All three require specialist investigation. The rolled copper alloy rims of vessels were found in contexts 2253 and 1356.

Tools and trade

6.4.29 Unidentified iron tools were found in the 15th – 16th century fills 1754 of pit 1752 and 1945 of pit 1947 (a prong), and the 14th century fills 2370 of 2363 and a tool handle from fill 1927 of pit 1900. These require identification by a specialist. In addition to these unidentified tools, an axe blade was found in fill 2009 of pit 2010 (SF 235), given a 14th century spot date. Another possible axe blade was found in fill 1660 of cut 1653. This requires cleaning to allow identification.

6.4.30 A square lead plate that could be a weight was found in context 1402. Half of what is possibly a copper ingot was found fill 1587 of pit 1347, however this piece should be assessed by a specialist before any conclusions can be drawn. A pair of scissors was found in context 2396, and identified by x-radiography (X-ray plate 1302)

Transport

6.4.31 Three iron horseshoes were found in contexts 2049, 1928 and 1988. A horseshoe nail with a cuboid head was found in context 1018 (X-ray plate 1292). In addition an iron spur was found in context 2007, and would presumably be dateable by a specialist.

Unidentified

6.4.32 A copper alloy cast finial with a knopped end was found in fill 2272 of pit 2267. This object requires identification by a specialist, as its closest parallel the author has seen is a Roman folding stool end.

6.4.33 A decorated object from context 1967 was identified in X-ray plate 1301. This object requires cleaning and identification. An open socketed object from context 1990 also requires further attention.

Statement of potential and recommendations

6.4.34 The metal small finds from Coventry present evidence of domestic, personal and industrial activity on site. They have the potential to provide both dating evidence and a depth to the site narrative regarding domestic activities, industry, dress fashions and personal adornment, trade and transport. Only the ironwork allocated small finds numbers appear on the database at present and this will need to be updated. The following further work is recommended:

- Coins and jettons to be sent to a numismatist for analysis

The following require specialist identification and analysis:

- Copper alloy wire and pins to be analysed with reference to date and production of pins.
- Analysis of the thimble (SF15, unstratified) is recommended to see if it is an early form.
- The items mentioned in the 'dress accessories' section, in particular the rumbler bell (SF271, context 2388) and the two annular brooches (SF50, context 1342 and SF67, context 1495).
- The Jew's harp (SF262, context 2210).
- Half copper ingot and casting run-off (SF58, context 1587)
- Pewter spoons (SF285, SF286, and SF295, context 2310) and possible copper alloy spoon bowl (SF82, context 1318)
- Copper alloy finial (SF264, context 2272)
- Unidentified iron tools mention in the section 'tools and trade'.

- Iron spur (SF237, context 2007)
- Copper alloy arrow head (context 1878, SF214)
- Open-socketed object from context 1990 (X-ray plate 1312).

The following require x-radiography and specialist identification:

- Iron stake (SF76, context 1357)
- Iron knife blades (SF73, context 1576 and SF 448, context 1253).
- Iron key (SF242, context 2058).
- Possible handle (SF203) from context 1754 requires another x-ray to aid in identification.
- The iron object from context 1225 (X-ray plate 1295)

The following require additional cleaning, conservation and specialist analysis:

- Triangular possible copper alloy blade (SF78, context 1679).
- Copper alloy key (SF246, context 2145).
- Unidentified iron object from context 2439 (X-ray plate 1303).

The following require additional cleaning and identification:

- Possible aiglet from context 1091. Cleaning recommended if the context itself proves interesting.
- Knife handle from context 1089 (X-ray plate 1289), if context proves interesting.
- Composite strap end SF30, context 1248 for cleaning.
- Annular brooch frame SF50, context 1342 for cleaning
- Copper alloy object SF88 context 1651.
- Possible axe blade SF85, context 1660.
- Decorated object from context 1967 (X-ray plate 1301).

Correlation of the finds with phasing and updated site evidence.

Selected objects for illustration and photography as required.

Stone

6.4.35 Five stone items were recorded in the small finds assemblage. These include a quern fragment and a millstone (from fill 1676 of pit 1675 and fill 2502 of pit 2402 respectively); a near-complete stone tile from fill 2308 of 2318; a whetstone from fill 1898 of pit 1899; and a spindle whorl from rubble deposit 2491.

Statement of potential and recommendations

6.4.36 The stone finds from Coventry offer evidence of building materials, domestic occupation, agricultural and industrial activity. All these artefacts should be looked at by a geologist in order to identify the type and origin of the stone. Further analysis will identify the date and function of all these objects.

Flint

6.4.37 A flint flake with a few clear bulbs of percussion and ripples was found in fill 2573 of a deep pit cut (2570). Specialist identification is required.

Statement of potential and recommendations

6.4.38 It is recommended that the flake be passed to a specialist for identification and dating, if possible, to determine its relationship to the apparently Medieval context in which it was found.

Glass

6.4.39 A small glass bead of yellow colour was found in context 1907.

Statement of potential and recommendations

6.4.40 This bead may add to the picture of dress accessories and jewellery of the period. To be dated by a specialist.

Gold

6.4.41 A plain gold ring with a D-shaped cross-section was found in fill 1945 of pit 1947. There are no visible inscriptions or markings. This ring has been reported to the Coroner under the Treasure Act 1996, and is awaiting a decision from the British Museum.

Statement of potential and recommendations

6.4.42 It is recommended that the report and recommendations from the British Museum be acted upon when they become available.

Jet

Crucifix

6.4.43 The upper part of a small crucifix carved in jet was found in fill 2188 of feature 2187 (SF 259). The head and arms of Christ survive, with an inscription visible above the head. This should be shown to a specialist (possibly John Cherry formerly of the British Museum) for comment and dating.

Beads

6.4.44 A group of partially finished and finished jet and shale beads and working waste was found in context 1174 (SF 453). This jet/shale working waste is of great interest and should be looked at by a specialist. A partially finished and broken jet bead was found in context 1428. This should be included in any analysis undertaken on the manufacturing assemblage from context 1174.

Statement of potential and recommendations

6.4.45 This assemblage appears to be the product of jet working on site, and is therefore an extremely interesting and important find. Evidence of medieval jet bead working is very rare, and most examples tend to come from the north east of England or from the thriving tourist trade of pilgrims to Santiago de Compostela in north-west Spain (Moran 2001). Therefore, this find has national significance and could provide

fascinating insights into industry in medieval Coventry and indeed Britain during this period.

Summary Discussion and Assemblage Potential

6.4.47 It is clear from the assessment of the small finds from these excavations that there is an ecclesiastical element to the activities represented in the locality. The patchment prickers and bone pens are associated with the written word. The broken jet crucifix is a relatively rare religious item and jet/shale bead making waste is likely to represent the production of rosaries. Textile likely to have an ecclesiastical association has also been identified during assessment (Walton Rogers below). This interesting aspect will be a focus of the finds analysis.

6.4.48 A basic record, as defined by RFG & FRG 1993, of the total small finds assemblage will be made at the first stage of analysis. The material will be examined by the specialist and finds database updated to provide the basic record. This data will be correlated with the contextual information so that the assemblage can be considered by phase, context and location. It is anticipated that the vast majority of the objects will require no further work. Objects potentially requiring additional radiography and investigative conservation have been identified and are itemised in this assessment above. Once the basic record has been completed and correlated with the updated site information, however, the number of objects requiring additional radiography, investigative conservation and/or illustration will be refined and the exact requirements confirmed at this stage. It will be most cost efficient for the necessary investigative conservation to be finalised, commissioned and undertaken at this stage of the work.

6.4.49 The additional information gained from investigative conservation will be added to the basic record. The finds information will then be summarised by context, phase and location to inform those compiling the site narrative. A text will also be drafted for incorporation in any published material considering the finds in the light of the research topics identified and refined during assessment.

6.5 Archaeometallurgical assessment by Anthony Swiss

Quantification

6.5.1 A substantial quantity of metallurgical waste, approximately 662kg, was identified and recorded during excavation and tabulated (Appendix 4). All the material was weighed and sorted on site and classified by its morphological characteristics. A total of seven classifications of residue were identified:

- Hearth bottoms
- Other diagnostic residue (macro and micro slag)
- Amorphous, undiagnostic slaggy residue
- Structural material / burnt and vitrified clay
- Fuel
- Non-ferrous metalworking residue
- Other residue

6.5.2 After the recording process, characteristic sub-samples from each category were retained for further visual analysis in the lab, with the results outlined below. The remaining samples were discarded.

Hearth bottoms

6.5.3 Also known as *smithing hearth cakes*, or *plano-convex bottoms*, hearth bottoms are known to form just below the blowing hole in a blacksmith's hearth, and as such are highly indicative of the process of blacksmithing. Their size and weight can vary considerably, from 100g or so to more than 2 kg, but the majority seem to be between 200 and 500 grams. They can be highly magnetic and can contain fragments of iron and / or hammerscale (Crew 1996).

6.5.4 A total 430 hearth bottoms were recovered from the St John's Street excavation, an example of which is given as Plate 14. Weighing approximately 276 kilograms, the hearth bottoms account for approximately 42% of the total weight of residue excavated.

6.5.5 Each of the hearth bottoms recovered was individually examined with its approximate size (longest length, width and depth) and weight recorded. The heaviest hearth bottom from the assemblage weighed 3.1 kg and the lightest only 57 grams. The longest was 26.5 cm in length, the smallest 5.5 cm. Crew has suggested that the larger hearth bottoms could be formed during primary or bloom-smithing, and the smaller ones during secondary smithing (Crew 1996).

Macro and micro slag

6.5.6 Only one piece of macro slag was recovered and most probably represents a small piece of be tap slag (Plate 15). Tap slag is characterised by its 'ropey' or flowed appearance which is indicative of the liquid/ semi-liquid slag having cooled down whilst flowing from a smelting furnace. A single, small piece of tap slag is not indicative of iron smelting having taken place in the vicinity, and it is possible that it is intrusive or that it formed in the blacksmith's hearth. Compositional analysis may answer this question.

6.5.7 The material classified as micro-slag are the hammerscales, of which there are two types; flake and spheroidal. Heavy residues from 21 contexts returned 1.51 kg of hammerscale, the largest quantity coming from medieval pit 1713 (context 1779) which yielded 997 grams. Flake and spheroidal hammerscale are both highly indicative of blacksmithing. Flake hammerscale forms when iron is heated up sufficiently in an oxidising atmosphere *i.e.* an open hearth. When the hot metal is moved to the anvil and forged the oxidised surface shatters into small pieces which then fall around the anvil and anvil base. Over a period of time large quantities of flake hammerscale can build up in the vicinity of the anvil and around forging area.

6.5.8 Spheroidal hammerscale are small spherical balls of slag / iron oxide. They are associated with blacksmithing, yet they can be formed in two ways; during primary or bloom-smithing and during fire welding. The two processes are similar, yet take place at different stages along the process of iron smelting to finished iron object. It is thought highly unlikely that primary smithing was undertaken in the medieval period at the current site (discussed below) and it is therefore the author's

opinion that the spheroidal scale is the waste product of the fire welding process. During the fire welding process the iron (stock bar, different iron alloys, or broken object) is heated in the hearth until white hot (1000 + ^{o}C). The extremely hot metal is then transferred to the anvil where it is hammer forged, or beaten into itself, thus causing the metal to fuse or weld itself together. This process may have been repeated several times to get the desired end product. To try and limit the amount of oxidisation the blacksmith may have covered the hot metal with a flux, such as silica sand. During the forging process some of the sand would fall into the hearth (helping to create a hearth bottom) whilst some became trapped as the metal was folded and beaten into itself. Temperature and pressure would see the sand react with the iron to form a liquid slag, and as the metal was continually forged with the hammer the hot, liquid would be forcibly squeezed out from the weld joins. The forces involved being such that the liquid slag would fly through the air forming small droplets (due to surface tension). The act of flying through the air would also cool the slag, thus retaining its characteristic spherical shape. Unlike the flake scale, spheroidal hammerscale can travel considerable distance from the anvil and its immediate area.

Amorphous, undiagnostic slaggy residue

6.5.9 The slags which can be labelled 'amorphous and undiagnostic' are very difficult to assign to any particular process, and they often make up the vast majority of metalworking residue found during excavation (Anon 2001). In the case of this assemblage, this type of slag accounts for at least 50% of the residue recovered. There is not a great deal to be said about this type of residue other than their small size and morphology would suggest that they are associated with ironworking/ blacksmithing rather than smelting (Plate 5).

6.5.10 Another residue which can be considered amorphous and essentially undiagnostic are concretions, a number of which are included in this assemblage. These residues are often made of small pieces of slag, soil, clay, hammerscale etc which have fused or corroded together to form the concretion. This type of residue has also been called *smithing floor or smithing pan* (Crew 1996, Anon 2001) and it has been

suggested that they have formed around the smith's anvil as large quantities of hammerscale, slag, and other debris have built up over a period of time and then subsequently been trodden down and compacted by the smith.

Structural material / burnt and vitrified clay

6.5.11 Included in the metalworking residues are some pieces of residue that are possibly associated with the structure of the blacksmith's hearth. These included three pieces of burnt/ vitrified clay adhered to tile (Plate 18) and many pieces of burnt/ vitrified clay (recovered from 17 contexts). The hearth or hearths would have possibly been waist height (for ease of use), the majority of the superstructure possibly constructed of wood, clay, soil or rock. The uppermost of the hearth may have been made of tiles laid horizontally, with a bowl-shaped depression in the middle, which was subsequently lined with refractory clay. It is possible that some of the tile assemblage recovered from the site may represent hearth construction material.

Fuel

6.5.12 In prehistory the main fuel for smithing would have probably been charcoal. However, from the Roman period onwards there is growing evidence for the use of coal (Dearne & Branigan 1995, Anon 2001). Although only a small amount of coal was found within the metalworking assemblage from St John's Street, the evidence for the use of this fuel does outway the evidence for the use of charcoal, *i.e.* there were no pieces of charcoal within the metalworking assemblage. Other assemblages from the Birmingham area have highlighted that coal has been found associated with metalworking/ blacksmithing debris (Swiss 2006, 2008a, 2008b).

Non-ferrous metalworking residue

6.5.13 Although the majority of the recovered residues were associated with ferrous metallurgy, the assemblage also contained several pieces of residue associated with non-ferrous metallurgy. These were recovered from a total of nine contexts, and their very distinctive blue/ green

colour made them easily recognisable amongst the more austere ironworking residues (Plate 19). Their colour also indicated that the residues were associated with either copper or copper alloy working. It is not known whether these are metalworking/ melting slags or corroded copper/ copper alloy objects. This is a question that further analysis such as *X*-radiography and *X*-ray fluorescence may answer.

Other residue

6.5.14 The most intriguing metalworking residues from the assemblage are those that have a distinct yellow, powdery coating. The yellow powder was observed on residues from 40 contexts and on a wide range of material, from pieces of the amorphous and undiagnostic slag, many of the hearths bottoms. Often the residues would have just a small amount of the powder, although some had distinctly large amounts. This is particularly true for one of the hearth bottoms (Plate 20). Upon closer examination the yellow powder could be seen to be "growing" or leaking from the hearth bottom's surface and appearing like small spherical pustules (Plate 21).

6.5.15 It is not known what this yellow powdery residue is, where it has come from, or why it is on so many pieces of the metalworking residue. The author has examined many assemblages of ironworking residues and has never seen anything even resembling this enigmatic bright yellow powder. One possibility is that the powder is sulphurous and is a residue/ by-product of blacksmithing using coal with high sulphur content.

6.5.16 Samples of the yellow powder have been taken from several different pieces of residue and from the large corroded object. The obvious technique for the analysis of the powder is *X*-ray diffraction and then the use of a crystallographic database such as PDF 4 to determine what the compound is, or at least what it contains. *X*-ray diffraction is both quick and easy and the results of the analysis could help dictate how the rest of the assemblage is viewed.

Discussion

6.5.17 Metallurgical residues are common finds during archaeological excavation, although the residues are often restricted to just a few kilos in weight. This is not the case with the excavation undertaken at this site, as roughly 662 kilograms of ironworking residue were recovered and presented for assessment.

6.5.18 After visual analysis of the ironworking residues, all of the residues (with the possible exception of one small piece) are probably associated with blacksmithing rather than iron smelting. The evidence for this assumption is the large quantity (42 % by weight) of hearth bottoms and over 1.5 kilos of flake and spheroidal hammerscale (residues which are fundamentally associated with blacksmithing). With the exception of a small piece of possible tap slag, there is a complete lack of any residue that one would associate with iron smelting. The small pieces of amorphous, undiagnostic slag, the concretions, and the small pieces of tile with adhered vitrified clay also all point towards smithing debris rather than smelting. The presence of pieces of coal instead of charcoal may also indicate blacksmithing.

6.5.19 The nature of the metalworking residues may also indicate that they are the result of secondary blacksmithing, *i.e.* the forging of bar/ stock iron, the repair and recycling of broken objects, rather than primary smithing (bloom-smithing/ bloom refining). Although primary smithing can produce both types of hammerscale and large hearth bottoms, the main argument against this assemblage being associated with primary smithing rests with the fact that bloom-forging would have occurred immediately after the bloom was removed from the furnace, when it was still extremely hot. Bloom-forging would have taken place very close to the smelting site, and once again we come back to the (almost) total lack of smelting residues within this assemblage.

6.5.20 Other evidence which points to secondary smithing is that many pieces of corroded iron that made up part of the assemblage. These could be off-cuts or pieces of scrap rod/ bar or even lost or discarded tools and broken objects. Metallographic analysis of some of the iron pieces /

objects will be important as the results will give an indication as to what alloys were being utilised (ferritic iron, phosphoric iron, steel).

6.5.21 The presence of the non-ferrous residues within the metalworking assemblage is interesting, and it is perfectly plausible that copper/ copper alloys were being worked concomitantly with the working of iron. Some of the small pieces of vitrified clay found on site could be pieces of the crucibles within which the non-ferrous metal would have been melted. Analysis of some of the vitrified clay using *X*-ray fluorescence could help answer this question.

6.5.22 Often, when presented with an assemblage of ironworking residues to assess it is very difficult to report anything other than "people were working iron". This is not the case with this current assemblage, largely due to the quantity and varied nature of the material recovered. By using all the available evidence and information, *i.e.* our current knowledge, the results of the further analysis, and the reports from the other specialists, it is hoped that the final report on the metallurgical residues will say much more than "people were working iron". It may be possible to throw light on what alloys of iron and copper were being utilized, what types of object were being made, the types of processes which were being undertaken on site, and the fuel used in those processes.

Statement of Recommendations

6.5.23 Some of the material from this assemblage would benefit considerably from further analysis, and that the results from these analyses could greatly enhance our interpretation of the site and the metalworking residues and help complete the aims and objectives of the site.

6.5.24 The single most important residue that needs to be examined further is the yellow powder recovered from both the metalworking residues. This enigmatic powder could indicate that sulphur bearing coals were used during the blacksmithing process, and that the sulphur has contaminated the slag residues, metal objects, and possibly burial environment. The results of the analysis of the powder may indicate

something completely different and unexpected. The further analysis of some of the hearth bottoms would also be beneficial, particularly examples with yellow powder inclusions.

6.5.25 The compositional analysis of the possible tap slag is also considered important, as this may determine which process produced this particular piece of residue. Smelting slag will often have elevated manganese content, as this element will segregate to the slag rather than the metal.

6.5.26 The compositional analysis of the copper/ copper alloy waste may be beneficial. The non-ferrous residues are not thought to be derived from smelting, and probably are either highly corroded copper/ copper alloy objects/ waste material, or are slaggy residues resulting from the melting/ recycling of copper scrap in crucibles. *X*-ray fluorescence analysis will help answer this as it will indicate the presence of alloying elements such as tin, lead, or even zinc.

6.6 Glass assessment by Cecily Cropper

Quantification

6.6.1 The assemblage comprised of over 220+ fragments of glass (where + indicates the presence of multiple fragments that too small to count and add no further value to an individually identified object). A full quantification of glass fragments is shown in Appendix 5.

6.6.2 Of this total 101+ fragments are of window glass, 74+ are bottle fragments and 47+ are from vessels. The bottle fragments represent a maximum number of 19 individual items. Vessel fragments represent a maximum number of 12 individual items. The final object is a short glass rod, as yet of unidentified purpose.

6.6.3 The painted window glass is significant, having most likely an ecclesiastical source. The window glass as a whole is the most indicative of periods of activity, the vessel and bottle glass fitting in

closely to the programmes of historical glazing attributed to the medieval period, the early post-medieval and the early 18th century.

Window

6.6.4 A significant proportion of the window glass is medieval, potentially ranging from as early as the 12th century though a date of the 13/14th century is more likely for the majority. The number of fragments here is misleading however, as the fragility of the early glass has unfortunately lead to significant breakage. Of this total, a small number of fragments still retain the remains of paint (e.g. from contexts 1334, 1290 and 1061). Much of the medieval glass is either plain (i.e. unpainted) or the paint has been lost and is therefore fairly undiagnostic for more accurate dating and interpretation.

6.6.5 One fragment in particular is however of notable significance (SF267 from context 2382), retaining the clear image of a naked male torso which may be iconographically identifiable. A figure having similar characteristics in terms of figurative design is that of Adam Delving from Canterbury Cathedral dating to the 12th century (CVMA, 2008). It is therefore possible that the Coventry piece is closer to that date.

6.6.6 A smaller amount of glass may either be late medieval or early post-medieval and with a provisional date of the 15/16th century. Included in this are fragments that indicate the method of manufacture, shown in edge pieces from blown cylinder glass, and the thick central bulls-eyes from 15/16th century crown spun glass (2310 and 2388).

6.6.7 A third small but notable grouping has a provisional date of the 17/18th century and the final date group is a very small number of 19/20th century fragments.

6.6.8 To summarise, there appear to be three probable main glazing programmes: 13/14th, 15/16th (probably post-dissolution plain glazing) and 17/18th centuries. Glass of these periods is most usually accompanied by some lead waste from glazing. It will be important

during further work for the glass specialist to assess the lead waste and associate a report with the window glass.

Vessels

6.6.9 Eleven vessels have been identified ranging from the medieval period up to 18th century. There are four that have landmark features that can give classification and most likely a closer date range, including two rims (one medieval and the other of a post-medieval date) and a base (16th or 17th century) from probable beakers (1112, 2310 and U/S) and a beautiful blown knopped stem from a goblet dating to around the 17th century (2324). The majority of fragments are unfortunately undiagnostic.

Bottles

6.6.10 There are a few examples of probable medieval and earlier post-medieval bottles (contexts 1116, 1246, 1998) or flasks dated prior to the introduction of mass production of bottles in the mid- to late 17th century. This earlier assemblage however is fragmented and fairly undiagnostic. The majority of fragments are of later bottles, with one concentration dating to around the early to mid-18th century (context 2528) and a second dating to the late 19th or early 20th century (context 1889) indicating a small and localized bottle dumps. The majority seem to be beer or wine though smaller examples may be for household substances such as the complete bottle with a paper label.

6.7 Wood Assessment by Steve Allen

Introduction

6.7.1 A total of 125 wooden small finds were recovered from the site and analysed as part of this assessment. This work consisted of the cleaning and examination of the objects submitted and an assessment of their condition. An evaluation of the potential for further investigation is included, with recommendations for long term stabilisation. All of the wood has been preserved through burial in a waterlogged anoxic environment and it appears that these conditions

were maintained in all contexts up to the time of excavation. The wood was in a generally good condition. All species identifications follow Schweingruber (1982) with all dimensions in millimetres. A full catalogue is given in Appendix 7.

Discussion

6.7.2 Many of the artefacts are sawn oak boards, sometimes with one or more nails driven through the face towards one end. Occasionally, chamfered edges are present, but the placing of the nail head relative to the slope of the chamfer sadly rules out identification of such boards as roof shingles. These boards are derived from a wooden lining or cladding nailed to a timber structure but closer identification of the type of structure is not possible owing to lack of evidence. The survival of saw arks suggests little erosion has taken place and perhaps these boards were not used in the open. The sawn conversion was carried out by sawing the parent timber lengthwise into parallel slices, a practice resulting in tangential conversions. Boards from the middle of the timber can have an almost radial conversion, as noted in the database.

6.7.3 Sawing was reintroduced into England in the late twelfth century (Goodburn 1991, 125), giving an earliest possible date for the assemblage. However the amount of boards, fragments derived from them and the numbers of unrecovered iron nails driven into them argues for a later medieval, if not early post-medieval, date. All are taken from fast grown knotty oaks and are unlikely to produce dendro dates unless all pieces are sampled and a composite ring sequence compiled.

6.7.4 Item 70 is an example of an earlier form of cladding. This is a section from a 'V' edged board. These utilise the natural sub triangular profile of a radially cleft board. The narrower edge fits into a groove cut into the thicker edge of an adjacent board, forming what is sometimes referred to as feather edge boarding. This practice is known from the Anglo Scandinavian period onwards and this piece may represent an earlier structure. Unusually in this assemblage, it is perhaps the only piece of board which is likely to provide a dendro-chronological date.

6.7.5 Board fragment 20 is an interesting piece. The shape of the cross section argues against it being part of a regular box as suggested, but the straighter of the edges is clearly cut to articulate with another piece of wood, though no actual; joints or fastenings for such can be identified. The 'rivets' may be the ends of longer nails broken off in the wood but the head ends are too corroded to be certain at present. They are certainly intended to secure something to the face of the board but there is insufficient evidence at present to know what that was.

6.7.6 The two bowls are the most recognisable artefacts. Both are face turned on a lathe from a halved blank, cut from an *Alnus spp.* log. The smaller of the two, (record no. 63, c.140 dia, c.35 high base to rim) has a prominent 'V' profile rim, a single groove around the exterior for decoration and a well defined base, hollowed to a concave profile on the outside. The larger (object 96, c.220 dia, c.70 high base to rim) has a beaded rim but no other decoration. The base is flat with concentric deeply turned grooves on the outside. Hewing marks show where the waste core was cut away and trimmed on the inside and outside of the bowl. The freshness of these marks, the freshness of the turning marks, lack of any staining from use and the relative completeness of the object argue for its arrival in its burial context very shortly after manufacture.

6.7.7 One slightly rarer find is object 64, a plate from a scale tang knife handle. This is complete, exhibiting holes for four rivets which would have fastened this plate through the tang of the blade to a matching plate on the other side. It is cut from boxwood, a fine grained hard wearing wood often used for similar purposes. No staining indicates the exact shape of the tang and it may be assumed that the scale was removed from the metal before disposal. Such knife handles appear in the mid-14th century, the date of the earliest known examples in London (Cowgill 1987, 26) and York (Ottaway and Rogers 2002, 2762).

6.7.8 The remainder of the assemblage consists of three types of material. Heartwood chippings are indicative of the working of oak timbers nearby. Chippings from the outer surfaces of roundwood poles may be associated with cutting points on stakes or piles. Finally, there are many fragments of roundwood, including species such as Alders, Willows, Prunus species, Hazel, Ash and Oak. Some of these are trimmed but otherwise their function is not clear. One small group (objects 48-55 may be from a wattle structure, made from rods of various species cut in winter or early spring. Another small group (objects 97-125) consists of ash charcoal, prepared for fuel. The rest may have been gathered for fuel and unused or be the broken up remains of wattle structures.

Statement of Recommendations

- The two wooden bowls (63 and 96), the plate from the scale tanged knife (64), the board with rivets (20) and the cask head (47) should be retained for future research and possible display. All will deteriorate unless stabilised and will require a standard treatment by p.e.g. polymers followed by freeze drying for stabilisation.

- All five objects should be illustrated. In addition, a selection of the better preserved sawn and nailed boards should be drawn to form part of the archive.

- The 'V' edged board no. 70 should be submitted for dendrochronology.

- The assemblage is certainly worth further research and writing up for publication as despite the amount of archaeological activity in Coventry in recent years, this is one of the few waterlogged collections recovered from the town.

6.8 Leather Assessment by Quita Mould

Quantification

6.8.1 A total of 93 pieces of leather were recovered from the site. A visual scan of the assemblage was completed with the results tabulated below (Table 3).

Context	Feature	Description
1878	Pit 1875	Nine fragments of thick leather. Penetrated by rootlets.
2144	Pit 2141	Soft leather pouch containing a small fragment of copper alloy, possibly a scale pan.
2504	Stone cess pit 2402	Remains of a turnshoe of late 15th century date. A textile lace and a piece of thick, inflexible woven textile.
2310	Stone cess pit 2338	Large group of leather work including: seven near complete shoes of 15th and early 16th century date including low-throated dress shoes and ankle boot (worn by men). Some of the fragments are clearly discarded debris. Other items include at least three fragments of calfskin with tooled decoration, a handle mount and a stitched panel of cattlehide (leather vessel?), an oval leather pouch containing an iron frame.

Table 3: Leather assemblage

6.8.2 The shoes provide dating evidence (15th and mid 16th century) for the contexts in which they were found. The shoe styles worn and amount of wear provide evidence of status of the local population. The cut down shoe parts and waste leather provides evidence of local crafts (cobbling, 'translating' and possibly shoemaking).

6.8.3 The range of other leather objects present include items not recovered or identified previously and potentially of some significance both regionally and nationally. They should be studied in order to fully describe them, identify them where possible and make them available to a wider audience.

Statement of Recommendations

- Fully prepare and conserve elements of the leather assemblage to allow for further study and long term storage

- Investigation of SF 248 [2141](copper alloy sheet item within a leather pouch)
  SF297 [2310] investigative conservation of the iron oval metal frame and associated leatherwork.
- Prepare basic record and working drawings as necessary
- Summarize for incorporation into the site narrative
- Draft leather report with illustrations

6.9 Clay Pipe Assessment by David Higgins

Quantification

6.9.1 A total of 156 fragments of clay tobacco pipe were recovered from the excavation, comprising 27 bowl fragments, 118 stem fragments and 11 mouthpieces (tabulated in Appendix 8). These range from the 17th century through to the early 19th century in date and were recovered from a total of 10 different contexts. Most of these contexts only produced a few fragments, with the exception being contexts 2324 (117 fragments) and 2344 (11 fragments). There are 16 stamped marks, 2 stamped stem borders, 3 burnished fragments, 2 milled stems and 1 possibly mould-decorated piece amongst the assemblage – although the latter is so fragmentary that it is not even certain whether this is decoration or an accidental accretion to the pipe. The majority of the assemblage was recovered from the fill 2324 of pit 2339. Another smaller group were recovered from five contexts (2344, 2394, 2395, 2396 and 2398) which represented backfill deposits of stone well 2399. These two clay pipe groups are assessed below.

Pipe group from pit 2339 (Plate 13)

6.9.2 This consistent group, including 21 bowls (20 of which are near complete), all date to between c1660 to 1690, with the 1680s being most likely. There are joins between the fragments and it is possible that complete pipes are represented in this group. These represent at least 6 different manufacturers and around half of the marks are of types that have not been previously recorded from Coventry. The pipes include local forms as well as imports from Shropshire and this

group provides a rare opportunity to carry out a detailed study of good quality seventeenth-century group from the city.

Pipe group from well 2399

6.9.3 This is a small assemblage of pipes, most of which date from the late eighteenth century and were recovered from the fill of a stone lined well, [2399]. One of the earliest of the well fills, (2398), contains some late seventeenth century material, perhaps indicating the initial date of construction, while the latest fill, (2394), contains a bowl that may well date from *c*1800-40, suggesting a period of use spanning about a century for this feature. There is one bowl of *c*1680-1730 from (2398) made by the well known Coventry maker John Pottifer but the main interest lies in the late eighteenth-century fragments, particularly those from (2344) and (2394). These show that pipes with deep oval stems, curved stems and spur bowls of a distinctive local style were circulating alongside imported pieces from as far away as Chester, which lies nearly 100 miles to the northwest. Some of the fragments are of good quality with decorated stems and/or burnished surfaces. This limited sample of pipes from the site suggests that its inhabitants had access to good quality pipes, some of which were sourced from a considerable distance.

Statement of Recommendations

6.9.4 This is an outstanding assemblage that will provide an important reference point for future studies, not only within Coventry itself but for the Midlands region as a whole. Some of the pipes are encrusted with lime-like deposits, probably as the result of having been buried in a cess-pit fill. These pieces need to be further washed/cleaned so as to fully reveal the maker's marks and to allow joins to be found. The group needs to be checked to see if any complete pipes can be reconstructed and then a detailed analysis of the bowl forms, maker's marks, etc, carried out followed by illustrations of key forms.

6.9.5 This assemblage is particularly important since Shropshire imports from the Broseley/Much Wenlock and Chester areas are present alongside local copies of Shropshire styles as well as non-Shropshire

forms. This not only provides a window on the trade and marketing links available to residents of Coventry during the seventeenth century but also an opportunity to assess the stylistic reach and dating of the Shropshire products themselves. The latter is a key point since local forms can be used to check the dating of the Shropshire styles and marks – something that is rarely possible in assemblages that are totally dominated by Shropshire products alone. The pipe groups recovered provide some useful information about both the archaeology of the site and the consumption of pipes within Coventry.

6.10 Fabric Assessment by Penelope Rogers

Introduction

6.10.1 Four separate find numbers were listed as textile, SF274, SF401, SF407 and SF415 (Table 4), but some of these include more than one fabric-type. In total seven different fabric-types were submitted for assessment. The textiles were recovered from fills and back-fills of pits and cuts; SF407 came from the backfill of stone-lined well 2344.

6.10.2 Each of the textiles fits the provisional spot date for deposition and there is no reason to suspect residual or intrusive material:

Small find no.	Context no.	Description	Provisional date
274	2388	Silk and metal-thread tablet-woven band. Found with cu/a object SF450	e16th c
401	2310	Three fabric-types	16th c
407	2344	Probably 'linsey-woolsey'	late 18th c
415	2502	Two fabric-types	15th - 16th c

Table 4: Textile catalogue

Material

6.10.3 There is a single length of a silk and metal-thread tablet-woven band (SF274), possibly a trim from a chair or box. This is an important object and deserves special attention, since in the 16th century such objects were associated with aristocracy and the Church.

6.10.4 The remaining six pieces are fragments of clothing fabrics, three made of wool and the rest undetermined (one may be a linen-wool union). Some are clearly tailor's or dressmaker's offcuts.

6.10.5 Although all are heavily stained, it is possible to see a hint of dye present in at least one of the 16th-century fabrics.

Preservation and its consequences

6.10.6 The tablet band SF274 has been conserved, but the remainder are still wet. The textiles have probably been preserved in waterlogged conditions and, given the urban situation, the soil conditions were probably acidic. This will have allowed the proteinaceous fibres, silk and wool, to survive, while linen will have decayed. The linen-wool union ('linsey-woolsey'), SF407, has been identified from the parallel rows of wool yarn, with missing linen crossways threads. Except for the missing linen, all textiles seem robust and it should be possible to carry out extensive analytical tests as appropriate (dye and fleece-type identification).

Statement of Recommendations

Methodology

6.10.7 The material needs to be dry for study.

6.10.8 Preliminary collection of technical details (weave, spin, thread-count etc) should be undertaken by low-power microscopy. Dye analysis could include absorption spectrophotometry (visible) and thin-layer chromatography. Fibre identification will be by transmitted-light microscopy, using a polarising analyser.

6.10.9 Fleece-types can be identified by measuring the diameters of 100 fibres per sample and plotting the results as a histogram: the range, mean and distribution of the measurements allow the fibres to be allocated to one of seven fleece-type categories.

6.10.10 The techniques of metal thread production changed with time and place of origin: the metal thread will be first examined by high-power microscopy and then a sample will be sent for ED XRF at another laboratory, to establish the composition of the metal.

Potential

6.10.11 The silk and metal-thread band will support the evidence of other artefacts from the site for an ecclesiastical establishment nearby. It deserves in-depth investigation, to look for anything that might indicate its place of origin and use.

6.10.12 The textile offcuts are few and probably indicate domestic clothes production, rather than a tailor's workshop. The single spindle whorl from the site is also likely to be a product of domestic spinning (note that it is a common mistake to equate spinning with 'textile production': in fact, most spinning was done by women at home and the yarn was then sent on to a professional weaver).

6.10.13 Britain produced a wide range of wool textile-types in the late medieval and post-medieval periods and these were traded commercially. Some cloths were also imported. Investigation of the dyes and wools (fleece types) may help identify the place of manufacture. This can then be compared with documentary evidence for the cloth trade in Coventry.

6.10.14 The author's report on thirteen textiles from late medieval Much Park Street was never published (the work was done immediately after the excavation and knowledge of the report's existence seems to have disappeared before publication). This material will provide useful comparanda for the wools and dyes in the post-medieval textiles from St John's Street. It is suggested that the original report is added as an appendix to the St John's Street report.

6.10.15 A large and well-dated series of offcuts from 16th- and 17th-century Newcastle upon Tyne (Walton 1981 and 1983) provides the main body of comparative material, and further comparisons can be made with late medieval London (Crowfoot et al 1992).

6.10.16 The 18th-century textile can be compared with the union fabrics recently published by Birmingham University at St Martin's in the Bull Ring, Birmingham (Walton Rogers 2006).

6.10.17 Further research could provide useful indications of local trade networks and the status and wealth of the people living/working on the site.

7 PALAEOENVIRONMENTAL ASSESSMENT

7.1 Macrofossils, insect remains and pollen by Roz Mckenna and Tom Hill

Introduction

7.1.1 A programme of soil sampling was implemented during the excavation, which included the collection of standard 40 litre soil samples from sealed contexts. 97 of these sediment samples were selected for an assessment of their palaeoenvironmental potential (60% of the total). A list of these samples can be seen in Appendix 9 with their context details, feature numbers and feature details. The aims of the assessment were:

- To assess the type of preservation and the potential of the biological remains
- To record any human activities undertaken on the site – both domestic and industrial
- To provide comparative material which will contribute to our understanding
  of the site within the city as a whole
- To provide information on the past environment of Much Park Street and the lifestyles of its past populations

7.1.2 A visual palynological evaluation was also undertaken on selected context spot samples. A total of 66 samples were submitted for visual assessment (Appendix 9). This was undertaken in order to evaluate their potential to provide information regarding the environment and landscape conditions that may have prevailed in the past.

Methodology

7.1.3 Following description and selection, subsamples of raw sediment from the selected samples were processed by staff from Birmingham Archaeology. 7 of the subsamples were identified as being waterlogged and so were processed using standard methods described by Kenward *et al.* (1980). Plant remains were extracted by means of a 'washover' to concentrate the lighter, organic fraction. The components of the fraction were recorded whilst wet. The washover and the residue was stored wet.

7.1.4 The remaining 90 subsamples were processed using standard water flotation methods for the extraction of environmental remains. The flot (the sum of the material from each sample that floats) was sieved to 0.3mm and air dried. The heavy residue (the material which does not float) was not examined by the author, and therefore the results presented here are based entirely on the material from the flot.

7.1.5 The flots were examined under a low-power binocular microscope at magnifications between x12 and x40. A four point semi quantitative scale was used, from '1' – one or a few remains (less than an estimated six per kg of raw sediment) to '4' – abundant remains (many specimens per kg or a major component of the matrix). Data were recorded on paper and by Microsoft Access database.

Results

7.1.6 The results of this assessment are tabulated in Appendix 10. The results are presented with samples from associated features being grouped together, and so are not in sample number order.

7.1.7 Charcoal fragments and root/rootlet fragments were present in virtually all of the samples. Due to the small size of the charcoal fragments and their poor preservation, no interpretable information can be gained from the samples, apart from two which are noted below. Insect fragments were present in several samples in abundance and were well preserved – a list of these samples is presented below in the recommendations section of this report.

7.1.8 Charred plant macrofossils were present in most of the samples, but were generally only present in small volumes and were poorly preserved, hence there could be no interpretable information gained from their study. However, several samples demonstrated high preservation, diversity and abundance of plant macrofossils and these are discussed below in the recommendations section. Bone fragments, including fish bones, were also recovered from most of the samples. These have been incorporated into the bone assemblage.

7.1.9 Ceramic building material (CBM) and slag fragments were present in a number of the samples, and this could point to some sort of industrial activity associated with the features which these samples came from.

7.1.10 Root / rootlet fragments were also present within the majority of the samples. This indicates disturbance of the archaeological features, and this may be due to the nature of some features being relatively close to the surface, as well as deep root action from vegetation that covered the site. This disturbance is further confirmed by the presence of waterlogged plant macrofossils present in limited volumes in a lot of the samples. The preservation of these was excellent and it is probable that they are modern contaminants. Those present (*Sambucus nigra, Rubus* sp. and *Betula* sp.) are all species often found in varying abundance in archaeological samples as a modern contaminant.

7.1.11 Of the sediment submitted for palynological work, the majority of the samples (47) were found to be orange-brown to red-brown fine sands, silts and clays. These samples were thus highly minerogenic and the visual inspection suggested that no suitable organic material was present within the contexts sampled. As a consequence, pollen analysis is unsuitable for these contexts. Of the remaining context samples, 9 were deemed to contain some organic material, whilst 10 contained visible humic remains which should be submitted for full analysis.

Discussion

7.1.12 There has only been a limited amount of environmental archaeology work carried out on the medieval and post medieval period in

Coventry. Coal and charcoal has been recorded in abundance at the majority of these sites and it has been suggested that this represents the dumping of the remains of domestic fires. Slag and hammerscale have been recorded at a number of the sites indicating industrial activity. It is probable that the samples examined in this study will represent similar activities.

7.1.13 Plant macrofossils have been recorded at the medieval cathedral and Priory of St Mary (Carruthers, 2003), Broadgate East (Greig and Strachan, 2003), Upper Well Street (Greig, 2003), Belgrade Plaza and Whitefriars Street (Fryer, 2006 and 2007), St John's Street Car Park (Clapham 2007) and Priory Street (McKenna 2008). They were recovered from features similar to those excavated at St John's Street, and were preserved by both charring and waterlogging, however always in very low numbers. A comprehensive study of the samples containing abundant and diverse remains would provide information on the past environment and the lifestyles of its past populations.

7.1.14 The environmental archaeology record for Coventry is neither large nor comprehensive, and so any work and information that can be gained from the samples from this site would strengthen the record and produce a good set of comparative data for any future archaeological work.

Statement of Recommendations

7.1.15 This assessment has proved successful in identifying the presence of plant macrofossils, insect remains, and pollen residues as well as small bone fragments and CBM within the samples recovered from the site. Therefore, the following tasks are recommended as part of a programme of full analysis:

- A total of up to 50 samples should be submitted for full analysis for plant macros, insect remains and pollen (Appendix 11). These should take into account the 29 samles which have already been identified after the current assessment with an addition of a further 18 suitable samples taken from key pit features across the site in an attempt to

provide environmental data to inform on the possible function of some of the distinctive pit forms.

7.2 Animal Bone Assessment by Matilda Holmes and David Brown

Methodology

7.2.1 A sample of approximately one third of the animal bone assemblage was scanned and basic information recorded for bones that could be identified to species or anatomy. This assessment was undertaken to give an indication of the size of workable data likely to be retrieved from the full catalogue. Data recorded included species, anatomy, condition (based on a score of 1-5, where 1 is excellent condition and 5 unrecognisable after Lyman, 1994), gnawing and burning which can be used to assess the taphonomic factors likely to have affected the assemblage. The potential of the material for fusion, toothwear, butchery, pathology and bone working data was also recorded. Ribs, skull bones and vertebrae were not recorded to species, with the exception of the zygomaticus and occipitale of the skull, and 1st and 2nd cervical vertebrae and sacrum. All the animal bones were hand collected, no sieved samples were available. Due to the absence of contextual dating at this stage, the potential of the material will be assessed as a complete assemblage of 12-20th century date, consisting of occupation and industrial deposits.

Taphonomy and Condition

7.2.2 The bones were in excellent to good condition (Table 5) which suggests a potential for optimum recovery of identification, ageing and metrical data from the assemblage, and also supports the theory that the debris from pits was the result of deliberate disposal (Mitchell 2008). Approximately 5% of the assemblage showed signs of gnawing, indicating that at least part of the assemblage was exposed for dogs and/or rodents to chew prior to burial. The presence of butchery marks on 12% of the assemblage, and burning on a smaller 1% indicates some form of domestic processing of the assemblage. Evidence for industrial or craft activity was recorded in the presence of two fragments of bone which had been worked, and 14 fragments that

showed signs of metal working deposits, either in staining from copper alloy, or the presence of slag attached to the bone (Table 6).

Number	Condition
1171	1 Excellent
278	2 Good
50	3 Moderate
7	4 Poor
0	5 Bad

Table 5: Condition of the animal bone assemblage

Taphonomic Factors	Number	%
Gnawed	82	5
Burnt	12	1
Butchered	184	12
Worked	2	-
Metal Working	14	1

Table 6: Taphonomic factors noted during the animal bone assessment

Quantification

7.2.3 There were over 3400 fragments in the sample, of which 1326 were identified to species (Table 7). A large proportion of the unidentified material included vertebrae, ribs and skull fragments. As this assemblage represents only approximately a third of the existing material, there is potentially a dataset of over 10,000 fragments available for full analysis, of which perhaps 4000 or more could be identified to species if similar preservation conditions apply to the rest of the site.

Summary of Material

7.2.6 Table 7 gives an impression of the type of species diversity to be expected. The main domesticates (cattle, sheep and pig) predominate, being present in nearly 80% of the assemblage which is not unusual,

being the main suppliers of meat to the diet in medieval and post medieval populations. Low numbers of dog and horse bones are also not unusual, as these animals were often disposed of separate to food waste, as these animals generally did not form part of the diet (Grant, 2002).

Species	Number	%
Cattle	485	37
Sheep / Goat	359	27
Sheep	33	2
Goat	1	-
Pig	155	12
Horse	5	-
Dog	6	-
Cat	18	1
Rabbit	7	1
Red Deer	5	-
Fallow Deer	4	-
Deer	8	1
Domestic Fowl	151	11
Pheasant	3	-
Duck	6	-
Goose	80	6
Total Identified	**1326**	
Unidentified Mammal	486	
Large Mammal	729	
Medium Mammal	674	
Small Mammal	24	
Unidentified Bird	154	
Unidentified Fish	20	
Total	**3413**	

Table 7: Species Representation (fragment count)

7.2.6 Of note, however, are the large numbers of domestic birds (chicken and goose), and wide variety of wild species (rabbit, red and fallow deer, pheasant and duck). Such a rich diversity of species can be indicative of a more affluent diet, and supports the higher status of the site implied in the structures associated with the medieval domestic buildings (Mitchell 2008). A total of 61 contexts also produced small

quantities of fish bone (Appendix 6) which will need full specialist identification as part of final assemblage analysis.

7.2.6 The potential of the assemblage to reveal more information regarding ageing (from fusion and tooth wear) and metrical data is also considerable (Table 8). This data can be used to help understand the animal husbandry of the populations of the main domesticates, and their morphology (size and shape).

Ageing	Number	% of identified assemblage
Fusion	902	60
Toothwear	70	5
Metrical	543	36

Table 8: Potential occurrence of metrical and ageing data

Statement of recommendations

7.2.7 The excellent level of preservation of the animal bone assemblage highlights the potential for detailed, targeted archaeozoological investigation. The majority of animal bone analysed during this assessment has come from pits, and the evidence from most contexts is indicative of food waste, deposited with industrial metal working waste and smaller scale bone working waste.

7.2.8 Any investigation into the urban context is valuable, and is particularly pertinent on this site, the occupation of which has been fairly continual from medieval to modern times.

7.2.9 Research questions that may be expected to be addressed by a detailed analysis of the complete assemblage can be summarised thus:

- Diet
- What did the inhabitants of the town eat?
- Can the diet of distinct households be inferred from pits within the boundary of specific properties?
- Can status or dietary restrictions of the population be suggested?

- Economy
- How did animals arrive at the site?
- Was food bought in as joints of meat, dressed carcasses or live animals?
- Can any assumptions be made to the origins of the animals – were they bred nearby, or marketed from the hinterland?

- Husbandry
- Is there any inference to be made regarding the animal husbandry or the rural economy, such as a wool, dairy or arable influence on the mortality profiles? Or were animals specifically bred for meat?
- Is there any evidence for 'improvement' in breeds in the post medieval material?

- Spatial Information
- Is there any suggestion for spatial differences on the site regarding rubbish disposal?
- Is there any evidence for industrial or craft waste, for example from butchery, hide processing, bone working?

- Temporal
- Were there any differences through time notable within individual households, or the site as a whole in terms of diet, economy, husbandry or disposal of refuse?

7.2.10 A relatively large amount of faunal data has been recovered from Coventry in the last few years (Locock, 1999) and it is hoped that information arising from the questions above may be compared with data from other sites within the town, perhaps to give a greater understanding of spatial differences within the town with regard to status and industrial / craft areas. This can then be set within the national framework to help understand more about post conquest urban settlements. There is a growing body of post medieval archaeozoological data (Thomas, 2005), which this site could add significantly to.

8 UPDATED PROJECT DESIGN

8.1 Discussion

8.1.1 The results from the excavations at St John's Street, Coventry have produced extensive archaeological evidence which will contribute to a greater understanding of chronological development of Much Park Street and Coventry as a whole. Several themes in particular have presented themselves. These include town planning and the use and evolution of property boundaries, the purpose and requirements of the backplots including their industrial and domestic usage, the social makeup of the inhabitants and construction methods of the periods concerned. The features, deposits and structures can be divided into seven main phases beginning in the 12th century (although there was residual evidence of earlier activity, albeit very little), through to the present. Specialist assessments of the artefactual evidence have provided invaluable material which we can utilise to achieve the aims set out in the initial research agenda. Together with the site records, these provide us with a detailed and informed chronology of the site, with each phase presenting us with valuable information.

8.1.2 The earliest phase of archaeological activity was during the 12th-13th century, when according to the documentary sources this area was within the boundaries of Cheylesmore Park. This would explain the relatively few features identified and their widely dispersed nature. No definitive structural remains were encountered but there was possible evidence for foundation trenches or beam slots.

8.1.3 Evidence for more intensive activity during the 13th-14th century was encountered, the greatest concentration of which lay within the northeastern corner of site. The features identified were primarily large pits which varied considerably in their form and probably function. Much of this activity had been preserved beneath the construction of building foundations from the 14th- 15th century and these pits may be representative of the sort of activity taking place elsewhere on site which was later lost. This trend may also provide evidence that the activity moved away from Much Park Street in a westerly direction possibly due to change of ownership, usage or space restrictions.

8.1.4 A deliberate and regulated construction programme defined by the regularisation of plot boundaries and introduction of stone building foundations, was introduced in the 14th-15th century. The northeastern area of site became occupied by the foundations of several well preserved buildings and the southern area of site contained numerous pits and evidence of boundary ditches defining the burgage plots. The increased site activity present in the archaeological record confirms the suggestion in the documentary sources that this was a period of prosperity and urban growth.

8.1.5 The 15th-16th century saw a dramatic increase in the level of activity and acceleration of pit cutting across the site. The pits were located in long rows orientated east to west, in an arranged layout consistent with plots running back from Much Park Street. The pits were of various types and were set in inter-cutting clusters and groups of discrete pits. Some of these had cut existing plot boundaries which presumably meant that these boundaries were no longer used, became less significant or their form was changed. Possible functions of these pits included storage, test quarry pits, tanning pits, waste pits, post-hole pits and pits providing other industrial functions. One large pit was confirmed as being an open cast quarry pit with contemporary access ramp. Also dated to this period was a levelling layer covering part of the southwestern area of site this was probably introduced to cover and fill previous extensive activities.

8.1.6 During the 16th-17th century there was a reduction in the frequency of pit cutting across the site and there was an apparent change of function of the plots from being heavily worked for industrial use or refuse disposal to being infrequently used. Many factors may play a part in this such as regulated waste disposal, change of ownership or function, or social factors such as the dissolution.

8.1.7 The same trend can be observed during the later post medieval and 19th and 20th century periods. Far fewer intrusive features were identified from these periods and there was clearer evidence for a renewed building programme. The historic mapping shows several groups of buildings dating to the 18th, 19th and 20th centuries but extensive evidence of structures was not forthcoming. It is likely that a thorough programme of clearance was undertaken prior to the creation

of the car park in the 1950's. The most complete and extensive later post-medieval building was that of Ribbon Dye works of which the majority of the ground floor brick surface was identified.

8.1.8 The variety, quality and extensiveness of the finds assemblage and structural evidence recorded at St John's Street is unparalleled in Coventry and this post-excavation report serves to demonstrate the potential and significance of the results and outline the next stage in the project.

8.2 Revised research agenda

8.2.1 In light of the assessment results, the research agenda as outlined in the written scheme of investigation remains valid. The site has the potential to add valuable data to the current pool of knowledge that outlines the archaeological and historical development of Coventry. Detailed analysis of the recovered finds assemblage and the wealth of archaeological features recorded on site is essential to enhance understanding of the evolution of this site and its place within a developing town. Of particular significance is the development of the site and the growth of trade, industry, and craft in this part of town. Further work on the animal bone, pottery, tile and finds assemblages should give us insight into urban production and trade, consumption as well as the social status of the occupants of the site. It is paramount that comprehensive documentary research is undertaken to aid in site interpretation, in particular the chronology of medieval construction on the Much Park Street frontage and the identification of the industrial/craft processes that were taking place within the backplots. A comparative study of the excavation results from the Much Park Street publication report of 1982 (Wright 1982) would enhance and complete gaps in the archaeological record. An integrated, phased discussion of the area excavation, salvage recording and watching brief results should be undertaken to achieve a more complete picture of the site.

National importance/ National research strategies

8.2.2 From this assessment, a number of key themes can be identified that corresponds to the West Midlands Regional Research Framework for Coventry (Soden 2003b).

8.2.3 Further work should be focused on providing further information on the following key themes:

1. Site chronology: Enhancing the historical and developmental chronology of the site which will then be set against the wider archaeological and historical background of the city itself.

2. Medieval town planning, the use and evolution of the backplots and social status: Enhancing our understanding of medieval activity centred in Much Park Street and assessing the social status of the area and its inhabitants, and its primary functions.

3. Trade and industry: Enhance our understanding of the processes and activities that occurred on the site. Produce comparable documentary and archaeological evidence that may assist in the identification of these industrial/craft processes (in particular the function of the sequence of pits identified across the site). Particular attention needs to focus on the small finds, with specific research on jet working and the jet trade links.

4. Provide comparative and supporting material: This will contribute to our understanding of the site within the city as a whole. Comparative analysis of the publication report; *'Much Park Street, Coventry; the development of a medieval street. Excavations 1970-74'* (Wright, 1982) is particularly necessary.

5. Dissemination: Allow access to the results to the people of Coventry and the wider public through publication and presentation.

9 TASK LISTS FOR COMPLETION OF ANALYSIS AND PUBLICATION

9.1 Summary of tasks

9.1.1 Post excavation assessment of the artefactual, palaeoenvironmental and structural evidence recorded at the site has defined a programme of work necessary for the appropriate completion of the project to publication. The tasks required to complete the analysis of this site and to produce a publication text are summarised in Table 9.

9.1.2 Due to the size of the assemblage recovered and the richness of material artefactual work will focus on targeted features, chronological periods or research themes tailored to each material group. It is hoped that this approach will not only provide detailed and rich understanding of the site and its material culture, but ensure that work undertaken is done so economically and within a strategic timeframe. It is anticipated that a 12 month programme to publication will begin in September 2009.

Task	Specialist reports	Author	Days	Completion
1	Pottery analysis	S. Ratkai	30	March 2010
2	Animal bone analysis	M. Holmes	20	March 2010
3	Archaeometallurgical analysis	T. Swiss	3	Jan 2010
4	Clay pipe	D. Higgins	5	Jan 2010
6	CBM analysis	P. Mills	5	Jan 2010
6	Glass	C. Cropper	8	March 2010
7	Leather artefacts	Q. Mould	7	March 2010
8	Worked wood	S. Allen	4	Jan 2010
9	Metal objects and Small finds	Q. Mould; Various	30	March 2010
10	Palaeoenvironmental analysis	BAE	15	March 2010
11	Fish Bone analysis	R. Nicholson	4	March 2010
12	Fabric and Textile	P. Walton	5	Jan 2010
13	Documentary research	N. Alcock	5	Jan 2010
14	Finds Illustration	N.Dodds	10	March 2010
	Contextual/ structural analysis			
15	Final stratigraphic analysis	W. Mitchell	7	April 2010
16	Final site phasing	W. Mitchell	3	April 2010
17	Updating database	W. Mitchell	3	April 2010
	Report			
18	Project management	K. Colls	10	TBA
19	Preparation of drawing roughs	W. Mitchell	5	April 2010
20	Preparation of illustrations	N. Dodds	15	May 2010
21	Preparation of plates	W. Mitchell/ N.Dodds	1	May 2010
22	Preparation of narrative	W. Mitchell/ K.Colls	15	June 2010
23	Integration of specialist reports	W. Mitchell/ K.Colls	10	June 2010
24	Preparation of discussion	W. Mitchell/ K.Colls	10	June 2010
25	Proof read first draft	A. Forster	4	July 2010
26	Editing	A. Forster/ K.Colls	5	July 2010
27	Amendments	W. Mitchell/ N.Dodds	2	July 2010
28	Preparation of final draft	W. Mitchell/ K. Colls	3	July 2010
29	Proof reading	A. Forster	8	July 2010
30	Submission of publication text	A. Forster	1	July 2010
	Archive deposition:			
31	Archive preparation and deposition	M. Duncan	5	July 2010

Table 9 – Breakdown of full analysis and publication task list

10 PUBLICATION SYNOPSIS

10.1.1 The results of the archaeological excavation and associated research and analysis are to be published as a monograph within an appropriate publication series (such as Oxbow or the British Archaeological Reports series (B.A.R), with at least one shorter article in an academic journal (e.g. Medieval Archaeology).

Recent Excavations in the City of Coventry. Volume 2 – Much Park Street 2008 (working title) By William Mitchell and Kevin Colls

Preface – 200 words
Summary – 200 words
Acknowledgements – 300 words

Chapter 1 – Introduction (5000 words, 3 figures, 3 maps, 5 plates)
Site location
Aims and objectives
Excavation methodologies

Chapter 2 – Setting the scene: The archaeological and historical background of Coventry
(8000 words, 6 figures, 8 maps)
The historical background of the site
The archaeology of the site and the local environs

Chapter 3 – The archaeology (20000 words, 12 figures, 10 plates)
Results of the excavations

Chapter 4 – The finds and environmental evidence
(28000 words, 12 figures, 10 tables, 10 plates)
Comprehensive finds analysis

Chapter 5 – Regional context: Comparisons to other significant sites in the region (5000 words, 5 figures, 4 maps)

Chapter 6 – Discussion: Updating the view of medieval Coventry
(10000 words, 3 figures, 3 tables)
Bibliography

11 THE ARCHIVE

11.1. The quantities outlined below (Table 10) include the area excavation, salvage recording and watching brief archives.

Material	Quantity
Tile	8262 (sample to be retained)
Fired Clay	9
Building Stone	8
Mortar	33
Other building material	9
Medieval Pottery	3750
Post-Medieval Pottery	559
Clay Pipe	156
Coins	1
Iron Nails	217
Other Iron	171
Copper Alloy	358
Lead	7
Other Metals	9
Metal residues/slag	662kg (discard after further work)
Glass	220 plus small fragments
Quern	1
Flint	1
Other Stone	6
Worked Bone	25
Animal Bone	271795g
Shell	85
Leather	93
Wood	122 fragments (6 to be retained)
Gold	1
Jet	2
Charcoal	309

Paper Archive	Photographic archive
Context sheets: 1673	Digital photographs: 1180 photos
Indices: 176	Colour slide: 17 films
Site drawings: 96 (A3)	Monochrome: 20 films

Table 10: Archive quantification

11.2 In the short term the archive will be stored at the Birmingham Archaeology stores. The archive will be deposited with the Herbert Art Gallery and Museum following the completion of the project.

11.3 Immediate conservation was required on some of the wooden artefacts, in order to stabilise them. In the long term some copper alloy and leather items will require conservation. All finds have been labelled, packaged, boxed, and stored in appropriate conditions.

12 ACKNOWLEDGEMENTS

12.1 The project was commissioned by the Halcrow Group Ltd on behalf of Stoford Developments Limited. Thanks are due to Christopher Patrick, City Planning Archaeologist, who monitored the project on behalf of Coventry City Council. Thanks also go to Simon Griffin who monitored the project on behalf of Stoford Developments Limited. Work on site was supervised by Will Mitchell, assisted by, Anthony Aston, Elizabeth Bishop, Paul Breeze, Dave Brown, Martina Burns, Bob Burrows, Thomas Burt, Ellie Buttery, Paul Collins, James Coyne, Emily Hamilton, Sam Hepburn, Katie Hutton, Nuala Marshall, Dave McNichol, Abbi Mynett, Ben Raffield, Emma Sautejeau and Will Slocombe. This report was produced by William Mitchell, illustrated by Helen Moulden and Nigel Dodds. The project was managed for Birmingham Archaeology by Kevin Colls.

13 REFERENCES

Cartographic Sources

- 1610 John Speed
- 1656 Dugdale (from J. Speed)
- 1748 Samuel Bradford
- 1807 Thomas Sharp
- 1851 Board of Health (1:528)
- 1888 Ordnance Survey 1st edition (1:500 and 1:2500)
- 1906 Ordnance Survey 1st edition revision (1:2500)
- 1913-14 Ordnance Survey 2nd edition (1:2500)
- 1921 Auction Plan (George Loveitt & Sons)
- 1937 Ordnance Survey 3rd edition (1:2500)
- 1950 Ordnance Survey (1:500)
- 1955 Ordnance Survey (1:2500)
- 1963 Ordnance Survey (1:2500)
- 1977 Ordnance Survey (1:2500)

Primary Sources

- *Coventry up to date*, 1896, Coventry City Council Archives
- *Ribbon Dyeing, H.E.Hammerton and sons*, 1938, Coventry City Council Archives
- Coventry City Council*, Official Handbook to Coventry Industries,* 1920

Secondary Sources

ACMBG: Archaeological Ceramic Building Materials Group

ACBMG 2002 *Ceramic Building Material Minimum Standards for Recovery, Curation*, Analysis and Publication. http://www.geocities.com/acbmg1/CBMGDE3.htm (10th October 2008)

Blinkhorn, P. 1996 Policy Report on Saxon and Medieval Ceramics in *Northamptonshire Northamptonshire Heritage*, Northamptonshire County Council Report January 1996

British Geological Survey 1994 *Coventry. England and Wales sheet 169. Solid and drift geology.* 1:50,000 (Keyworth, Nottingham: British Geological Survey)

Brown, D. H. 2007 *Archaeological Archives. A guide to best practice in creation, compilation, transfer and curation*. Reading: IFA

CARP 1988 *Bayley Lane Excavations (School of Biological Sciences, University of Birmingham)* Coventry Archaeological Rescue Programme.

Colls, K. and Hancox, E 2008. *Excavations at the Herbert Art Gallery and Museum, Coventry, 2005/6: Post Excavation Assessment*, Birmingham Archaeology Report **1402b**

Cowgill, J. 1987 Manufacturing Techniques, in Cowgill, J, de Neergaard, M and Griffiths, N (1987) *Knives and Scabbards. Medieval Finds from Excavations in London*: **1**, 8-39

Crew, P. 1996 *Bloom Refining and Smithing Slags and Other Residues*. Archaeology Data Sheet No. 6. Historical Metallurgy Society

Crowfoot, E., Pritchard, F., Staniland, K., 1992, *Textiles and Clothing c.1150-c.1450* (*Medieval Finds from Excavations in London*, 4), London: HMSO

Dearne, M. J. & Branigan, K. 1995 The Use of Coal in the Roman Period. *Antiquities Journal*, **75**, 71 - 105

Demidowicz, G 2003 *A Guide to the Buildings of Coventry: An Illustrated Architectural History*. Tempus Publishing, GB.

Department of the Environment (DoE), 1990 *Planning Policy Guidance Note 16: Archaeology and Planning*

English Heritage, 1991 *Management of Archaeological Projects*, English Heritage.

English Heritage, 1995 *A strategy for the care and investigation of finds*, London, ancient monuments laboratory

English Heritage. 2001 *Centre For Archaeology Guidelines : Archaeometallurgy*. English Heritage.

`

English Heritage, 2002 *Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation*, English Heritage

Gault, W. R., 1979, 'Warwickshire Clay Tobacco-Pipe Makers', in P Davey (ed.), *The Archaeology of the Clay Tobacco Pipe*, **I**, British Archaeological Reports, British Series 63, Oxford 392-407 (411pp).

Goodburn, DM 1991 Woods and Woodland: Carpenters and Carpentry, in Milne, G (1991) *Timber Building Techniques in London c.900-1400*. LAMAS Special Paper no. **15**, 106-130

Grant, A. 2002 Food, Status and Social Hierarchy. In Miracle, P and Milner, N (eds.) *Consuming Passions and Patterns of Consumption.* Cambridge: McDonald Institute for Archaeological Research. pp. 17-23

Griffin, S 2008 *Archaeological works at St John's Street, Coventry, Written Statement of Investigation.* Halcrow.

Halstead, J. 2008 Land *off Priory Street, Coventry, archaeological excavations 2006: post excavation assessment and updated research design.* Birmingham Archaeology Report

Hancox, E. 2005 *Herbert Art Gallery and Museum: An Archaeological Investigation. Post Excavation Assessment and Updated Project Design.* Birmingham Archaeology Report

Higgins, D. A. 2005, 'Clay Tobacco Pipes from Excavations at Edgbaston Street, Moor Street and Park Street, Birmingham, 1997-2001', unpublished report prepared for Birmingham Archaeology.

Institute of Field Archaeologists (IFA) 1994 (Revised 2001) *Standards and Guidance for Archaeological Evaluations.*

Locock, M. 1999 Animal bones and the urban economy: 30 years of archaeozoology in Coventry. In Anderson, S (ed.) *Current and Recent Research in Osteoarchaeology* ***2***. Oxford: Oxbow. pp. 12-16

Lyman, R. L. 1994 *Vertebrate Taphonomy*. Cambridge, Cambridge University Press.

Mayes, P., and Scott, K. 1984 Pottery kilns at Chilvers Coton, Nuneaton *Soc Med Archaeol Monogr Ser* ***10***.

McAree, D., and Mason, P. 2006 *Archaeological Excavation at Belgrade Plaza, Coventry*: Assessment Report and Updated Project Design. Northamptonshire Archaeology Internal Report **06/110** August 2006

McGrory, D. 1991 *Around Coventy in Old Photographs*

Mitchell, W. 2008 *St John's Street Coventry Fieldwork Summary*. Birmingham Archaeology Report **1776**

Moran, J. 2001 "Amber, Jet & Opal" in Mitchell, K., K. R. Murdoch, and J. Ward *Fast Castle: Excavations 1971-86*, Edinburgh: Edinburgh Archaeological Field Society, pp. 117 - 122 and *errata* page

Muldoon, S. 1979, 'Marked Clay Pipes from Coventry', in P Davey (ed.), *The Archaeology of the Clay Tobacco Pipe*, **I**, British Archaeological Reports, British Series 63, Oxford 255-78 (411pp).

Museums and Galleries Commission, 1992 *Standards in the museum care of archaeological collections.* London: Museums and Galleries Commission

Ottoway, P. and Rogers, N. 2002 *Craft, Industry and Everyday Life: Finds from Medieval York.* Archaeology of York AY17/15. York

Phear, S 2007b *Archaeological Evaluation at John' Street car park, Much Park Street, Coventry.* Historic Environment and Archaeology Service, Worcestershire County Council. Report number **1583**

Pryor, F. 2007 *Britain in the Middle Ages, An Archaeological History*, Harper Perennial

Rátkai, S. 1992 'Medieval Pottery', in S Cracknell and M W Bishop *Excavations at 25-33 Brook Street, Warwick 1973* Trans Birmingham and Warks Archaeol Soc ***97*** *1991-92,* 1-40

Rátkai, S. 2004 'The Pottery', in K. Nichol and S. Rátkai *Archaeological excavation on the north side of Sandford Street, Lichfield, Staffs, 2000* Transactions of the Staffordshire Archaeological and Historical Soc Vol **XL 2004**, 58-121

Rogers, T. 2007a *Desk-Based Assessment at St John's Street car park, Much Park Street, Coventry.* Historic Environment and Archaeology Service, Worcestershire County Council. Report number **1552**

Roman Finds Group and Finds Research Group AD700-1700 (1993) *The Guidelines for the Preparation of Site Archives for all finds other than fired clay vessels*

Rutter, J. A. and Davey, P. J. 1980 'Clay Pipes from Chester' in, P Davey (ed.) *The Archaeology of the Clay Tobacco Pipe*, **III**, British Archaeological Reports No **78**, Oxford, 41-272.

Schofield,J and Vince, A. 2003 *The Archaeology of Medieval Europe. 1100-1600-Medieval Towns*, Continuum

Schweingruber, F. W. 1982 *Microscopic Wood Anatomy.* Zurich

Soden, I. 2003a Coventry's archaeology: summary of the medieval resource, West Midlands Regional Research Framework for Archaeology, Seminar 5, http://www.iaa.bham.ac.uk/research/fieldwork_research_themes/projects/wmrrfa/seminar5/Iain%20Soden%20.doc. Accessed August 2008

Soden, I. 2003b *Early Post Medieval Coventry: Resource Assessment c.1539-c.1750*, West Midlands Regional Research Framework for Archaeology, Seminar 6, http://www.iaa.bham.ac.uk/research/fieldwork_research_themes/projects/wmrrfa/seminar6/Iain%20Soden.doc. Accessed August 2008

Soden, I 2005 *Coventry: The Hidden History.* Tempus Publishing Ltd. Stroud

Swiss, A. J. 2006 *Visual Analysis of Ironworking Residues Recovered from an Excavation at 149 - 159 Bordesley High Street, Birmingham*. Birmingham Archaeology.

Swiss, A. J. 2008a, *Visual Analysis of Residues Recovered from Heathmill Lane, Birmingham*. Birmingham Archaeology.

Swiss, A. J. 2008b *Visual Analysis of Residues Recovered from Morrisons, Holyhead Road, Wednesbury - BA 1468C & BA 1562*. Birmingham Archaeology.

Thomas, R. 2005 Zooarchaeology, improvement and the British Agricultural Revolution. *International Journal of Historical Archaeology.* 9(2). pp. 71-88

VCH, 1969. 'The City of Coventry: Introduction', A History of the County of Warwick: Volume VIII: The City of Coventry and Borough of Warwick (1969), pp. 1-23. URL: http://www.britishhistory.ac.uk/report.asp?compid=16005

Vince, A. G. 1996 *The medieval floor tiles from Coventry Whitefriars*. Dept of Archaeology, University of York unpublished report research of archaeological materials**.** Reading: IFA

Walker, K, 1990 Guidelines for the preparation of excavation archives for long-term storage. UKIC, London.

Walton, P. 1981 'The textiles' in B.Harbottle and M.Ellison *An excavation in the Castle ditch, Newcastle upon Tyne, 1974-76*, *Archaeologia Aeliana*, 5th series, **9**, 190-228

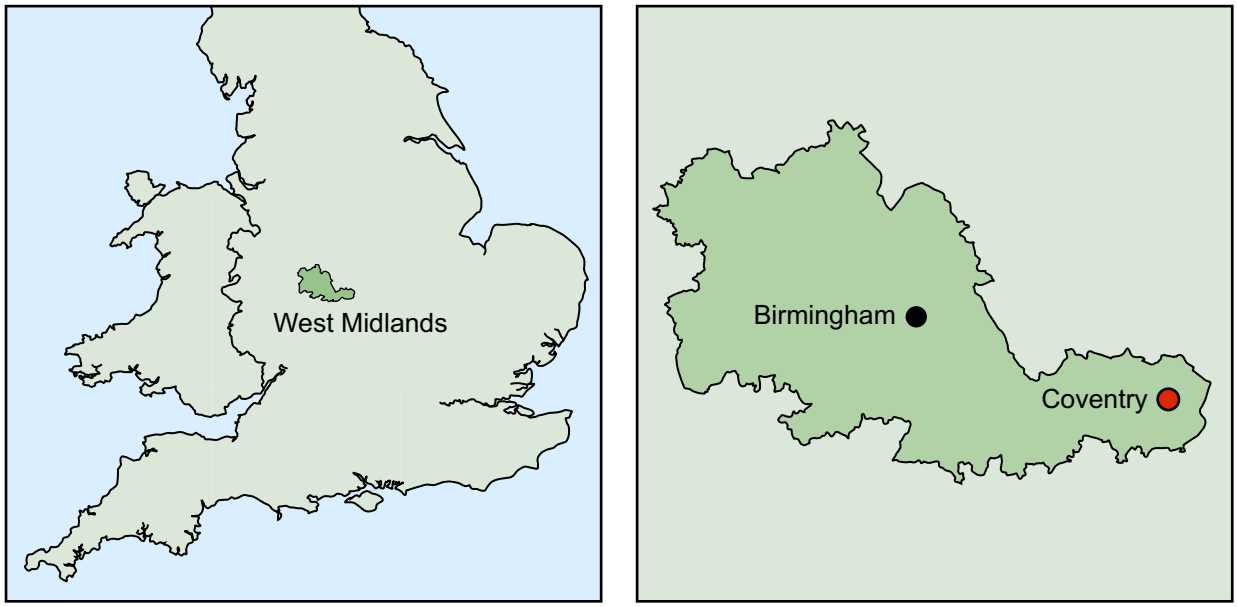
Walton, P. 1983 'The textiles' in M. Ellison and B. Harbottle 'Excavation of a 17th century bastion in Newcastle upon Tyne' *Archaeologia Aeliana* 5th series, **11**, 217-240, 262-3

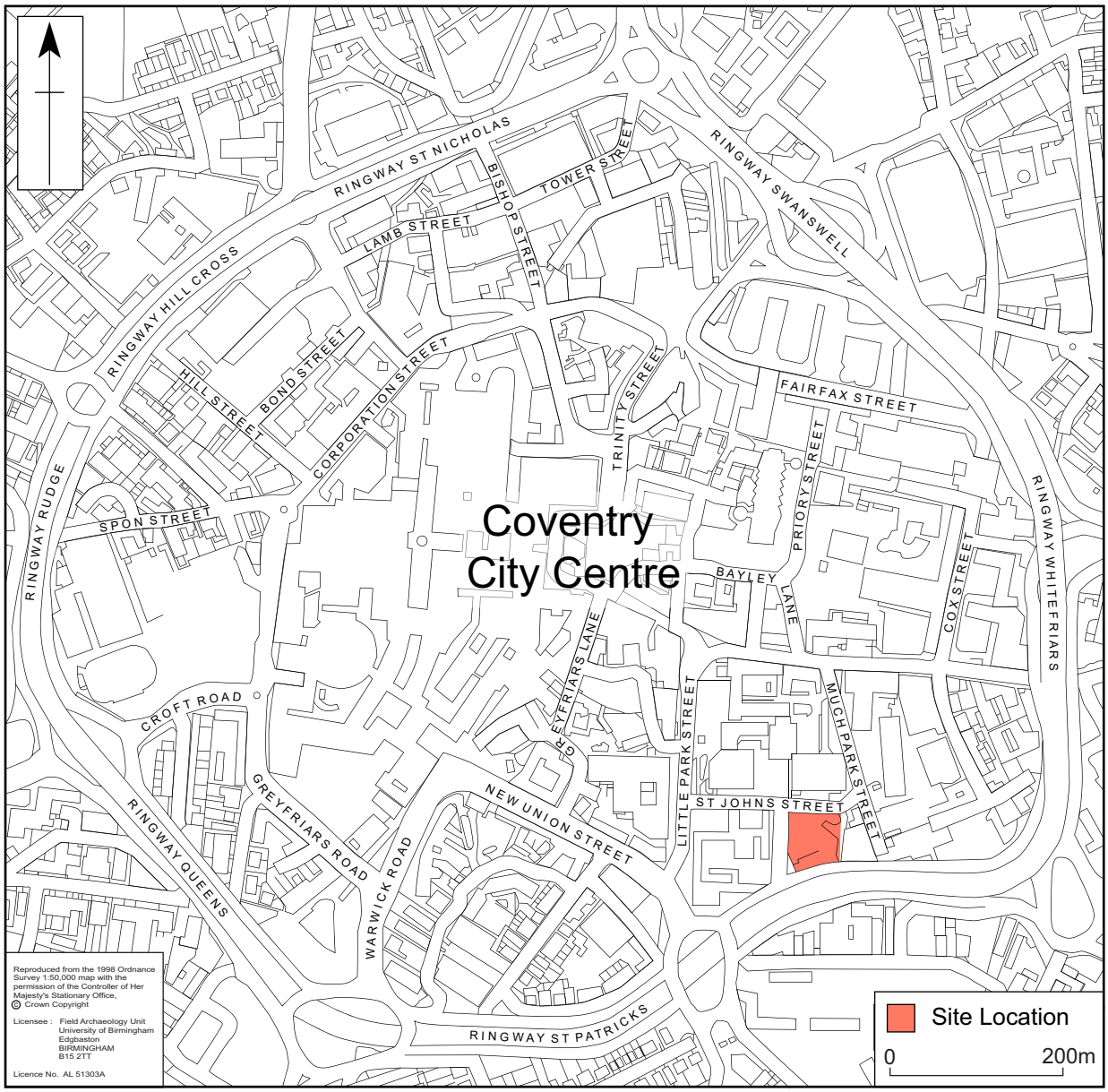
Walton Rogers, P, 2006, 'Textiles' in M.Brickley, S.Buteux, J.Adams, R.Cherrington, *St Martin's Uncovered: Investigations in the Churchyard of St Martin's-in-the-Bull Ring, Birmingham, 2001*, Oxford: Oxbow, pp163-178 and seven colour plates between pp190 &191.

Woodfield, C. 1981 *Finds from the Free Grammar School at the Whitefriars, Coventry c 1545-c 1557/58* Post-Med Arch 15 1981 81-159

Wright, S M 1982 *Much Park Street Coventry: the development of a medieval street. Excavations 1970-74*, Transactions of the Birmingham and Warwickshire Archaeological Society, Volume 92, 1-134

Appendices





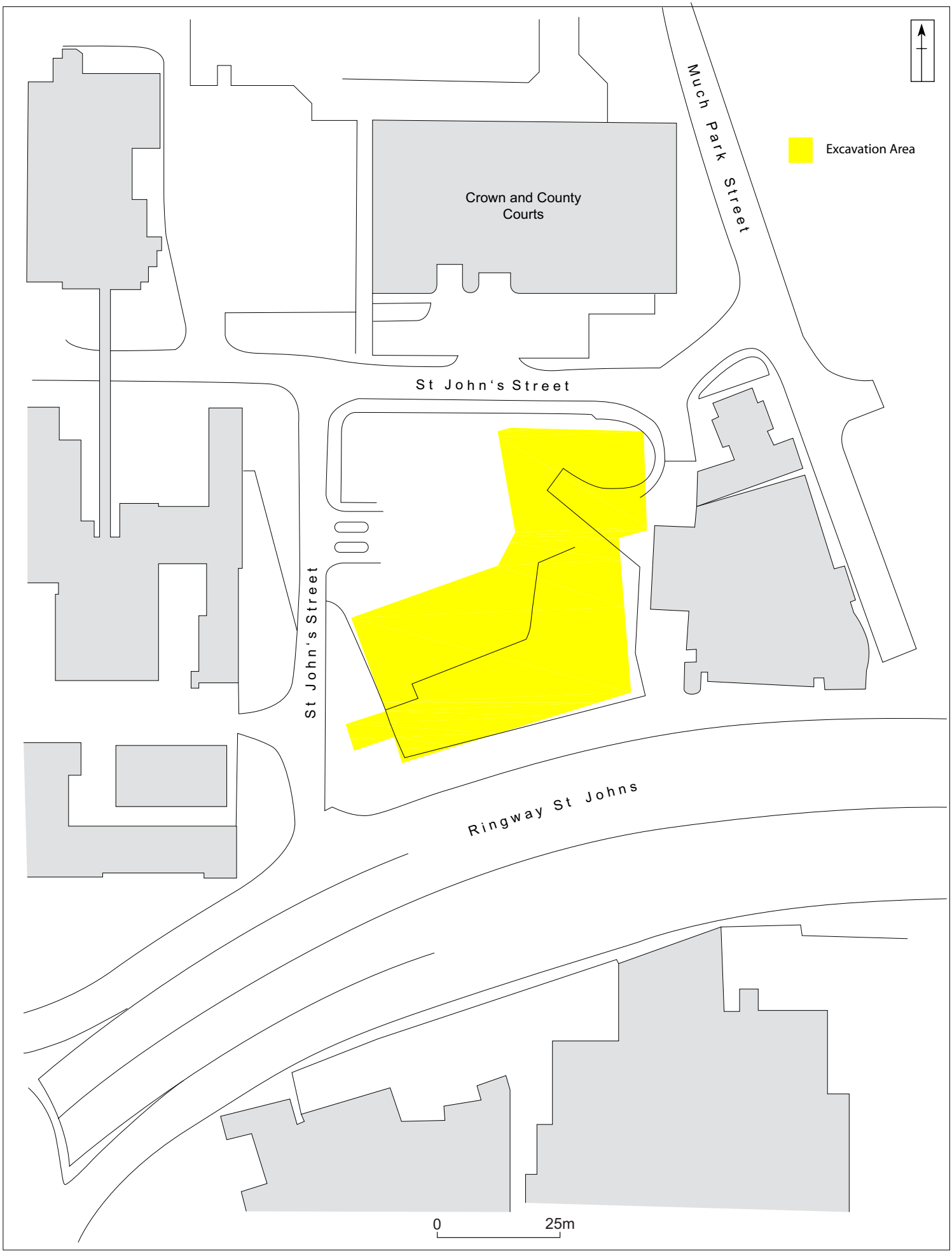
birmingham archaeology

www.barch.bham.ac.uk

PN: 1776

St John's Street, Coventry

Figure 01: Regional Location



birmingham archaeology
www.barch.bham.ac.uk

PN: 1776
St John's Street, Coventry
Figure 02: Site Location Plan

birmingham archaeology

www.barch.bham.ac.uk

PN: 1776

St John's Street, Coventry

Figure 03: Site Plan

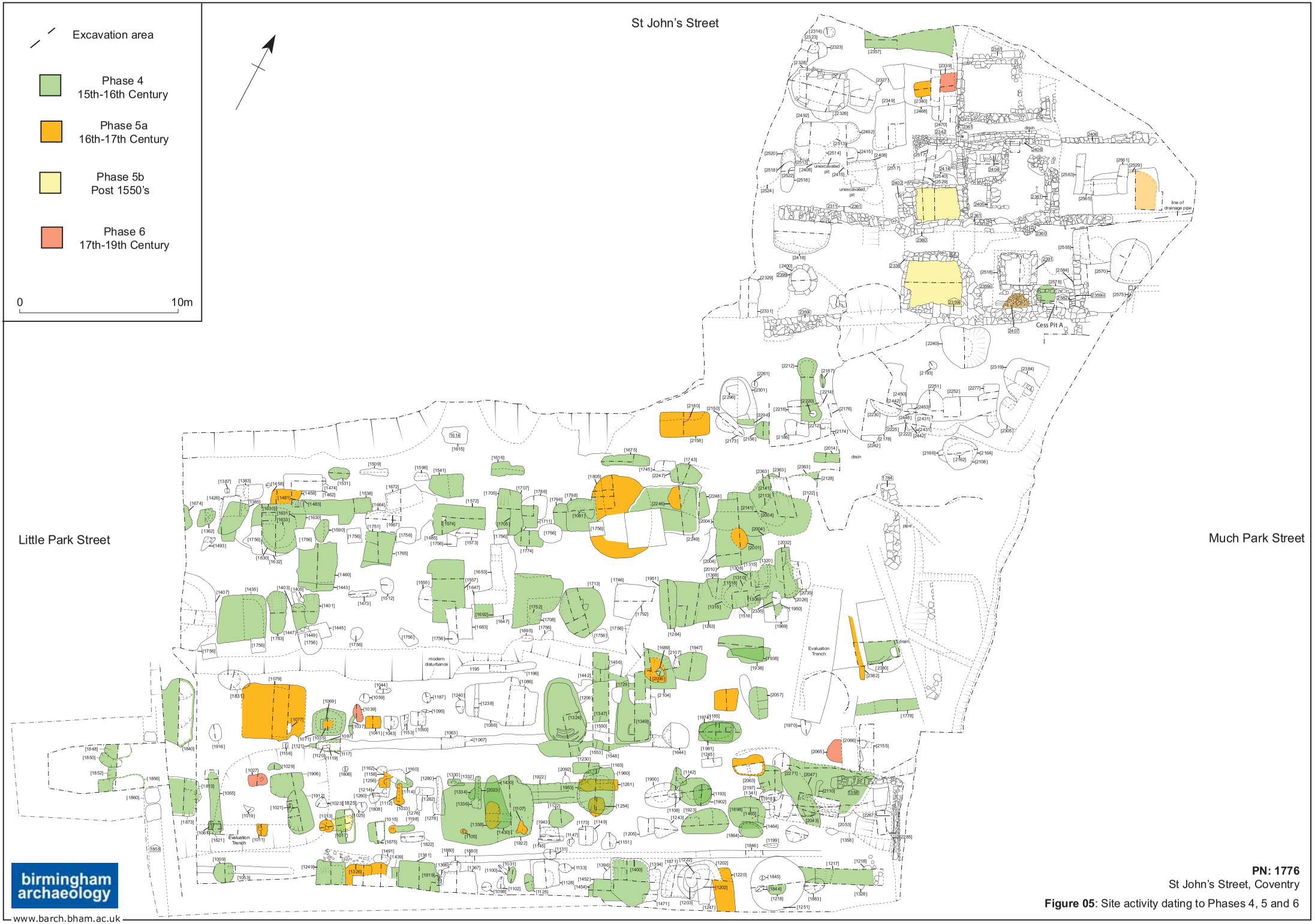
birmingham archaeology

www.barch.bham.ac.uk

PN: 1776

St John's Street, Coventry

Figure 04: Site activity dating to Phases 1, 2 and 3



birmingham archaeology

www.barch.bham.ac.uk

PN: 1776

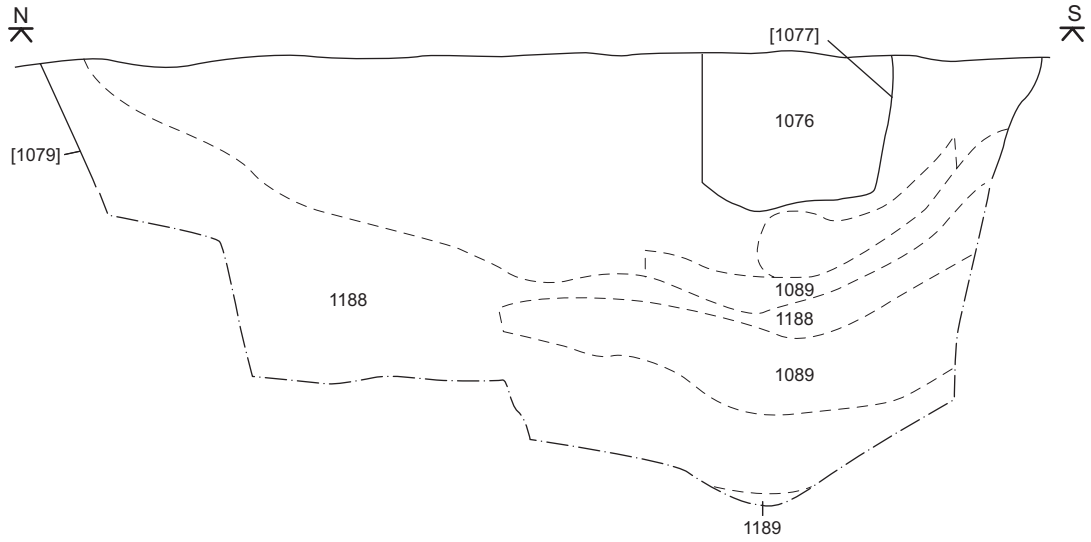
St John's Street, Coventry

Figure 05: Site activity dating to Phases 4, 5 and 6

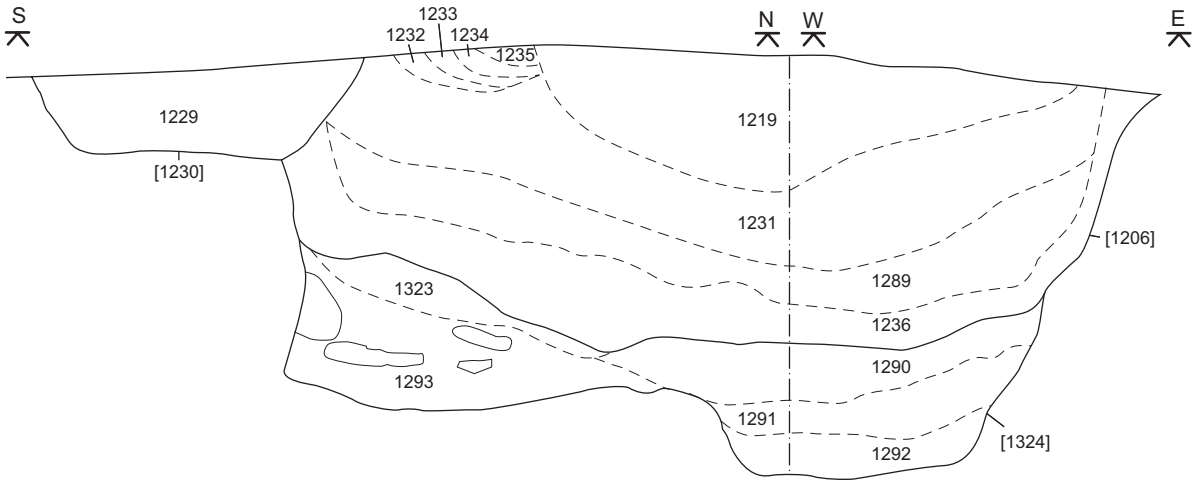
birmingham archaeology
www.barch.bham.ac.uk

PN: 1776
St John's Street, Coventry
Figure 06: Site activity dating to Phase 7

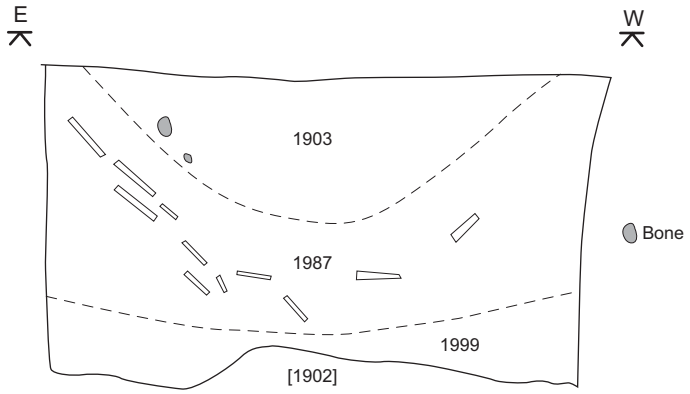
West facing section through pit 1079



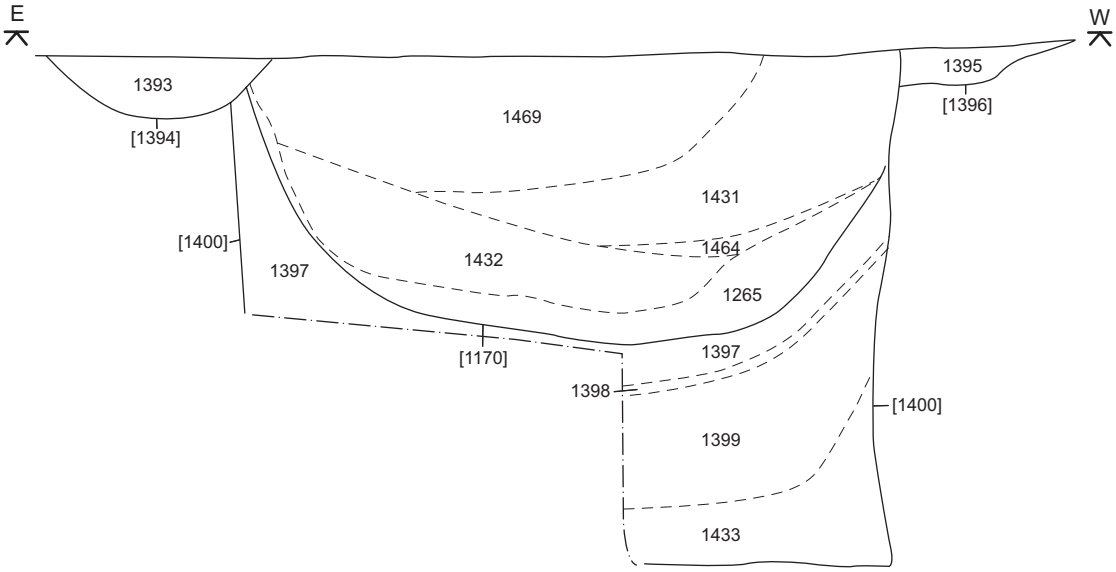
East and south facing section through pits 1206 and 1324



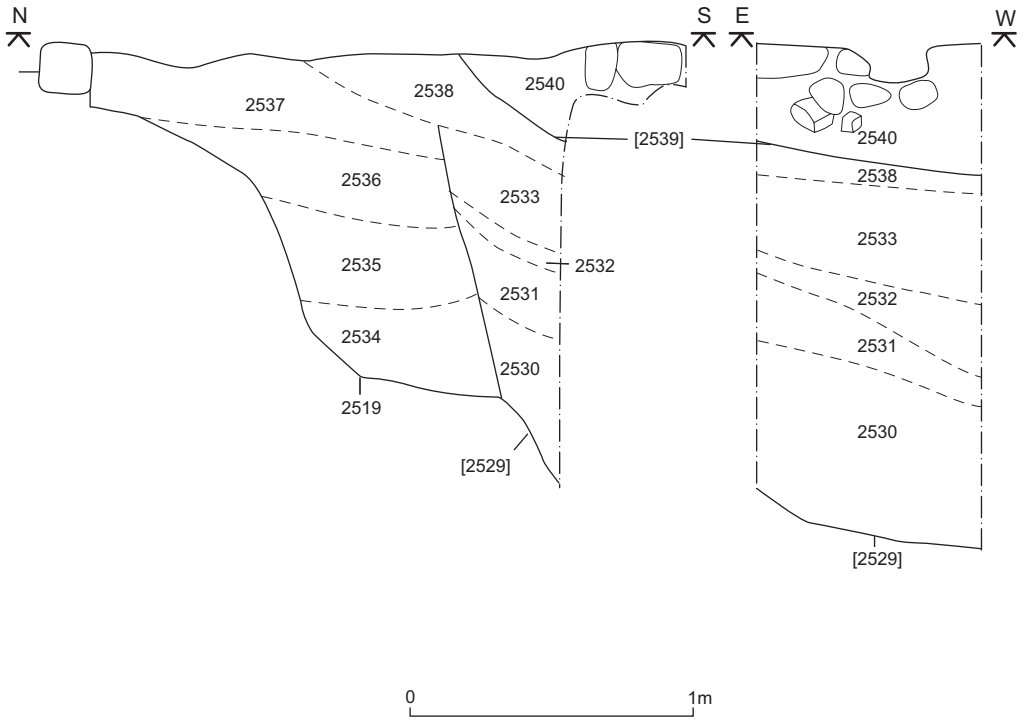
North facing section through pit 1902

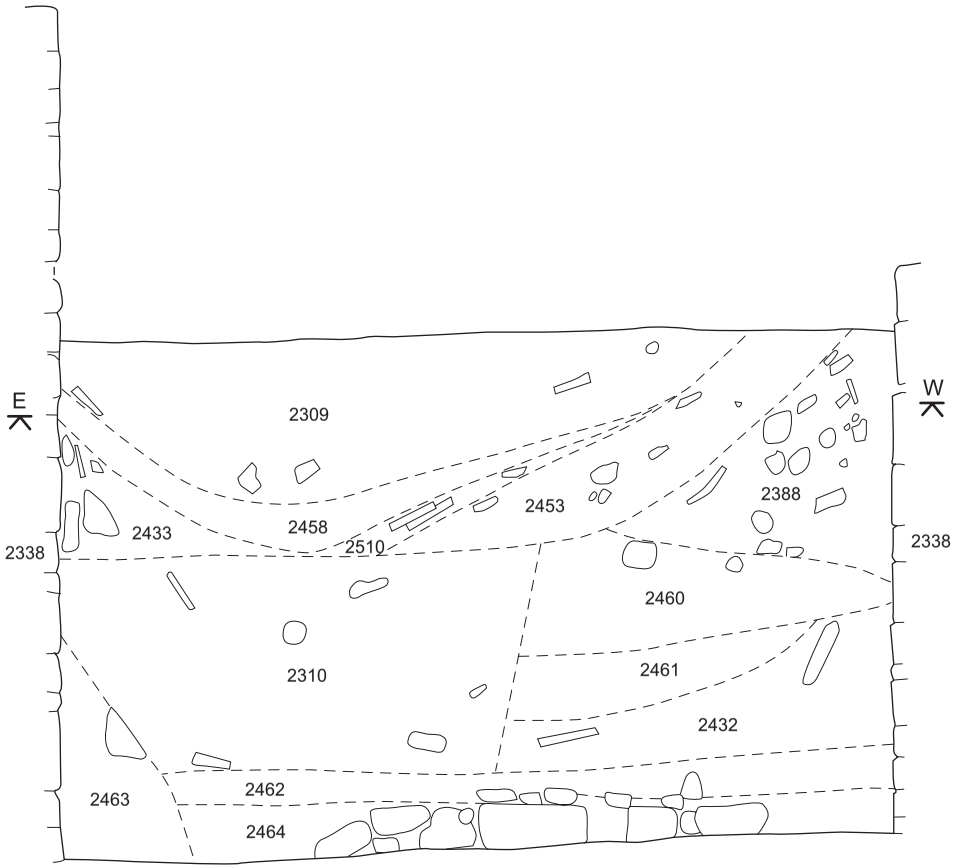


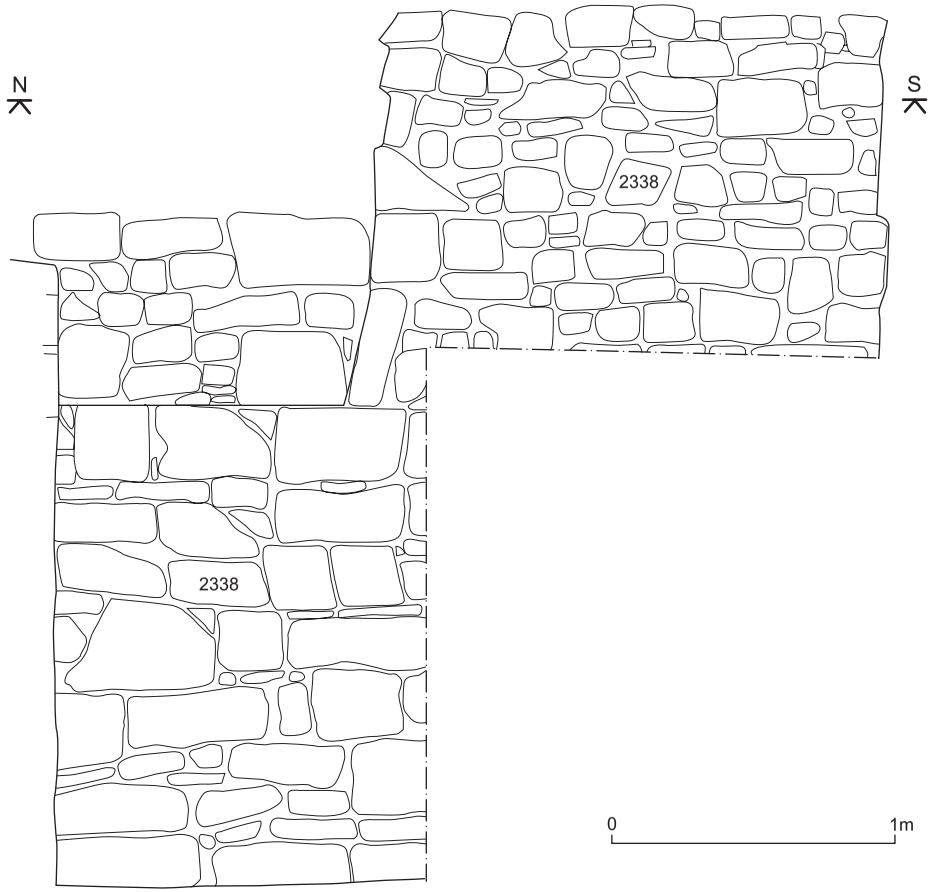
North facing section through pits 1170 and 1400



West and north facing section through pits 2519 and 2529







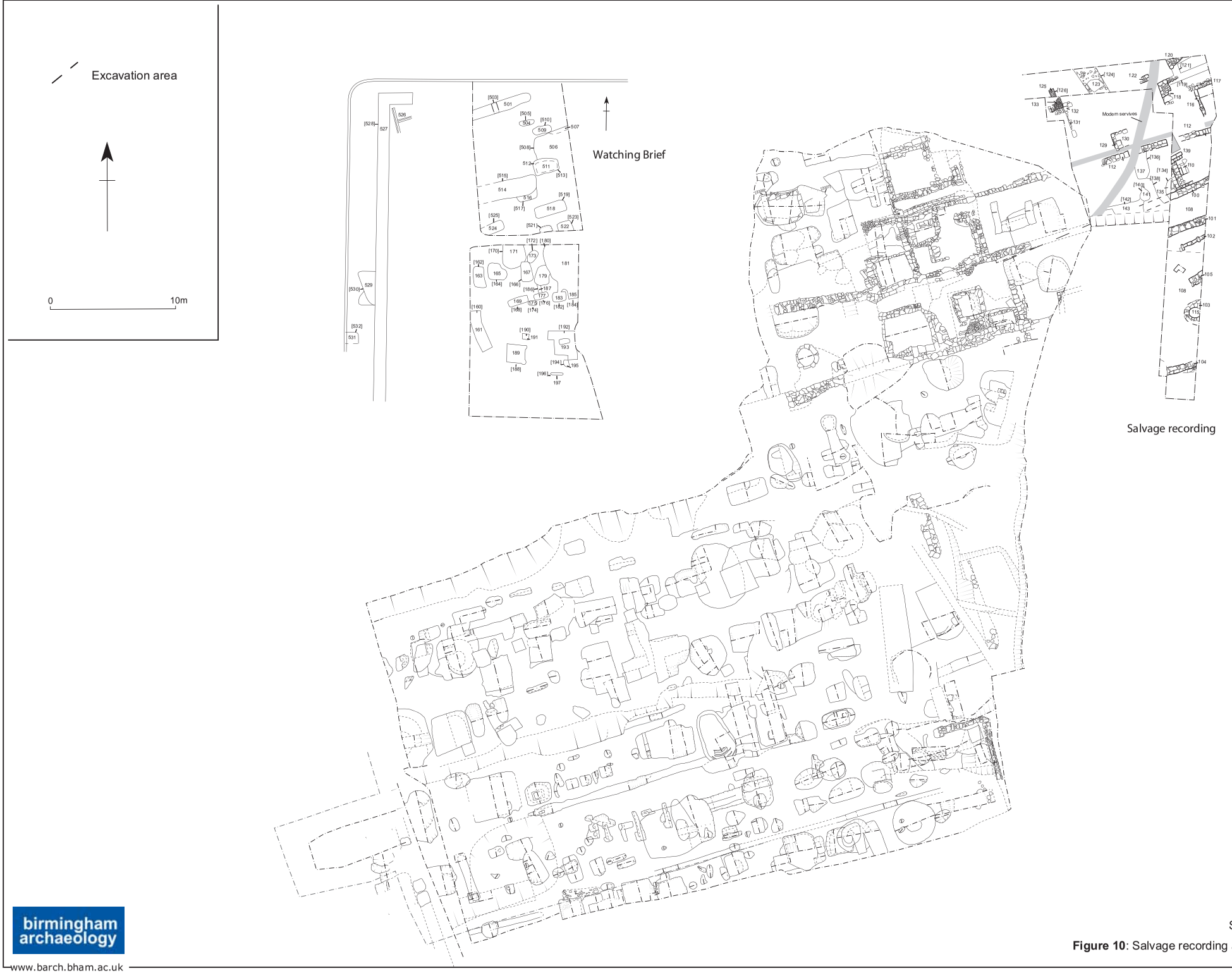
birmingham archaeology

www.barch.bham.ac.uk

PN: 1776

St John's Street, Coventry

Figure 09: North facing section and west elevation of cess tank 2338



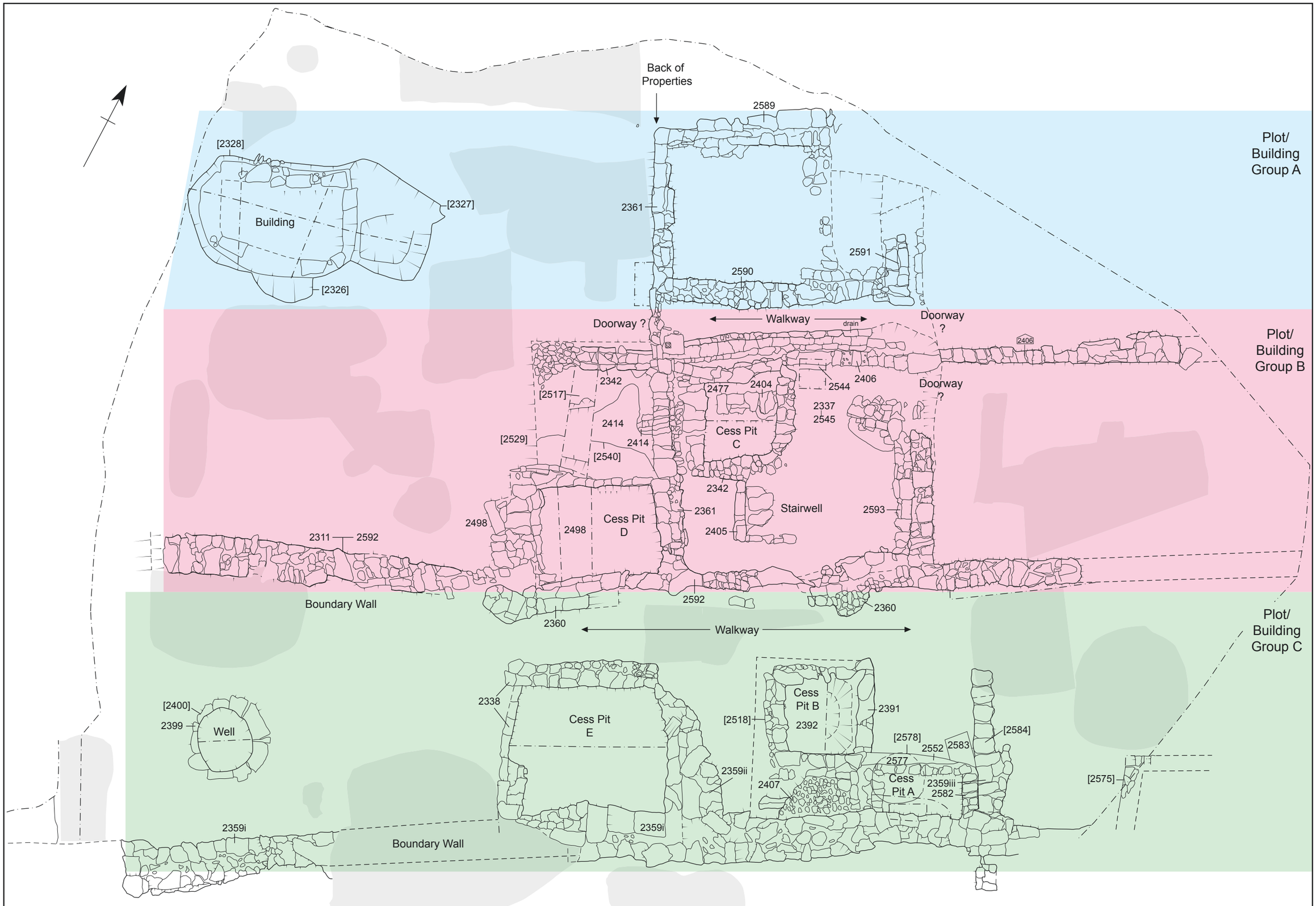
birmingham archaeology

www.barch.bham.ac.uk

PN: 1776

St John's Street, Coventry

Figure 10: Salvage recording and watching brief results



birmingham archaeology

www.barch.bham.ac.uk

PN: 1776
St John's Street, Coventry

Figure 11: Building/Plot Groups