AN ARCHAEOLOGICAL EXCAVATION AT CHESTER ROAD/GREAT JACKSON STREET, MANCHESTER, GREATER MANCHESTER

Assessment Report

An Archaeological Excavation at Chester Road/Great Jackson Street, Manchester, Greater Manchester

Assessment Report

Central National Grid Reference: SJ 8327 9736

Site Code: CRM 08

Commissioning Client: Scottish Widows Unit Funds Limited c/o Jones Lang LaSalle Limited Chancery Place 50 Brown Street Manchester M2 2JT

Contractor: Pre-Construct Archaeology Limited Northern Office Unit N19a Tursdale Business Park Durham DH6 5PG

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PART A: PROJECT SUMMARY

1. NON-TECHNICAL SUMMARY

- 1.1 An archaeological excavation was undertaken between February and April 2008 by Pre-Construct Archaeology Limited at the former Tom Garner Motors site, Chester Road/Great Jackson Street, Manchester. The work was undertaken ahead of a mixed-use redevelopment of the site, the central National Grid Reference of which is SJ 8327 9737.
- 1.2 The site lies within an Archaeological Priority Zone, as defined in the Unitary Development Plan of Manchester City Council. It is located on the south side of the now largely canalised River Medlock, on the north side of which stood *Mamucium*, the Roman fort in Manchester. Directly to the north of the site was the Roman road that ran south-westwards out of the extramural settlement towards the legionary fortress at Chester. Investigation of archaeological remains from the Roman period was therefore the main purpose of the excavation. The site was occupied by buildings in the 18th and 19th centuries, a period of rapid expansion in Manchester during the industrial era, therefore archaeological remains relating to the development of the city in this era were also anticipated.
- 1.3 The archaeological potential of the site was first established by desk-based assessment in 2006, with a field evaluation in 2007 identifying the presence of archaeological features of Roman and post-medieval date at the site. The Roman features were assumed to relate to extramural settlement south of the Medlock and alongside the approach road to the fort. Open area excavation was therefore required to fulfil a condition relating to archaeology attached to planning permission for the re-development scheme. The excavation was undertaken across a roughly rectangular area covering *c*. 2,200 m² within the southern part of the overall site. The central National Grid Reference of this area was SJ 8327 9736.
- 1.4 Natural sand, sand and gravel and clay deposits of glacial origin (Phase 1) were exposed across the excavation area.
- 1.5 The earliest Roman activity (Phase 2) comprised a group of boundary ditches delimiting plots of land set out to the south of the Roman road. Although the internal areas of these plots were generally badly truncated, a group of relatively well-preserved features was recorded within the south-eastern corner of the northernmost plot. They were evidently refuse pits, the most substantial of which may originally have been dug to extract sand, gravel and clay, prior to being utilised for waste disposal. A substantial pit in the southernmost plot, again probably a quarry feature when originally excavated, yielded a remarkable find, this being an exceptionally well-preserved altar.
- 1.6 Fashioned from sandstone, the altar bears a dedication by one Aelius Victor to the mother goddesses of a German tribe known to have provided auxiliary units for the Roman army and it is surmised that this individual was a member of the Roman military in Manchester. The altar was probably set up as a roadside shrine and was presumably disposed of in the pit when obsolete. Antiquarian discoveries in this area have long indicated that the southwestern approach to the Roman fort and associated settlement had particular religious significance. This is only the third Roman altar ever found in Manchester and the first since 1832. Unusually well-preserved, it is one of the largest and most imposing Roman altars from Britain and it is a find of very great significance.

- 1.7 Dating evidence recovered from the Phase 2 plot boundaries and internal features indicates that this activity occurred during the early to mid-2nd century AD. The nature of this evidence strongly indicates that the extramural settlement attached to the Roman fort extended beyond the River Medlock by this time. Although no direct evidence of buildings was identified for this phase, domestic refuse within the refuse pits certainly indicates the presence of nearby habitation and it is considered likely that dwellings and shops may have lined the road, with their backlots utilised for refuse disposal and other activities.
- 1.8 Phase 3 witnessed something of a change in layout at the site in the Roman period, with relatively small, regular plots defined by relatively shallow ditches being replaced by a more substantial boundary system. The large size of the new boundary ditches, along with evidence of fairly elaborate methods of construction, for example, traces of a wooden box drain linked with lead fittings was recorded in the base of one ditch, suggest that these features were of greater importance than the previous land divisions; they may even have delimited the south-western extent of the extramural settlement beyond the Medlock at this time. Pottery recovered from Phase 3 ditches dates this activity to the late 2nd century AD.
- 1.9 Phase 4 again saw a change in the layout of the site, with the previous boundaries being replaced with a system of smaller boundaries, similar to those of Phase 2, which seemingly returned the site to a group of plots. Within these plots traces of possible structural features, such as beam slots and postholes, were exposed, although no clear building plans were discernible. Again, clusters of refuse pits yielded domestic refuse that presumably originated from nearby habitation. A substantial ditch bounding the south-western side of these plots potentially delimited the extent of the extramural settlement at this time. The pottery assemblage recovered from this phase of activity suggests that it dates from the early to mid-3rd century.
- 1.10 Roman period remains were overlain by a developed soil (Phase 5), up to 0.50m thick, this signifying a long period of general disuse. In fact, the archaeological evidence suggests that, following abandonment of the Roman settlement, this area remained unoccupied until it was brought into agricultural use in the late 18th century.
- 1.11 Phase 6 comprised post-medieval and early modern structural remains representing renewed usage of this area as industrialisation took hold of the city. The excavated remains included two rooms of a cellar dwelling and several small outbuildings, these the surviving elements of a group of terraced houses that formerly stood on the site. Brick and stone culverts provide evidence for the existence of streets that crossed the site in the 19th century. Part of the basement of a public house from this era, known from cartographic evidence to be The Van Tavern, was also recorded.
- 1.12 The excavation yielded a modest sized assemblage of Roman pottery, comprising local wares, Romano-British traded wares and imported material such as samian ware and Spanish amphora. Several 'small' finds were also recovered, the majority being of domestic or structural function. Faunal remains and palaeoenvironmental evidence was scarce due to the acidic nature of the subsoil, which is not conducive to the survival of such material.

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- 1.13 This Assessment Report is divided into three parts. Part A, the Project Summary, includes an introduction to the site, its location, geology and topography, planning and archaeological background, and a full description of the archaeological methodology employed during the investigations. It concludes with an illustrated summary of the archaeological remains representing each of the main phases of occupation.
- 1.14 Part B, the Data Assessment, quantifies the written, graphic and photographic elements of the Site Archive and contains specialist assessments of the artefactual and bioarchaeological evidence, with recommendations for any further work for each category. It then provides an overall discussion of the archaeological findings of the project and concludes with a summary of the potential for further analysis of each element of the site data. Part C contains the references and acknowledgements. The report has three appendices.

2. INTRODUCTION

2.1 General Background

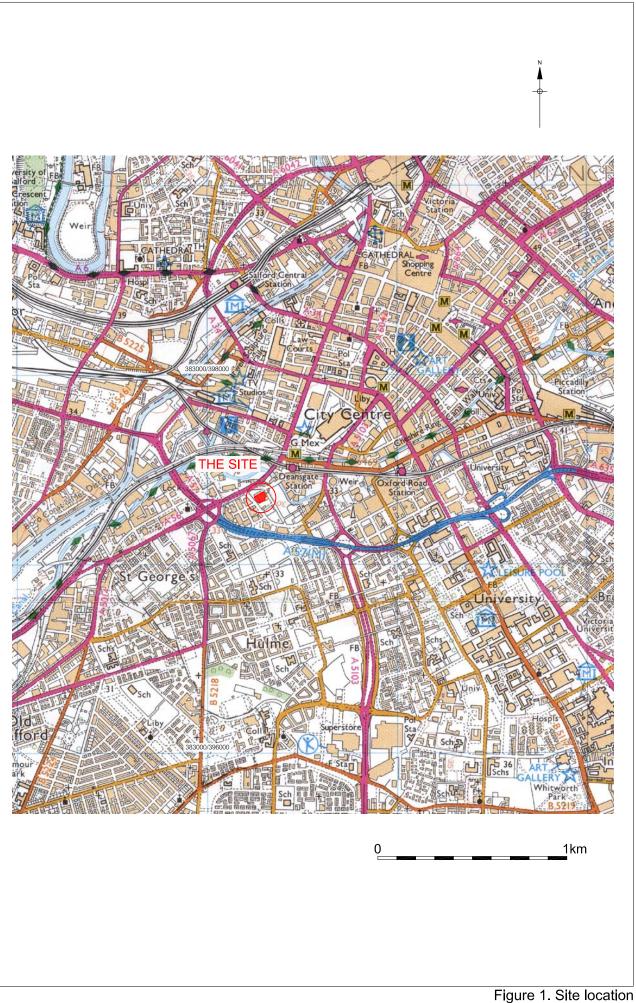
- 2.1.1 This report describes the methodology and results of an archaeological excavation undertaken by Pre-Construct Archaeology Limited (PCA) at the former Tom Garner Motors site, Chester Road/Great Jackson Street, Manchester. The work commissioned by Scottish Widows Unit Funds Limited was undertaken between 11th February and 18th April 2008 in advance of a proposed mixed-use re-development of the site.
- 2.1.2 The site is located on the southern periphery of Manchester city centre and comprises an approximately rectangular shaped block of land bounded by the A56, Chester Road and Deansgate to the north, Great Jackson Street to the west, Owen Street to the east and commercial properties to the south (Figure 1).
- 2.1.3 The site lies within an Archaeological Priority Zone, as defined in the Unitary Development Plan of Manchester City Council. *Mamucium*, the Roman fort in Manchester, was founded in the late 1st century AD *c*. 0.2km to the north, on the opposite side of the River Medlock. The site lies directly adjacent to the south-western approach road to a fording point of the river and the line of modern Chester Road is presumed to follow this route. The area in which the site lies thus has particular potential for evidence of Roman roadside settlement and religious/funerary activity. In addition, the site was occupied by buildings in the 18th and 19th century, when Manchester expanded rapidly during the industrial era.
- 2.1.4 Archaeological interests related to the re-development scheme were secured through planning conditions on the recommendation of the Greater Manchester Archaeological Unit (GMAU), in its capacity as archaeological advisor to the Local Planning Authority (LPA), Manchester City Council. In 2006, a desk-based archaeological assessment was prepared by PCA.¹ This formulated a baseline consideration of the archaeological potential of the site and was followed by a field evaluation, undertaken by PCA in 2007.² The evaluation identified the presence of Roman and industrial era archaeological remains within the central portion of the site.
- Accordingly, the GMAU advised that further investigation of archaeological remains threatened by the re-development scheme was required and that an open area excavation should be carried out. The excavation was undertaken across a roughly rectangular area of *c*.
 2,200 m² within the southern portion of the overall site (Figure 2).
- 2.1.6 The archaeological project herein described follows guidelines set out in *Management of Research Projects in the Historic Environment (MoRPHE)*.³ A Written Scheme of Investigation (WSI) for the excavation⁴ effectively a 'Project Design' in MoRPHE terminology was prepared by PCA and approved by the GMAU in advance of the excavation. This Assessment Report sets out a formal review of the data collected during the fieldwork.

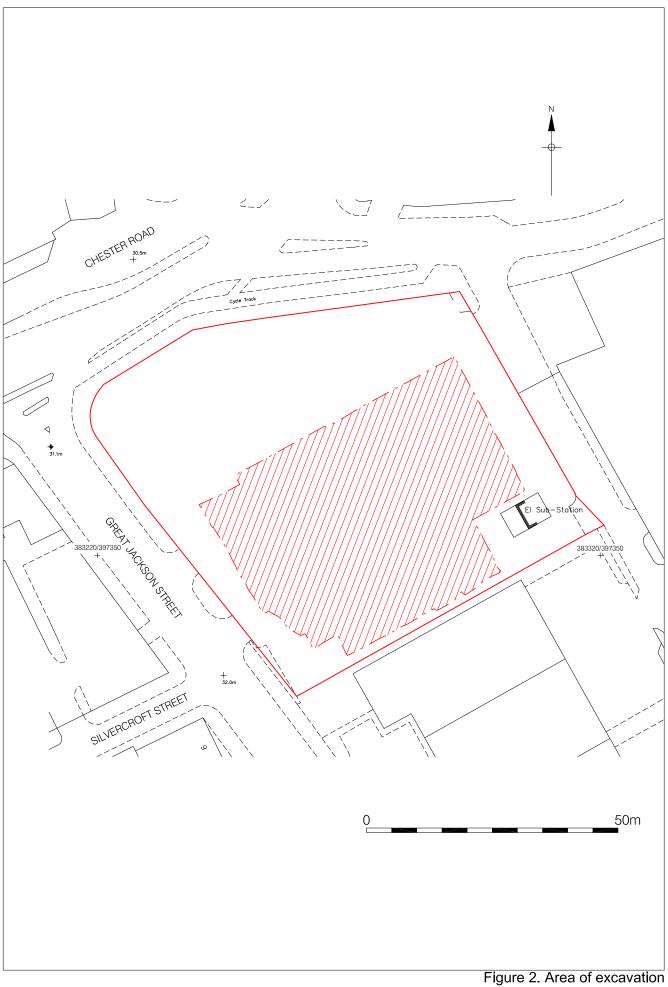
¹ PCA 2006.

² PCA 2007a.

³ English Heritage 2006.

⁴ PCA 2007b.





igure 2. Area of excavation Scale 1:750

- 2.1.7 At the time of writing, the paper and photographic elements of the Site Archive and the artefactual assemblages are housed at the Northern Office of PCA, Unit N19a Tursdale Business Park, Durham, DH6 5PG. The biological and faunal remains are housed at Archaeological Services Durham University, South Road, Durham, DH1 3LE. The Roman altar was deposited with The Manchester Museum in April 2008, at the conclusion of the excavation fieldwork.
- 2.1.8 When complete, the remaining elements of the Site Archive will be deposited at The Manchester Museum, The University of Manchester, Oxford Road, Manchester M13 9PL, under the site code CRM 08. The Online Access to the Index of Archaeological Investigations (OASIS) reference number for the excavation is: preconst1-65489.

2.2 Site Location and Description

- 2.2.1 The former Tom Garner Motors site postcode M15 4GA is located on the easternmost part of the A56, Chester Road, on the southern periphery of Manchester city centre. The central National Grid Reference for the overall site is SJ 8327 9737. It is bounded to the north by Chester Road and Deansgate, by Great Jackson Street to the west, Owen Street to the east and by commercial units and open land to the south.
- 2.2.2 The site as a whole is sub-rectangular in shape and covering *c*. 0.50 hectares. Prior to the archaeological excavation it was occupied by showrooms, garage/workshops and associated forecourt and parking areas of Tom Garner Motors, all of which had been demolished by the time of the excavation.
- 2.2.3 The excavation area itself was sub-rectangular in shape measuring *c*. 58m NE-SW by *c*. 42m NW-SE and covering *c*. 0.20 hectares within the central and southern portions of the overall site (Figure 2). Its central National Grid Reference is SJ 8327 9736. Effectively this was the footprint of the former garage/workshop of Tom Garner Motors, with the excavation area extending beyond the limits of the former building by *c*. 8m to the south-west and *c*. 4m to the south-east.

2.3 Geology and Topography

- 2.3.1 Geologically, the Manchester and Salford region straddles the southern part of the Carboniferous South Lancashire Coalfield and the northern part of the Permo-Triassic Cheshire basin. To the south and west, the Carboniferous Coal Measures are overlain by Permo-Triassic rocks of the Sherwood Sandstone Group.
- 2.3.2 Quaternary superficial deposits laid down during the Devensian glaciation cover most of the area, reaching thicknesses of more than 40m. These include glacial till (pebbly and sandy clay), glaciolacustrine deposits (laminated clays and sands) and glaciological outwash (sands and gravels). Post-glacial deposits include alluvium, river terrace gravels and peat. The site lies on the south side of the valley of River Medlock, towards its confluence with the River Irwell and river terrace deposits, mostly sandy gravel, have been identified along parts of the valley of the Medlock, towards Manchester city centre.

- 2.3.3 Areas covered by substantial depths of 'made ground' are well documented in this part of Manchester, with many former rivers having been culverted and their valleys infilled during and since the Industrial Revolution. This is a fate suffered by the Medlock along much of its course, as well as its various tributaries. The Medlock was formerly a meandering of the eastwest tributary of the River Irwell, but is now largely covered over and canalised. Where the Medlock joins the Irwell, to the west of the site, it then enters the Manchester Ship Canal.
- 2.3.4 There is some variation in ground level across the re-development site. Immediately prior to the excavation, its central area previously occupied by the showroom and garage/workshop of Tom Garner Motors had a concrete slab at a fairly uniformly height of *c*. 31.80m OD. To the south-west, street level on the junction of Great Jackson Street and Silvercroft Street, is at *c*. 32.0m OD. The strip of land to the west of the former garage/workshop, accessed from Great Jackson Street, slopes down generally to the north, standing at *c*. 31.65m OD in the south-western corner of the site and at *c*. 31.20m OD, falling significantly to *c*. 30.0m OD towards the north-eastern corner of the site, this being the lowest lying part of the site.
- 2.3.5 In sum, the existing ground surface at the site evidently reflects both the true topography of the site, occupying relatively high ground above the southern valley side of the Medlock, and the effects of modern landscaping. Off the site, the ground surface falls away generally to the east and to the north, towards Chester Road.

2.4 Planning Background

- 2.4.1 A planning application (reference number 077114/FO/205/C3) was submitted to the LPA, Manchester City Council, for a mixed-use development proposal at the site.
- 2.4.2 As the site lies within an Archaeological Priority Zone as defined in the Unitary Development Plan of Manchester City Council, the re-development proposal came under the scrutiny of the GMAU, the body responsible for archaeological development control in the city. In considering any development proposal, the GMAU is mindful of government guidance set out in *Planning Policy Guidance Note 16: 'Archaeology and Planning'* (PPG 16),⁵ as well as existing local planning policy.
- 2.4.3 The initial requirement was for an archaeological desk-based assessment (DBA) in order to formulate a baseline consideration of the archaeological potential of the site; this was undertaken in 2006 by PCA. The site had obvious Roman potential, due to its proximity to the line of the Roman road running into Manchester from the south-west, with the site of the Roman fort lying just to the north, across the Medlock valley, within the Castlefield part of the city centre. The site thus had particular potential for evidence of Roman roadside settlement, as well as evidence of religious and funerary activity from this period. In addition, the site had potential for important post-medieval remains since it was occupied by 18th and 19th century buildings, the result of the expansion of the city following the Industrial Revolution.

⁵ Department of the Environment 1990. PPG16 is currently under review as part of a consultation paper (July-October 2009) on a new planning policy statement on the historic environment.

- 2.4.4 An archaeological evaluation undertaken in 2007 revealed the presence of significant archaeological remains of Roman origin in the central part of the overall site. As it was not possible to preserve the archaeological remains *in situ* within the proposed re-development, the GMAU advised the LPA that archaeological interests related to the scheme should be secured through two planning conditions,⁶ thus:
 - the first required investigation and recording of archaeological remains of interest prior to development;
 - the second required that there should be provision for due commemoration of the archaeology of the site.
- 2.4.5 A Written Scheme of Investigation (WSI) for the archaeological excavation was prepared by PCA following consultation with Norman Redhead of the GMAU. The WSI detailed the methodologies to be applied to the excavation and post-excavation stages of work. This document was approved by the GMAU prior to the excavation.

2.5 Archaeological and Historical Background

This archaeological and historical background to the site was extensively researched for the aforementioned DBA and much of the detail contained below has been extracted from that document.

Prehistoric

2.5.1 There is no known prehistoric activity in the immediate vicinity of the site and thus there was little or no potential for evidence of such activity during the excavation.

Roman

- 2.5.2 In contrast, the site had particular potential for Roman period remains, as demonstrated by the 2007 archaeological evaluation. The site lies on the south side of the River Medlock, now for the most part covered over, but formerly a meandering east-west tributary of the River Irwell. The Roman fort *Mamucium* was founded in the last quarter of the 1st century AD on the north side of the Medlock, in the area now known as Castlefield. The fort was constructed on sandstone bluff at a topographically advantageous location close to a fording point on the Medlock, which pre-industrial era mapping indicates was separated from the nearby confluence of the Medlock and Irwell by a low-lying morass.⁷
- 2.5.3 Prior to the excavation, the site was thought to lie just to the south of the road which ran north-eastwards to the ford of the Medlock and thus probably within, or on the southern boundary of, the extramural settlement, *vicus*, that developed around the fort. Having crossed the Medlock, the road is thought to have changed alignment to run to the NNE (from that point its line is followed by modern Deansgate), thereby serving the eastern portion of the *vicus*. This road was an important arterial route of the period, continuing south-westwards from *Mamucium* to the minor settlement of *Condate* (Northwich) and then onto the legionary fortress of *Deva* (Chester). To the north-east, the route continued onto the legionary fortress of *Eboracum* (York). With this in mind, existing knowledge of the development of the military garrison is likely to be relevant to understanding Roman period occupation at the site.

⁶ Set out in a letter to the LPA dated 2nd May 2007.

⁷ Gregory 2007, 1.

- 2.5.4 Present understanding of *Mamucium* the fort and *vicus* at Manchester identifies four main phases of development.
 - Period 1: c. AD 79 c. AD 90

The first fort – built in turf and timber - was *c*. 1.2 hectares in size, thus being capable of holding a 480-man infantry unit. Foundation is believed to have been associated with the campaigning of Agricola in AD 79.

• Period 2: c. AD 90 - c. AD 140?

The fort was modified, its rampart strengthened and its defensive ditch system altered. Buildings and industrial areas were constructed within the northern *vicus*. The period appears to have ended with the demolition of the existing fort and possibly the abandonment of the northern *vicus*.

• Period 3: c. AD 160? - c. AD 200

The fort was rebuilt - again in turf and timber - and extended to the west, increasing its size to *c*. 2.0 hectares. Expansion may have been to accommodate additional granaries, with the fort possibly serving as a supply depot.

• Period 4: c. AD 200 – c. AD 400

The fort was rebuilt again in the early 3rd century with a stone defensive wall and gates and probably remained occupied to the end of Roman rule in the early 5th century. The *vicus* likely contracted in size during this period, since the construction of outer defensive ditches encroached on the pre-existing settlement.

- 2.5.5 As mentioned above, the site lies very close to the suspected line of the Roman road that ran south-westwards, locally between *Mamucium* and the minor settlement of *Condate* (Northwich), this being an element of the main arterial route linking legionary fortresses at Chester and York. In fact, the alignment of modern Chester Road is such that it probably represents, or respects, the original line of this Roman road. The archaeological evaluation which preceded the excavation herein described did not, however, locate any evidence for the Roman road and a previous evaluation, undertaken to the south of Chester Road and to the west of the site herein described, similarly found no evidence of it.
- 2.5.6 The 19th century antiquarian Charles Roeder reported that 18th century investigations by John Whitaker described the road to *Condate* as '...*issuing from the eastern fort gate then winding along at the less precipitous bank higher up at the old ford of the Medlock, having Great Jackson Street on the left...*'. The road was said to be 14 yards (12.80m) wide and 1½ yards (1.37m) deep where it exited from the east side of the fort. Roeder noted that, even by Whitaker's time, all traces of the Roman road in the immediate neighbourhood of Hulme were already obliterated. Roeder also reported that a drawing of a section of the road showed that it was between 3 to 4 feet thick (0.91-1.21m) and was formed of a layer of gravel boulders, a layer of red gravel, a thick bed of gorse and brushwood.

- 2.5.7 Current knowledge has the vicus extending to the south of the Medlock, having developed alongside the road to Condate.⁸ Archaeological investigations at Castlefield Quay, to the north of the site herein described, perhaps give the strongest support for this hypothesis. Although numerous antiquarian and later findspots are known from the broad vicinity of the site, the provenance of artefacts retrieved during 17th-19th centuries has been acknowledged as being generally poor. The main antiquarian findings likely relating to the vicus are summarised below.
- 2.5.8 The 18th century antiquarian John Whitaker observed the sluice of a water mill exposed by floodwater, comprising a long rock-cut tunnel 25 yards long (*c*. 23m), but evidently continuing, and 1 yard wide and deep (*c*. 1m). This was interpreted as being of probable Roman origin and a map by Charles Roeder illustrated this as lying only a short distance to the east of the current site.⁹ Roeder also described the discovery, in the vicinity of Chester Road, of inscribed building stone and tile, such material implying the presence of well-appointed buildings in the vicinity of the site. Roeder concluded that the discovered evidence of Roman activity on the south side of the River Medlock was sufficient, at the time, to indicate Roman occupation in this area. Roeder suggested that the areas of Gaythorne and Hulme, on the two banks of the Medlock, may have been populated by the higher ranks of Roman society as these locations were situated on rising ground with better drainage, with ready access to the river. In summary, therefore, antiquarian accounts indicated the distinct possibility that the Roman *vicus* extended as far south as the site.
- 2.5.9 Previous discoveries, in the vicinity of the site, of material relating to ritual, religion and ceremony in the Roman period were certainly a significant factor in raising its archaeological potential. Funerary activity, represented by both burials and cremations, is documented in the vicinity. Charles Roeder noted, in 1832, the discovery of a tile tomb on the south side of the River Medlock evidently near Great Jackson Street, close by the Roman road to Chester. The coffin was of oak and enclosed in a casing of flanged tiles. Roeder noted that several other Roman sepulchral stones had been found in this area. Roeder's map of Roman Manchester shows the south side of Chester Road annotated with 'Tombs', only a short distance to the west of the site.
- 2.5.10 Of probably the great significance, in terms of raising the potential of the site for evidence of Roman religion, was the 19th century discovery, close to Chester Road, of three sculptures attributed to the worship of the god Mithras, a god closely associated with the military. The presence of Mithraic sculptures close to Chester Road suggests that a dedicated temple stood in the vicinity of the site. Roeder also noted the discovery of a fragmentary centurial stone, bearing an inscription naming the Frisian cohort, which was in Britain in the early 2nd century AD. Three altars, two bearing dedications related to the military, were also found during 19th century re-development of the area.

⁸ *ibid*, Figure 1.1.

⁹ Roeder 1900.

Saxon - Medieval

2.5.11 There is no evidence that the site was occupied in the Saxon or medieval periods. The focus of Manchester moved northward towards the cathedral area following the abandonment of the Roman fort in the early 5th century and there is nothing to suggest that the settlement extended as far south as the site.

Post-Medieval, Industrial and Modern

- 2.5.12 Modern development of Castlefield began in the 1760s with the construction of the Bridgewater Canal, which terminated as Castlefield Basin to the north of the current site. Later in the 18th century, the role of Castlefield as an industrial transportation centre was secured by the construction of the Rochdale Canal to adjoin the earlier Bridgewater Canal.
- 2.5.13 Green's map dating to 1787-94 shows the site was agricultural land. A distinct NE-SW field boundary crossed the southern portion of the site and a series of parallel NW-SE boundaries evidently delineated narrow plots fronting Chester Road. A small building is shown towards the north-eastern corner of the site and this may have been the dwelling probably a farmhouse of the occupier '*John Entinslo*(?) *Esq*.'
- 2.5.14 Lewis's map of 1788 may depict a landscape of greater antiquity than its date of issue suggests. Again this indicates that, prior to the 19th century, the site was agricultural land, with two buildings in the north-eastern corner, one of these being that shown on Green's map. NW-SE plot boundaries suggested on Green's map in the north-eastern part of the site are more clearly evident on Lewis's map. However, to the west, the land was sub-divided by a series of NE-SW boundaries into plots fronting Jackson's Lane, which bounded the site to the west.
- 2.5.15 Buildings in the vicinity of the site attest to development in the later post-medieval/early modern period with the offices of the Manchester Ship Canal Company sited immediately to the west of the site. Map regression demonstrates that the site was developed during the 19th century and a number of listed townhouses standing on the opposite side of Chester Road provide parallels for the types of building techniques employed during this period. The remains of occupation levels, terraced dwellings and industrial structures have been encountered during archaeological investigations to the west and north-east of the site and demonstrate that structural remains of buildings, both domestic and industrial, associated with the Industrial Revolution in Manchester form an important part of the archaeological record.
- 2.5.16 In the early 19th century, large quantities of gravel were excavated from within and around the area formerly occupied by the fort and transported by barge along the Bridgewater Canal
- 2.5.17 By the time of Pigot's map of 1819, the essentially agricultural character of the site had evidently been all but lost. A NW-SE road, Arthur Street, divided the site into two portions and buildings had been erected along the Chester Road frontage and the northern parts of Jackson's Lane and Arthur Street. Owen Street bounded the site to the east.

- 2.5.18 Banck's map of 1831 indicates that extensive development of the site occurred during the 1820s. Much of the site had been infilled with housing, including along the Jackson's Lane frontage to the west, along both sides of the central Arthur Street and along the Owen Street frontage to the east. A broad, additional road, shown as Bank Street on later maps, crossed the southern portion of site, running from the south-western corner on a SW-NE alignment. It is probable that the buildings represent dwellings associated with early 19th century urbanisation, required by rapid industrialisation. Of note, however, is an open area presumably a yard off Chester Road in the north-western corner of the site.
- 2.5.19 The Ordnance Survey 1st edition map of 1844-49 shows much the same layout as the Banck's map, but with greater detail of the buildings and associated open areas. The open yard in the north-western corner of the site is annotated '*Timber Yard*', with a cistern shown on its eastern side. To the rear of the buildings on the (renamed) Great Jackson Street frontage were smaller structures, accessed through narrow alleys and similar in size to the back-to-back buildings in the 'Little Ireland' area, to the east of the site. To the rear of the buildings fronting Arthur Street were further small structures around two courts, Arthur Court No.1 and Arthur Court No.2, both accessed by alleyways. One of the larger buildings fronting Owen Street is Bank Court.
- 2.5.20 Slater's Directory of Manchester 1848, lists a variety of artisans and professionals occupying the buildings at the site. An earthenware dealer, school teachers, provision dealers, butcher, cashier, surveyor, professor of music, surveyor and silk merchant lived on the east side of Great Jackson Street. Fronting Chester Road were shopkeepers, such as a drapers, butchers, a watchmaker, a milliner, a newsvendor, a beer retailer, and other occupations, such as a blacksmith, a cooper, a wheelwright and a picture frame maker. Similar residents were living along Owen Street, including an engineer, an artist, an agent, a dressmaker, a joiner, two smiths, a bricklayer and an organ builder. Evidently the more prosperous shopkeepers and tradespeople lived in street frontage properties, whilst the poorer members of society, including lesser tradespeople, occupied smaller cottages to the rear, arranged around small courtyards. Each cottage was probably occupied by more than one family, with some families possibly occupying only a single room. Cellar rooms, with no natural light and dampness, formed wretched living spaces for some of the poorest members of early to mid-19th century Manchester.
- 2.5.21 Slater's Directory of Manchester for the years 1863 and 1877-78, records similar businesses along Chester Road and Great Jackson Street, a variety of tradespeople and lesser professions. The Ordnance Survey 2nd edition of 1893 shows that there had been further infilling of open areas in the north-western and south-eastern parts of the site. The premises formerly known as The Van Tavern, had evidently expanded, but was annotated simply as an unnamed inn.

- 2.5.22 The Ordnance Survey map sequence shows that there was relatively little alteration in the layout of the site until after the Second World War. The 1948 edition shows there had been clearance of many buildings at the site. The southern part of the Great Jackson Street frontage, both sides of Bank Street, the Owen Street/Chester Road corner and the western portion of the Chester Road frontage had all been cleared of buildings. The inn is no longer named and a '*Ruin*' occupies the plot immediately to its north. A '*Boatman's Home*' occupies a building at the Chester Road/Great Jackson corner, and an '*Engineering Works*' and a '*Plastic Moulding Works*' are shown in the south-western quarter and central eastern portion of the site, respectively. The Ordnance Survey map edition of 1953 shows little change to the site other then the addition of a number of small buildings in its north-western portion, the removal of the ruin and the change of Arthur Street to Henson Street as a place name.
- 2.5.23 The 1959 Ordnance Survey map shows that most of the buildings at the corner of Chester Road and Henson Street had been demolished, probably during the issue of the map. By this time, Bank Street had been renamed Banforth Street. The 1968 edition of the Ordnance Survey map suggests that the site was largely unoccupied by this date with the only remaining buildings being those associated with a '*Depot*' in the eastern half of the site. It is likely that Banforth Street, Henson Street and Owen Street had effectively ceased to exist by this date. By 1985 all evidence of the roads that once divided the site had disappeared and the site was occupied by one large building. The most recent Ordnance Survey mapping shows the site occupied by the premises of Tom Garner Motors.

3. AIMS AND OBJECTIVES

3.1 Project Aims

- 3.1.1 Since preservation *in situ* was not a feasible option within the proposed re-development scheme, preservation by record was considered the most appropriate form of mitigation. Accordingly, the broad aims of the archaeological excavation were:
 - to locate, record, sample and interpret any archaeological deposits exposed within a defined area across the central and southern portion of the site, where the earlier evaluation had identified remains of significance;
 - to locate, recover, identify and conserve (as appropriate) any archaeological artefacts and palaeoenvironmental remains exposed during the work;
 - to prepare a report summarising the results of the work;
 - to prepare and submit a suitable archive to an appropriate museum.
- 3.1.2 The particular aim of all excavation and recording undertaken at the site was the recovery of evidence of Roman activity associated with the extramural settlement of *Mamucium*, as well as evidence of significant industrial era occupation of this part of Manchester. Archaeological evidence from the site, therefore, had potential to illuminate the Roman and industrial era history of Manchester, all of which would be of, a least, local importance.

3.2 Research Objectives

- 3.2.1 The production of an archaeological Research Framework for North West England has identified gaps within current knowledge, assessed the potential for addressing these and defined consequent research initiatives.¹⁰ This English Heritage-funded initiative now provides a viable, realistic and effective academic basis for the undertaking of archaeological investigations in the region.
- 3.2.2 Within the Research Framework, two main items on the Research Agenda for the Romano-British period¹¹ are of particular relevance to the site herein described. In discussing the *vici* of the region, described as '...*in one sense the location of the interaction between the countryside and the town...'*, the first of these items, 'Settlement and Landuse', states that '...*there is currently little data on which to base serious examination of the differences between material culture and lifestyles in different kinds of community'*. Certainly, for Roman Manchester, the precise extent of the *vicus* remains imprecisely defined and an open area excavation on the south side of the Medlock presented an opportunity to examine this particularly poorly understood area. For the North West region generally, there remain '...*many unanswered questions over the decline of vici, as most do not appear to have outlasted the mid 3rd century*', so this excavation had potential to add important knowledge regarding the lifespan of the extramural settlement in Manchester. One initiative set out within this agenda item regarding artefacts states that '*Systematic publication of excavated assemblages from the region...is a priority...*'.

¹⁰ Brennand 2007.

¹¹ Philpott and Brennand 2007.

- 3.2.3 The second particularly relevant item on the Research Agenda for the Romano-British period for the site herein described is 'Ritual, Religion and Ceremony'. This highlights the importance of investigation of funerary material from the outskirts of proto-urban settlements and *vici*. ¹² Since human burial was forbidden within Roman towns, cemeteries of the period tend to cluster along the main routes leading to them. Thus the site, situated close to the approach from the west, certainly had potential of encountering roadside burials. Given the previous discoveries of material relating to Roman religion and ceremony in the vicinity of the site, it is of particular relevance that this agenda item highlights how '...evidence of Romano-Celtic deities... and of deities who were evidently local in origin... may contribute to the understanding of the impact of Roman culture in different types of communities'.
- 3.2.4 In the industrial era, the site was clearly representative of many modern British cities in its rapid development from open ground to densely occupied streets lined by terraced housing the main type of housing provision for both the middle and working classes throughout the 19th and early 20th centuries with associated shops and businesses. It also provides a good example of the consolidation of urban plots into larger units when smaller roads ceased to exist in the modern era. For the site herein described, a particularly relevant item on the Research Agenda for the industrial and modern period¹³ is 'The Urban Landscape'. This states that 'Archaeological research is needed to shed light on children, servants, domestic-based workers, and the urban working class in general.' and goes on to highlight how 'Cellars are particularly fertile areas for investigation.' since '...for the poorest they formed domestic accommodation...' and notes the undertaking of previous important archaeological investigation of such structures in Manchester.

¹² ibid.

¹³ Newman and McNeil 2007.

4. METHODOLOGIES

4.1 Fieldwork

- 4.1.1 The archaeological excavation was undertaken in accordance with the relevant standard and guidance document¹⁴ of the Institute for Archaeologists (IfA, formerly the Institute of Field Archaeologists IFA). PCA is an IfA-Registered Organisation. In addition, the approved WSI for the excavation set out in detail the methodologies to be employed during the fieldwork.
- 4.1.2 The excavation area was roughly rectangular, measuring a maximum of 58m NE-SW by 42m NW-SE, with a total area of *c*. 0.20 hectares (Figure 2). Effectively this was the footprint of the former garage/workshop of Tom Garner Motors, extending beyond this by c. 8m to the southwest and *c*. 4m to the south-east. The northernmost portion of the site was excluded from the archaeological excavation area as the previous evaluation had established that no significant archaeological remains survived there, likely due to substantial modern era truncation. The presence of an electricity sub-station in the south-eastern corner of the site precluded investigation in the vicinity of that building. The south-western limit of excavation was defined by the presence of a live service.
- 4.1.3 The removal of overburden and subsequent ground reduction was undertaken by tracked 360° mechanical excavators employing 1.80m wide toothless buckets (Plates 1 and 2). This work took place under direct archaeological supervision. All undifferentiated topsoil or archaeologically insignificant material was stripped down, in spits of approximately 100mm thickness, to the top of the first significant archaeological horizon or to the level of the natural sub-stratum, whichever came first. Spoil was stored in the northern portion of the site.
- 4.1.4 Archaeological excavation and recording was undertaken in accordance with recognised archaeological practice and following the methodology set out in PCA's '*Field Recording Manual*'.¹⁵ Following machine clearance, the sections and base of the excavation area were cleaned using hand tools. A site grid was established within the excavation area and tied in to the Ordnance Survey grid using a Total Station EDM. Archaeological deposits and features were recorded using the 'single context recording' method on the PCA *pro forma* 'Context Recording Sheet'. Excavated features and stratigraphic deposits were recorded in plan at a scale of 1:20 and in section at a scale of 1:10.
- 4.1.5 All archaeological features were cleaned with hand tools by the archaeological team to enable identification and recording. All discrete features such as pits and postholes were initially 50% excavated and recorded in section before being fully excavated in order to aid artefact and dateable material recovery. A minimum sample of 25% of each linear feature was excavated.

¹⁴ IFA 2001.

¹⁵ PCA 2008.

- 4.1.6 A detailed photographic record of the investigations was compiled using SLR cameras. This comprised black and white prints and colour transparencies (on 35mm film), illustrating the principal features and finds in detail and in general context. All photographs of this nature included a clearly visible graduated metric scale. The photographic record also included 'working shots' to illustrate more generally the nature of the archaeological investigations. The photographic record was supplemented with digital photography.
- 4.1.7 Two Temporary Bench Marks (TBMs) were established on the site from the Ordnance Survey Bench Mark (value 32.21m above Ordnance Datum (OD)) located on the street frontage of 378-380 Deansgate. The TBMs had a values of 30.87m OD and 31.83m OD.

4.2 Post-excavation

- 4.2.1 Not everything recovered from an archaeological excavation has the same significance and thus the same potential for further study, thus the process of 'assessment' identifies those elements of the site data that require further analysis. In accordance with MoRPHE guidelines, the site data has been assessed for its potential for further analysis in relation to the research objectives of the project and any additional questions that have come to light as a result of the fieldwork. This Assessment Report enumerates the different kinds of evidence (stratigraphic, artefactual and palaeoenvironmental) from the site and sets out a formal assessment of the potential of each element of the collected data for further analysis.
- 4.2.2 The stratigraphic data from the site is represented by the written, drawn and photographic records. Post-excavation work involved checking and collating site records, grouping contexts, enhancing matrices, consulting with external specialists and phasing the stratigraphic data. A written summary of the archaeological sequence was then compiled, as described below in Section 5. The contents of the paper and photographic elements of the Site Archive are quantified in Section 6.
- 4.2.3 All processing of artefacts and ecofacts was undertaken away from the site. Assessment of artefactual and ecofactual material has been undertaken by suitably qualified personnel. For each category of artefact and ecofact an assessment report has been produced including a basic quantification of the material and a statement of its potential for further analysis and recommendations for such work (Sections 7-16).
- 4.2.4 Assemblages of ceramic material, including tile and fired clay, and faunal remains were recovered along with a variety of 'small finds' comprising objects of wood, stone, glass, ceramic, copper alloy, iron and lead. All artefacts recovered were treated in an appropriate manner and were cleaned, marked, conserved, bagged, packaged, boxed and stored, as appropriate and in accordance with recognised guidelines.¹⁶ All materials that required stabilisation were transferred to a specialist conservation facility as soon as possible. The conservation of vulnerable materials commenced with an assessment of all recovered artefacts and X-radiography of the metal objects. Quality of preservation was assessed and the long-term conservation and storage needs of all excavated material identified.

¹⁶ UKIC 1983; Watkinson and Neal 2001.

- 4.2.5 The palaeoenvironmental sampling strategy for the project was to recover bulk samples from suitable, well-dated archaeological deposits. To this end, 15 bulk samples collected during the fieldwork that were sent for an initial assessment of the potential for survival of biological remains (Section 14).
- 4.2.6 Survival of all materials recovered during or generated by archaeological projects depends upon suitable storage. The complete Site Archive, comprising written, drawn and photographic records (including all material generated electronically during post-excavation) and all recovered materials will be packaged for long term curation. In preparing the Site Archive for deposition, all relevant standards and guidelines documents referenced in the Archaeological Archives Forum guidelines document¹⁷ will be adhered to, in particular a well-established United Kingdom Institute for Conservation (UKIC) document¹⁸ and a forthcoming IfA publication.¹⁹
- 4.2.7 The Site Archive will be quantified, ordered, indexed, and internally consistent. An acceptable standard for archives generated by archaeological projects is defined in MoRPHE. The depositional requirements of the receiving body, in this case The Manchester Museum, will be met in full.

¹⁷ Brown 2007.

¹⁸ Walker 1990.

¹⁹ IfA forthcoming.

5. PHASED SUMMARY OF THE ARCHAEOLOGICAL SEQUENCE

5.1 Phase 1: Natural Sub-stratum

- 5.1.1 Natural sub-stratum, [25], was exposed across the excavation area and was of variable composition. In general, to the north-east it comprised mottled light grey and light orange brown sand, while to the south-west it comprised variously coloured sand and gravel. In deeply cut archaeological features these deposits were generally observed to overlie soft light to mid greyish pink clay. The variable nature of the natural sub-stratum as recorded is largely typical of the glacial drift geology of this part of Manchester.
- 5.1.2 The maximum height at which the natural sub-stratum was recorded was 31.28m OD, this towards the south-western corner of the excavation area. Apart from occasional localised undulations in the surface of the natural, the site was relatively level. Towards the north-eastern side of the excavation area, the natural sub-stratum was exposed at *c*. 31.0m OD. This slight slope away to the north-east reflects the natural topography of the area in which the site lies, on relatively high ground above the southern valley side of the River Medlock.

5.2 Phase 2: Roman Plots, Early to Mid-2nd Century (Figures 4 and 9; Plates 5-10)

Boundary ditches delimiting Plots 1-4

Ditches [13], [75], [79], [81], [114], [132], [135], [180], [196], [198], [215], [219], [236], [238], [252], [268], [270]

- 5.2.1 The earliest recorded features of Roman origin comprised a group of variously aligned, discontinuous shallow linear features, all severely truncated by later phases of activity and exposed cut into the natural sub-stratum. These are interpreted as boundary ditches delimiting parcels of land aligned approximately NE-SW, designated as Plots 1-4, set out to the south of the nearby Roman road, the line of which is presumed to follow modern Chester Road.
- 5.2.2 A short length of a possibly east-west aligned shallow linear feature, [81], was recorded in the southern central portion of the excavation area, this measuring 0.30m long, truncated at both ends, by 0.30m wide by 80mm deep. Interpretation is not certain as such a small portion survived, but it may be the remnant of a boundary feature.
- 5.2.3 Feature [81] was truncated to the east by a shallow ditch, [79], up to 0.40m wide and 0.25m deep. With a rounded terminal to the south-west, it ran on a roughly NE-SW alignment for a total distance of *c*. 16.30m, although discontinuous due to truncation by numerous later features. Located *c*. 5.40m to the north-east was a similarly aligned feature, recorded as ditch [268] but probably a continuation of ditch [79]. In total this measured *c*. 7.25m in length, with a short interruption towards the south-western end. It was truncated at either end by modern activity and was up to 0.60m wide and 0.27m deep. Neither feature yielded artefactual material from their silty fills, [80] and [269], respectively. Together these features are interpreted as delimiting the south-eastern sides of Plots 1 and 2 and the north-western sides of Plots 3 and 4.

- 5.2.4 The upper fill of ditch [268] had been re-cut, as ditch [270] (not shown on Figure 4), which was traced for a total length of *c*. 7.25m and was up to 0.38m wide and 0.25m deep. Although no artefactual material was recovered from its single sandy silt fill, [271], this re-cut indicates some degree of longevity of the boundary. The fill was much darker in colour than that of the earlier version, perhaps suggesting that it had been deliberately backfilled rather than naturally silting-up.
- 5.2.5 The south-western side of Plot 1 and the north-eastern side of Plot 2 were delimited by a shallow NW-SE aligned ditch, [252], 0.35m wide and up to 0.23m deep, and recorded for a distance of *c*. 3.50m. Its single sandy silt fill, [251], produced two sherds of undiagnostic Roman pottery.
- 5.2.6 A short length of NE-SW aligned ditch, [238], measuring *c*. 2.30m NE-SW by 0.50m wide and 0.18m deep was recorded to the north-east of ditch [268], in the vicinity of the corner of Plot
 1. Only a short length of this feature was exposed and no artefactual material was recovered from its single sandy fill, [239], therefore any interpretation cannot be certain. However, it is possible that this represents part of a ditch delimiting another plot of land to the east of Plot 1.
- 5.2.7 Ditches [238] and [268] were truncated by a NW-SE aligned ditch, [236], measuring *c*. 3.80m in length, with a rounded terminus to the north-west and truncated to the south-east by modern activity, by 0.57m wide and 0.16m deep. This feature is interpreted as a boundary ditch delimiting the north-eastern side of Plot 1. The feature was recorded extending beyond the corner of Plot 1 for a short distance, before being truncated by later activity, suggesting the existence of another plot of land south-east of Plot 1, designated Plot 4. No artefactual material was recovered from the single sandy fill, [237], of this ditch.
- 5.2.8 The south-western side of Plot 2 was delimited by a shallow NW-SE aligned ditch, [75], recorded for a length of *c*. 8.50m and up to 0.60m wide and 0.22m deep. This had a rounded terminal in the north-west and was truncated to the south-east. No artefactual material was recovered from its single silty sand fill, [76].
- 5.2.9 Plot 1 thus measured 19m NE-SW and at least 6m NW-SE, although it was not possible to ascertain the full dimensions in the latter direction due to truncation. Plot 2 measured 16.0m NE-SW and at least 12.0m NW-SE; the terminal of boundary ditch [75] could represent the extent of the plot, although this is not certain.
- 5.2.10 The north-eastern side of Plot 3 and the south-western side of Plot 4 were delimited by a roughly NW-SE aligned ditch, [135]. Recorded for a length of *c*. 13.0m, this was a more substantial feature than those previously described, up to 1.63m wide and 0.38m deep. No artefactual material was recovered from its single sandy silty clay fill, [134]. Located immediately to the north-west, a short length of a similarly aligned ditch, [215], may represent a continuation of this boundary. One sherd of Roman pottery and an iron nail (SF 55) were recovered from its single sandy silt fill, [214].

- 5.2.11 The northern edge of a shallow presumed linear NW-SE aligned feature, [132], was located c. 0.60m north-west of ditch [135]. This feature was heavily truncated on three sides so that the surviving portion measured only 0.82m NW-SE by 0.17m wide and 0.20m deep. No artefactual material was recovered from its single sandy silt fill, [133]. Interpretation cannot be certain as such a small portion survived, but the feature may represent part of a ditch, possibly draining into the ditch separating Plots 3 and 4.
- 5.2.12 A short length of a ditch, [198], was recorded adjacent and parallel to the north-eastern side of ditch [215], extending for a distance of *c*. 2.60m. This was 0.60m wide and up to 0.35m deep and a sherd of Roman pottery was recovered from its single fill, [197]. Truncating the north-western edge of ditch [198] was a parallel ditch, [196], recorded for a distance of *c*. 3.40m and up to 0.85m wide and 0.35m deep (Plate 9). Two adjoining sherds of Roman pottery were recovered from its single sandy clayey silt fill, [195]. The close proximity of these parallel ditches suggests that they represent replacement of the boundary defining Plots 3 and 4 over a period of time.
- 5.2.13 The south-eastern side of Plot 3 was delimited by a shallow ditch, [114], aligned approximately NE-SW and recorded for a length of *c*. 6.0m. This ditch was up to 0.68m wide and 0.24m deep and its single sandy silt fill, [115], yielded seven sherds of pottery dated to the early to mid-2nd century AD, along with four pieces of ceramic building material.
- 5.2.14 Plot 3 thus measured 16.20m NW-SE by at least 10.0m NE-SW, although the full extent in the latter direction was not ascertained within the limit of excavation.
- 5.2.15 A short length of a NE-SW aligned ditch, [219], was recorded to the north-east of Plot 3. It measured *c*. 7.0m in length, truncated at each end, by 1.05m wide and 0.22m deep. Its single sandy fill, [218], produced 12 sherds of pottery indicating an early to mid-2nd century AD period of origin. Immediately to the north-west was a roughly parallel feature, [180], measuring *c*. 2.80m in length, with a rounded terminal in the north-east and truncated to the south-west, by 1.10m wide and 0.55m deep. A total of 43 sherds of pottery were recovered from its single silty fill, [181], this assemblage dated to the mid to late 2nd century, along with four fragments of ceramic building material. Also of note from this feature was a flint flake of prehistoric origin; although certainly residual in context, this indicates the presence of prehistoric activity within the general vicinity of the site. These ditches are interpreted as representing part of the south-eastern boundary of Plot 4, which thus measured *c*. 19.0m NE-SW by *c*. 10.0m NW-SE.
- 5.2.16 Two separate parts, of combined length c. 5.80m, of a roughly NW-SE aligned ditch, [13], were recorded in the south-easternmost corner of the excavation area. This was up to 1.80m wide and 0.30m deep and a sherd of pottery of 2nd century date was recovered from its single silty fill, [14], along with a small piece of ceramic building material and a fragment of jet (SF 43). This ditch is interpreted as a boundary feature probably associated with another plot of land to the south-east of Plot 3, this largely located beyond the limits of excavation. The composition of its infill indicated deliberate backfilling rather than the natural silting-up of this feature.

Features inside Plot 1

Linear features [211] and [262]; pits [11], [97], [184], [225] and [257]

- 5.2.17 A shallow NNE-SSW aligned linear feature, [262], was recorded towards the north-eastern corner of Plot 1. This measured 6.05m in length, with sub-square terminals at each end, and was 0.30m wide and 80mm deep. Located immediately to the north-east was a portion of a NE-SW aligned linear feature, [211], which measured *c*. 1.0m in length, truncated to the north-east by a modern intrusion, by 0.30m wide and 80mm deep. Although no artefactual material was recovered from either of their single sandy fills, [210] and [263], respectively, a pit, [225], containing pottery of early to late 2nd century date truncated feature [262]. These linear features are interpreted as possible timber slots forming part of a structure within the north-eastern corner of Plot 1. Alternatively, both features, which were recorded on a similar alignment to that of ditch [268], the boundary ditch delimiting Plot 1, may represent reestablishment of this boundary, or indeed an earlier version of it.
- 5.2.18 Part of a feature, [257], measuring 2.20m by 1.65m, although the upper part of its western edge was heavily truncated, and 1.25m deep was recorded to the west of linear feature [257]. Where the feature cut into sandy geological material it was roughly sub-circular in plan, however, at lower levels, where it cut through clay, its shape became sub-rectangular, measuring c. 1.0m x 0.80m, suggesting that, after being left open for a period of time, the upper portion of the feature eroded. Its fills, [258], [259], [260] and [261], generally comprised various compositions of clay, silt and sand. A total of twelve sherds of pottery dated to the early to mid-2nd century AD were recovered from primary fill [258] and fill [259]. Of particular interest was the base of a stamped samian vessel. This feature is interpreted as a refuse pit.
- 5.2.19 The south-eastern edge of pit [257] was truncated by a substantial sub-circular pit, [225] measuring 3.20m by 3.0m and 1.62m deep. Its fills, [226], [227], [228], [229], [230], [231], [232], [233], [234] and [235], generally comprised various compositions of clay, silt and sand (Section 2, Figure 9). An assemblage of 74 sherds of Roman pottery was recovered from its fills. The earliest fills from which pottery was recovered, [235] and [234], contained material of 2nd century date. The remaining pottery, from upper fills [228] and [229], ranged in date from AD 70 to the late 2nd century. The size of this feature indicates that it may originally have been a quarry pit to extract sand and clay, but was subsequently utilised as a refuse pit.
- 5.2.20 A group of three inter-cutting sub-circular pits, [11], [97] and [184], was recorded to the west of pit [225]. Pit [11] measured 1.45m by 1.15m and 1.0m deep and its fills, [12], [30], [31] and [65] (Section 4, Figure 9), generally comprised silty sand. Eight sherds of pottery dated to the 2nd century AD were recovered from fill [31]. The upper fill, [12], produced 51 sherds of pottery, these indicating a late 2nd century date for deposition. A group of 17 iron objects (SF 17-25, SF 27-34) were recovered from fill [12]. The majority of these have been identified as nails, possibly from a composite object, the organic part of which had degraded. Also from this feature were a small sheet of lead (SF 36) and a small circular stone disc of uncertain function. This feature is interpreted as a refuse pit dating from the late 2nd century AD.

- 5.2.21 Truncating the southern edge of pit [11] was a more substantial sub-circular pit, [184], which measured 2.0m by 1.45m and 1.65m deep. As with pit [257], its upper portion was sub-circular in plan, but where it cut deeper into natural clay it was sub-square (Section 3, Figure 9). Three sherds of pottery recovered from its generally silty sandy fills, [185], [186] and [187], indicate an early to mid-2nd century AD date. The primary fill was sterile sand, with no inclusions, this possibly derived from erosion and it is possible that the primary purpose of the feature was as a quarry pit to extract natural clay. Although sparse debris was observed in the upper fills, these did contain some charcoal and thus it is surmised that, following initial natural silting, the feature was utilised as a refuse pit.
- 5.2.22 Truncating the northern edge of pit [184] was another sub-circular feature, [97], which measured 1.10m by 1.05m and 0.36m deep. Five sherds of pottery of 2nd century AD date were recovered from its clayey silt fills, [126] and [127], and two iron nails (SFs 78 and 79) were also recovered. Of particular note was a copper alloy coin (SF 42), although surface detail was not discernible due to corrosion. This feature is also interpreted as a refuse pit.

Features inside Plot 3

Linear features [58], [137], [139]; pit [154]

- 5.2.23 A discontinuous shallow linear feature, [137], aligned approximately NW-SE was recorded within Plot 3, running parallel to its north-eastern boundary. This was recorded for a total length of *c*. 4.80m and was up to 0.45m wide and 0.10m deep, truncated at each end by modern activity. Located *c*. 0.50m to the north of ditch [137], and roughly parallel to it, was another shallow feature, [139], which measured *c*. 4.70m in length, truncated to each end by modern activity, by 0.58m wide and up to 0.26m deep. A small fragment of a glass vessel (SF 84) of 1st to 2nd century AD date was recovered from its single sandy clayey silt fill, [138]. It is possible that these linear features were the remains of timber slots representing part of a structure within Plot 3. Alternatively, they may represent portions of drainage features. To the south-east was a fragment of a NE-SW aligned linear feature, [58], which measured *c*. 2.80m, truncated to the south, by up to 0.90m wide and 0.17m deep. Its single silt fill, [59], produced five sherds of pottery of mid to late 2nd century AD date. Interpretation cannot be certain, but this could represent part of a drainage gully within Plot 3.
- 5.2.24 Located adjacent to the south-eastern limit of the excavation area was a substantial subcircular pit, [154], which measured 2.62m east-west by 2.31m north-south and 1.65m deep (Plate 10). As with previously described pits, at the upper surface of the natural sub-stratum the feature was sub-circular, becoming sub-rectangular with depth (Section 11, Figure 12). In its lower portion, the feature had near vertical sides and a flat base. Its primary fill, [240], comprised clayey silt up to 0.25m thick, which contained decayed organic material and fragments of twigs and wood, including two pieces of worked oak board (see Section 15). This was overlain by a 0.32m thick fill, [207], comprising dark grey silty clay with charcoal flecks throughout. Bulk samples of these fills produced small quantities of waterlogged weed seeds with the species present indicative of open and disturbed ground (see Section 14).
- 5.2.25 The overlying fill, [206], comprised sterile yellowish grey sand, up to 0.20m thick, which was notably different in composition from the earlier fills and may represent a dump of material deposited to seal underlying decaying matter.

- 5.2.26 Following infilling of the lower *c*. 0.80m of the feature with these three fills, a complete samian bowl, the external surface of which was decorated with a hunting scene, was placed in the pit. On top of this was an inscribed stone altar (SF 44), found with the inscription face down, although it is uncertain if there is any significance to this (Plates 5 and 6). Fill [157], comprising dark grey clayey silt, up to 0.25m thick, had then been deposited in the pit. An assemblage of 23 sherds of pottery of mid to late 2nd century AD date were recovered from this fill. The uppermost fills, [156] and [155], with a combined thickness of *c*. 0.80m, were again relatively sterile and could represent intentional backfilling of the upper part of the feature using the natural sub-stratum.
- 5.2.27 The altar was located fairly late in the depositional sequence of the pit, indicating that the feature was open and likely to have been used as a general refuse pit prior to deposition of both the samian bowl and the altar. The substantial size of the pit suggests that its original function may have been for quarrying, later utilised for refuse disposal. As previously mentioned, it is thought that the Roman road to the north of the site was a particular focus for religious and ceremonial activity, and the altar likely originated from a roadside shrine, being removed and placed within the pit upon abandonment of that facility. A detailed description of the altar and a discussion of its significance form Section 10 of this report.

5.3 Phase 3: Roman Boundary Ditches, Late 2nd Century (Figures 5, 9 and 10; Plates 11 and 12)

Ditches [42], [85], [190], [311]

5.3.1 A substantial linear feature, group number [311], was recorded in the eastern part of the excavation area. A NW-SE aligned element, ditch [190], was recorded for a distance of c. 17.0m, truncated to the south-east, and was up to 2.0m wide and 1.05m deep (Plate 11). This element had steeply sloping sides, stepping down to a narrow concave base (Section 6, Figure 10). The ditch bifurcated to the north-west so that the overall feature was approximately T-shaped. The north-south aligned elements, recorded as discontinuous ditches [42] and [85], to the north and south, respectively, extended for a total length of 36.0m, truncated to the north and with a rounded terminal to the south. Ditch [42] had a stepped profile with a generally narrow and flat base and was a maximum of 2.60m wide and 1.10m deep (Section 3, Figure 9), whilst further north the profile became U-shaped (Section 7, Figure 10). Ditch [85], which was up to 1.50m wide and 0.60m deep, had a stepped profile with a relatively narrow and flat base (Section 5, Figure 10). The primary fills of ditches [42] and [190], recorded as [194], [199], [280] and [300], consisted of relatively sterile sand and gravel, indicating that the material derived from natural silting. A single sherd of pottery of mid-2nd century AD date was recovered from the primary fills.

- 5.3.2 Situated immediately above the primary fill along the north-western end of ditch [190], close to the point where the ditch bifurcated, were the degraded remains of timber planking (Section 6, Figure 10; Plate 12). This measured at least 2.40m in length by up to 0.15m wide and 20mm thick, and originally may have extended along the entire length of this ditch, although the surviving wood was generally in a very poor state of preservation. At the very degraded south-eastern extent of the planking, a box-shaped lead object (SF 59) was recorded in association with the timber. The planking may represent the base of a timber box drain and the lead object could represent the junction of two sections of the drain. A further short length of degraded timber plank was recorded along ditch [42], again close to the junction of the various elements of the ditch. A wooden stake was recovered from primary fill [194]. This had been rammed into the base of the feature and may be contemporary with the planking.
- 5.3.3 The upper fills of ditch segments [42] and [190], fills [191], [192], [193], [200], [201], [202], [203], [278], [279], [287] and [288], generally comprised various compositions of clay, sand and silt, with a combined thickness of up to 0.85m. An assemblage of 60 sherds of pottery recovered from these upper fills is of 2nd century AD date. The relatively frequent debris within these fills suggests deliberate backfilling rather than natural silting-up.
- 5.3.4 Only a single fill, [86], was recorded in the southern portion of the north-south aligned element of the feature, ditch [85]. An assemblage of 27 sherds of pottery was recovered from this silty sand deposit, indicating a late 2nd century AD origin. The absence of multiple fills within this part of the ditch could perhaps indicate that this was a later addition to the overall feature, so that, in its origin form, this was a splayed L-shaped ditch, defined by ditches [42] and [190]. This is supported by the fact that there was no distinction between the upper fills of ditches [85] and [42].
- 5.3.5 This overall feature was clearly a substantial boundary that, as with Plots 1-3, delimited areas of land on the south side of the Roman road. Although the pottery recovered from the Phase 3 ditches was of the same broad date range as the material recovered from Phase 2 features, the stratigraphic relationships identified by excavation demonstrate that the earliest, relatively insubstantial, land management system was replaced by a ditched-boundary arrangement of greater scale. The traces of planking recorded along the base of the ditch likely represents a timber box drain.

5.4 Phase 4: Roman Plots, 3rd century (Figures 6 and 11; Plates 13 and 14) Boundary ditches delimiting Plots 5-7

Boundary ditches [20], [69], [83], [145], [131], [151], [163], [180], [168], [205], [267], [291]

5.4.1 A group of ten shallow roughly NE-SW and NW-SE aligned ditches were recorded across the excavation area. As with the similar Phase 2 features, these are interpreted as boundary ditches delimiting parcels of land, Plots 5-7, extending south-eastwards from the Roman road which ran to the north-west of the site.

- 5.4.2 The south-eastern sides of Plots 5 and 6 were bounded by a NE-SW aligned ditch, [69], which was traced for a length of *c*. 35.60m, truncated to the north-east and south-west by modern intrusions, and which measured up to 0.82m wide and 0.30m deep. A small assemblage of thirteen sherds of pottery was recovered from its single sandy silt fill, [68], including some material of mid-3rd to early 4th century AD date, along with a fragment of slag (SF 91), this likely to be a by-product of iron smithing. A truncated ditch, [205], located northeast of ditch [69], although on a slightly different alignment, may represent a continuation of this boundary. This was *c*. 7.70m long by 0.40m wide and 0.20m deep produced a sherd of Roman pottery from its single sandy fill, [204].
- 5.4.3 The north-eastern corner of Plot 5 was probably delimited by ditch [145], although this was recorded for a distance of only *c*. 2.80m, truncated to the north, and it was 1.0m wide and 0.45m deep. No artefactual material was recovered from its single sandy silt fill, [144].
- 5.4.4 The south-western side of Plot 5, and the corresponding north-eastern side of Plot 6, were delimited by a discontinuous NW-SE aligned ditch, [163], traced for a total length of *c*. 6.0m, truncated to the north and with a rounded terminal in the south. It was 0.34m wide and 0.17m deep. No artefactual material was recovered from its single sand and gravel fill, [162].
- 5.4.5 The south-western sides of Plots 6 and 7 were delimited by a more substantial ditch, [20], this aligned NW-SE and traced for a length of *c*. 34.0m, continuing beyond the limits of excavation. It was up to 2.0m wide and 0.68m deep and had steeply sloping sides, stepping down to a narrow flat base (Section 8, Figure 11). Its primary fill, [21], comprised clayey silty sand from which an assemblage of 16 sherds of pottery of 2nd century AD date was recovered. Although no artefactual material was recovered from its upper clayey sand fill, [22], a portion of this ditch excavated during the previous evaluation produced pottery of 3rd century AD date.
- 5.4.6 Plot 5 thus measured c. 15m NE-SW and at least 11m NW-SE, although the full extent of this axis was not established, and Plot 6 measured c. 29m NE-SW by at least 18m NW-SE.
- 5.4.7 A group of parallel ditches, aligned roughly NNE-SSW, was recorded to the south-east of Plots 5 and 6 and these may represent the south-eastern boundary of another parcel of land, Plot 7, perhaps reinstated in different positions over a period of time. The southernmost ditch, [131], traced for a length of *c*. 20.20m, with a rounded terminal to the south and truncated to the north, was 0.45m wide and 0.18m deep. Four sherds of 2nd century AD pottery were recovered from its single clayey sandy fill, [130], along with nine fragments of ceramic building material. This boundary continued to the north-east beyond an area of truncation, where it was recorded as ditch [168], which measured *c*. 7.20m by 0.70m wide and up to 0.45m deep. A total of 46 sherds of pottery were recovered from its single sandy silt fill, [169], and this assemblage is of early 3rd century AD date. Eight fragments of ceramic building material were also recovered. In total this boundary thus extended for a distance of more than 35.0m, continuing beyond the limit of excavation to the north-east.

- 5.4.8 Approximately 1.0m to the north-west of ditch [131] was a parallel ditch, [83], which was traced for a distance *c*. 10.0m in length with a rounded terminal adjacent to the terminal of ditch [131] and truncated to the north. It was up to 0.87m wide and 0.27m deep but no artefactual material was recovered from its single sandy silt fill, [84], which contained frequent flecks of charcoal. The feature had probably been deliberately backfilled rather than naturally silting-up. A further segment of NNE-SSW aligned ditch, [267], was located to the north-east of ditch [83], this extended *c*. 2.0m in length, truncated at either end, and was 1.0m wide and 0.23m deep. It may represent a continuation of ditch [83], giving a combined length of over 18m. One sherd of Roman pottery was recovered from its single sandy silt fill, [266].
- 5.4.9 Lying adjacent and parallel to ditch [83] was a short length of a linear feature, [151], c. 4.70m in length, truncated to the north and with a terminal to the south. This survived to a depth of only 70mm, this portion being 0.60m wide. While three sherds of post-medieval pottery were recovered from its single sandy clayey silt fill, [150], these are considered to be intrusive, due to the considerable truncation of the feature. The alignment and form of this feature indicates that it represents another ditch of Roman origin.
- 5.4.10 All of these linear features defined an area of land to the south of Plots 5 and 6 which has been designated as Plot 7, although it is acknowledged that this parcel of land was not regular in plan and narrowed to the north-east. Plot 7 would have measured over 45.0m NE-SW and when defined by the southernmost ditch, [131], would have been *c*. 12m NW-SE, narrowing to less than 4.0m in the north-east. The north-western side of Plot 8 was defined by ditch [131] and the south-eastern side may have been bounded by a continuation of ditch [20], although this lay largely beyond the edge of excavation.

Features inside Plot 5

Postholes [52], [123], [159], [208], [291]; pits [9], [16], [32], [40], [243], [245]; timber slot [289]

- 5.4.11 A circular feature, [291], was located along the boundary between Plots 5 and 6, adjacent to the southern terminal of boundary ditch [163]. This was *c*. 0.70m in diameter and 0.18m deep and had a linear projection running north-eastwards for 0.40m, beyond which it was truncated. It was, therefore, not possible to determine whether this represented the terminal of a linear feature, or a posthole from which the timber post had been removed creating the linear projection. No artefactual material was recovered from its single silty sand fill, [292]. To the south-east was a sub-circular feature, [52], probably a posthole, which measured 0.72m by 0.68m and 0.26m deep and produced five sherds of Roman pottery. It is possible that these two features together may have been associated with an access point in the boundary between the Plots 5 and 6.
- 5.4.12 Several sub-circular features recorded within Plot 5 have been interpreted as refuse pits. Pit [40], located in the northern portion of the plot, measured 1.10m by 1.02m and 0.26m deep. No artefactual material was recovered from its single silty fill, [41], which contained frequent inclusions of charcoal and occasional fragments of stone. It has been placed within this phase due to its location; if the plot boundary for the earlier Phase 2 Plot 1 is projected then this pit would span the boundary, therefore it is considered more likely that the feature was associated with Plot 5.

- 5.4.13 Truncating the north-western edge of pit [40] was a substantial sub-circular pit, [16], which measured 2.20m by 2.0m and 0.74m deep. Ten sherds of pottery recovered from its primary silt fill, [17], were of 2nd century AD date. The upper fill, [18], which contained frequent charcoal and fragmented stone throughout, produced an assemblage of 29 sherds of pottery of late 2nd to early 3rd century AD date, along with the base of a glass vessel (SF 83) of 1st-3rd century AD date.
- 5.4.14 To the south-east of these pits was part of a sub-circular pit, [243], measuring at least 0.31m, truncated to the north-west by a substantial modern intrusion, by 0.50m and 0.21m deep. No artefactual material was recovered from its single sandy silt fill, [244]. This pit was truncated by a sub-circular pit, [245], which measured at least 0.80m, truncated to the north-west, by 1.50m and 0.74m deep. Three generally sandy silt fills, [246], [247] and [248], were recorded within this pit, of which the uppermost, fill [246], produced three pottery sherds of late 2nd century AD date. As with pit [40], these pits have been placed within Phase 4 as they lie centrally within Plot 5 and would have spanned the earlier Phase 2 Plot 1 boundary.
- 5.4.15 A sub-circular refuse pit, [32], located to the west of pit [245] measured *c*. 1.90m by 1.55m and 0.43m deep. Ten sherds of pottery recovered from its primary clayey silt fill, [33], were of early 3rd century AD date. Its upper silty sand fill, [34], produced 16 sherds of late 2nd century AD pottery. Also recovered from the pit were eleven iron objects, the majority of these nails (SF 4 and SF 6-15), along with two fragments of chain links (SF 8 and SF 10) and one fragment of glass vessel (SF 5) of 1st-4th century AD date. Truncating the north-western edge of pit [32] was a sub-circular refuse pit, [9], which measured 1.05m by 0.80m and 0.48m deep. Eighteen sherds of pottery of late 2nd century AD date were recovered from its single silty sand fill, [10], along with an iron nail (SF 1) and a pointed iron object that may have served as an awl (SF 2).
- 5.4.16 A shallow sub-square feature, [208], was located within the south-eastern portion of Plot 5. This measured c. 0.50m across and was 0.19m deep. Two fragments of stone slab were recorded at the base of this feature, which is interpreted as a post-pad. No artefactual material was recovered from its single clayey sandy silt fill, [209], but the feature did truncate Phase 2 pit [225]. Another possible structural feature, [123], was located adjacent to the north-eastern corner of Plot 5. Sub-circular in shape, this measured 0.57m by 0.51m and was 0.18m deep. Its fill, [122], contained two large stones and a fragment of a beehive quernstone (SF 41), these thought to represent post-packing material used to support an upright post.
- 5.4.17 Adjacent to the south-western boundary of Plot 5 was a sub-circular feature, [159], *c*. 1.0m in diameter and 0.78m deep. This feature had an irregular, steep profile that tapered to a blunt point and it is interpreted as a posthole. No artefactual material was recovered from its single sandy silt fill, [158], and it may, therefore, have been situated within the earlier Phase 2 Plot 1. However, it has been assigned with the later phase.
- 5.4.18 A small part of a probably linear NNW-SSE aligned feature, [289], was located towards the south-eastern corner of Plot 5, this truncating Phase 3 enclosure ditch [42]. It measured at least 0.42m by 0.41m, truncated on all sides, and was 0.12m deep. The function of this feature is uncertain as such a small portion survived, but it is tentatively interpreted as a timber-slot or alternatively could be part of a ditch or gully. No artefactual material was recovered from its single sandy silt fill, [290].

Features inside Plot 6

Pits [29], [102], [295]; postholes [62], [63], [293], [309]; timber slots [56], [66], [71], [306]

- 5.4.19 Two narrow linear features, [56] and [66], were located in the central portion of Plot 6. Feature [56], which was aligned NNE-SSW, was *c*. 2.60m in length, truncated to the south by modern activity, and was 0.30m wide and 60mm deep. To the north-east and aligned at approximate right-angles to that feature was feature [66], which was *c*. 1.25m in length by 0.40m wide and 0.10m deep. No artefactual material was recovered from either of the clayey sand fills, [57] and [67], respectively, of these features and they had no relationship with any other Roman features. Consequently, and also due to their location within the central part of Plot 6, these features have been placed within the latest Roman phase. Both have been tentatively interpreted as parts of beam slots, which would have housed horizontal timbers, although this is far from certain.
- 5.4.20 Part of a NE-SW aligned linear feature, [71], was recorded within the north-eastern corner of Plot 6. It was 1.20m in length, but truncated at each end, 0.30m wide and 0.28m deep. This feature was not well defined, suggesting a 'robbed-out' structural feature, such as a timber beam slot. No artefactual material was recovered from its single sandy silt fill, [72]. A short distance to the north of feature [71] was feature [306], this interpreted as the rounded northwestern terminal of a possible linear feature. This was 0.32m wide and 70mm deep and survived for a length of 0.37m, truncated to the south-east. Two fragments of Roman pottery were recovered from its silty sand fill, [305]. This feature may represent a structural feature such as a beam slot. These features may have been situated within the earlier phases of activity but, in the absence of close dating material, have been placed within the latest phase of activity to which they likely belonged.
- 5.4.21 Other structural features recorded within the north-eastern corner of Plot 6 comprised a cluster of several small postholes. Posthole [62] measured 0.31m in diameter by 90mm deep and posthole [63] measured 0.48m in diameter by 90mm deep. Posthole [309], which had been truncated to the south-west, measured 0.60m in diameter by 0.15m deep. Post [293] measured 0.56m in diameter by 80mm deep. No artefactual material was recovered from any of these features, which again have been assigned to the latest phase of activity to which they likely belonged.
- 5.4.22 Part of a sub-circular pit, [29], was recorded within the north-western part of Plot 6. This measured 1.52m, truncated to the south-west, by 1.25m NE-SW and was 0.63m deep. Five generally sandy silt fills, [26], [27], [28], [36] and [37], were recorded within the feature. An assemblage of 158 sherds of pottery of late 2nd to early 3rd century AD date were recovered from upper fills, [26], [27] and [28], including a near complete ceramic flagon. Two fragments of glass of 1st-4th century AD date were also recovered from this pit, along with a few fragments of ceramic building material and a nail (SF 16). This feature is interpreted as a refuse pit.

- 5.4.23 Located within the centre of Plot 6 was a substantial sub-circular pit, [102], which measured c. 3.40m by 3.10m and 1.45m deep (Plate 13). In profile the feature had sloping sides which stepped down to become vertical and a wide, flat base (Section 10, Figure 11). The primary fill, [103], which comprised a deposit of mid grey coarse sand slumped against the side of the pit, produced 14 sherds of pottery of mid-2nd century AD date. This was overlain by a deposit, [104], comprising gravel with frequent charcoal fragments, with charred heather stems recorded in the bulk sample taken of this fill, this material possibly representing waste from some industrial or manufacturing process undertaken in the vicinity. The upper fill, [105], produced 28 sherds of late 2nd to early 3rd century AD date. The pit also produced 15 pieces of ceramic building material, an iron nail (SF 52) and two unidentifiable iron objects (SF 80 and 81). Given its dimensions, this feature is likely to have been dug originally as a quarry pit, but was certainly subsequently utilised as a refuse pit.
- 5.4.24 Another substantial sub-circular refuse pit, [295], was located within the north-eastern corner of Plot 6, truncating linear feature [306]. This measured at least 1.44m NW-SE, truncated to the south-east by a modern foundation, by 1.90m NE-SW and was 1.14m deep. Three fills, [296], [297] and [303], of various compositions of clay, silt and sand were recorded within this pit. One sherd of pottery of mid to late 2nd century AD date was recovered from its primary fill, [303]. A total of three sherds of Roman pottery and three iron nails (SF 66-68) were recovered from the upper fill [297].

Features inside Plot 7

Linear features [54], [118], pits [19], [92], [94], [106], [116], [124], [217], [249]; postholes [60], [73], [77], [141], [143], [189]

- 5.4.25 Several probable refuse pits were recorded within the area designated at Plot 7. Adjacent to the south-western boundary was a sub-circular refuse pit, [19], which measured *c*. 2.20m by 2.10m and 0.50m deep. Ten sherds of Roman pottery were recovered from its single clayey silt fill, [35].
- 5.4.26 A cluster of intercutting features was recorded in the central portion of Plot 7, truncating the Phase 2 and 3 boundary features. Feature [143], originally presumably circular but truncated to the north-west by feature [141], was *c*. 1.10m in diameter and 0.92m deep. At its base was an oval depression measuring 0.56m by 0.68m and 0.26m deep, likely representing the position of a substantial post, and this feature has therefore been interpreted as a post-pit. Its single sandy silt fill, [142], produced two sherds of Roman pottery.
- 5.4.27 Feature [141], also presumably originally circular but truncated to the north-west by post [124], was *c*. 1.0m in diameter and 0.80m deep. Its single sandy silt fill, [140], produced one sherd of Roman pottery. This also had a sub-oval depression at its base, this measuring 0.50m by 0.36m and 0.26m deep, which may represent the location of a substantial post. This feature is therefore also interpreted as a post-pit and may represent the re-establishment of a timber post over a period of time.

- 5.4.28 Post [141] was truncated to the north-west by an oval feature, [124], which measured 1.40m by 0.70m and 0.35m deep. Its single silty sand fill, [125], contained inclusion of stones of varying sizes throughout, including two fragments of quernstone (SF 39 and 40). The function of this feature is uncertain and it has tentatively been interpreted as a refuse pit. Alternatively, the fragmented stone within this feature may represent post-packing, therefore it could be interpreted as a post-pit.
- 5.4.29 Truncating the north-east edge of pit [124] was a circular pit, [92], c. 1.40m in diameter and 0.80m deep (Plate 14). Twenty five sherds of pottery of probable early to mid-2nd century AD date were recovered from its primary sandy silt fill, [93], along with five fragments of ceramic building material and an iron nail (SF 101). No artefactual material was recovered from its two sandy silt and silty sand upper fills, [108] and [109]. A bulk sample from fill [108] produced charred cereal remains of barley, wheat and oats along with a few indeterminate fragments of burnt and calcined bone, this material providing evidence for waste from food preparation.
- 5.4.30 Another cluster of intercutting features was located just to the south-east of the aforementioned features. The earliest, feature [116], comprised a small part of a presumed sub-rectangular feature measuring at least 0.45m, truncated to the south by modern activity and to the north by pit [106], by 0.54m and at least 90mm deep. Its single silt fill, [117], produced one sherd of samian pottery of late 1st to mid-2nd century AD date. As only the lower portion of this feature survived truncation, its function is unclear, but it has tentatively been interpreted as a small refuse pit.
- 5.4.31 To the north of feature [116] was part of a presumed circular feature, [217], measuring *c*.
 0.88m by 0.60m, truncated to south-west, and 0.20m deep. No artefactual material was recovered from its single sandy silt fill, [216], which contained charcoal flecks, fragments of burnt bone and a single fragment of ceramic building material. This feature is interpreted as a refuse pit.
- 5.4.32 Truncating refuse pits [116] and [217] was an oval feature, [106], which measured at least 1.20m, truncated to the south by modern activity and to the north by pit [94], by 0.80m and 0.14m deep. Its single sandy silt fill, [107], produced two sherds of Roman pottery along with seven fragments of ceramic building material and an iron nail (SF 87). This feature is also interpreted as a refuse pit.
- 5.4.33 Truncating the northern edge of refuse pit [106] was another likely refuse pit, [94], oval in shape and measuring 1.92m by 1.34m and 0.30m deep. Two sandy silt fills, [95] and [96], were recorded within this feature. Although no artefactual material was recovered from primary fill [96], an assemblage of 25 sherds of pottery of early to mid-2nd century AD date was recovered from its upper fill, [95].
- 5.4.34 Within the far north-eastern portion of Plot 7, adjacent to the limit of excavation, was another sub-circular refuse pit, [249], which measured *c*. 0.75m by 0.55m and 0.30m deep. Its silty fill, [250], which contained flecks and fragments of charcoal, produced two fragments of pottery of early to mid-2nd century AD date, along with three fragments of ceramic building material and a piece of iron slag (SF 89).

- 5.4.35 Several features representing possible structural remains were recorded within Plot 7. To the north-west of the aforementioned feature clusters was a NNE-SSW aligned linear feature, [118], c. 1.85m in length by 0.36m wide and up to 0.10m deep. This may represent a 'robbed out' structural feature, such as a beam slot. No artefactual material was recovered from its single silty sand fill, [119]. Several metres to the east was a NW-SE aligned feature, [54], which measured c. 1.70m by 0.21m wide and c. 30mm deep. This feature had squared terminals at both ends, vertical sides and a flat base and it is interpreted as a beam slot. No dateable artefactual material was recovered from its single silty sand fill, [55]. Again, features [118] and [54] have both been placed within the latest phase to which they likely belonged.
- 5.4.36 Situated between the aforementioned two possible beam slots were a circular posthole, [73], 0.40m in diameter and 90mm deep, and a short linear feature, [60], the form of which suggested that it comprised two small postholes. Two sherds of Roman pottery were recovered from the latter feature. To the south-west was a small posthole, [77], 0.27m in diameter and 60mm deep, and part of a truncated feature, [189], measuring *c*. 0.15m by 0.28m and up to 0.16m deep, also possibly a posthole.
- 5.4.37 In the far south-eastern corner of Plot 7, adjacent to boundary ditch [20], was a sub-circular posthole, [166], which measured 0.54m by 0.49m and 0.22m deep. Its fill, [167], contained a large number of rounded cobbles, these presumably representing post-packing, along with two sherds of Roman pottery.
- 5.4.38 Recorded within the eastern portion of Plot 7 was a NE-SW aligned linear feature, [148], c.
 5.20m in length, with a rounded terminal to the south-west and truncated to the north-east,
 0.70m wide and 0.24m deep. This produced no artefactual material from its single silt fill,
 [149]. To the east was a fragment of another linear feature, [152], which measured 0.95m in
 length, with a rounded terminal in the north-east and truncated to the south-west by a modern
 intrusion, by 0.55m wide and 0.22m deep. No dateable artefactual material was recovered
 from its single clayey silt fill, [153]. The function of these truncated linear features is uncertain,
 although they may represent portions of drainage features. Again, they have been placed
 within the latest phase of activity to which they likely belong.

Features within Plot 8

Cobbled surface [101]; linear feature [253]; postholes [48], [212], [298]

- 5.4.39 A cobbled surface, [101], was recorded adjacent to the south-eastern limit of excavation, spanning the gap between Plots 7 and 8. This measured at least 8.70m NW-SE, continuing to the south-east beyond the limit of excavation, by 8.10m NE-SW and was up to 80mm thick (Section 11, Figure 12). In its north-eastern extent the cobble surface overlay the terminal of Phase 3 ditch [85]. This surface was constructed with well-sorted, small rounded and subrounded cobbles, 30-100mm in diameter, set within a silty sand matrix.
- 5.4.40 A small assemblage of eight sherds of early to mid-2nd century AD pottery was recovered from the cobbled surface, along with two fragments of ceramic building material, including a piece of flue tile. A sherd of post-medieval pottery was also recovered, this considered to be an intrusive fragment. The surface is interpreted as an area of hardstanding located within the entranceway between Plots 7 and 8; presumably this area was subject to such heavy traffic that the contemporary ground surface required consolidation.

- 5.4.41 A very small number of possible structural features were recorded within Plot 8, to the northeast of the cobbled surface. Posthole [48], which measured 0.27m in diameter by 0.14m deep, contained a quantity of rounded cobbles likely to be the remnants of post-packing. This feature truncated infilled Phase 2 ditch [13].
- 5.4.42 Adjacent to the eastern limit of excavation, just to the south-east of plot boundary [168], was a short length of a NE-SW aligned linear feature, [253], at least 0.35m in length, continuing beyond the limit of excavation, by 0.20m wide and 30mm deep. This had a squared terminal at its south-western extent with near vertical sides and a flat base and it is interpreted as representing part of a timber beam slot. No artefactual material was recovered from its single clayey sand fill, [254].
- 5.4.43 To the south-west, also adjacent to the plot boundary, was a circular feature, [212], which measured 0.45m in diameter and 0.40m deep and truncated infilled Phase 2 ditch [180]. Nine sherds of mid-2nd century AD pottery were recovered from its silty sand fill, [213], which also produced nine iron objects (SF 69-77) and one fragment of glass (SF 82) of 1st-2nd century AD date. Iron objects SF 70, 71 and 73 have been identified as nails, whilst SF 74 may be a hook-like object with a hexagonal nut from a bolt. This feature also contained a number of rounded cobbles, possibly the remnants of post-packing.

5.5 Phase 5: Post-Roman Developed Soil (Figure 12)

- 5.5.1 Cobble surface [101] was directly overlain by an extensive clayey sand deposit, [100], recorded over an area measuring up to *c*. 35.0m NE-SW, continuing beyond the south-eastern and north-eastern limits of excavation, by at least 7.60m NW-SE and up to 0.50m thick. A small assemblage of 13 sherds of early to mid-2nd century AD pottery was recovered from this deposit. The deposit was recorded in section extending across the whole of the south-eastern portion of the excavation area, directly overlying features of Roman period of origin and could possibly have extended across the whole of the excavation area prior to modern levelling activity (Section 11, Figure 12). This deposit has been interpreted as a developed soil, which evidently began to accumulate when Roman occupation of the area ceased, and the thickness of this deposit indicates that it accumulated over a substantial period of time.
- 5.5.2 In the central part of the excavation area, developed soil [100] was overlain by a dark bluish grey, clayey sand deposit, [70], measuring at least 6.95m NW-SE by 8.90m NE-SW and up to 0.15m deep. Upon excavation it was noted that the interface between deposits [100] and [70] was particularly diffuse and it was concluded that this deposit actually formed a modified part of layer [100], with the dark bluish grey colour simply the result of modern diesel contamination. A single sherd of pottery of 17th-19th century date was recovered from deposit [70], this considered likely to be intrusive.

5.6 Phase 6: Post-medieval and Industrial Era Activity (Figures 7, 8 and 12; Plates 15 and 16)

Deposits [178], [179], [282]; pits [46], [50], [99], [129], structures [1], [7], [8], [23], [38], [110], [174], [176], [183], [223], [307], drains [2], [4], [265], [275], [302], [304]

- 5.6.1 Two pits, [99] and [129], were recorded adjacent to the south-eastern limit of excavation, cutting developed soil [100] or its modified portion, [70]. Pit [99] was sub-circular and measured at least 1.82m NE-SW by at least 0.64m NW-SE, truncated to the south-east by a modern intrusion, and 0.32m deep. Its single silty sandy fill, [98], produced one sherd of Roman pottery, this considered residual in context as the pit truncated the Phase 5 developed soil. Sub-oval pit [129] measured at least 1.48m NW-SE, continuing south-east beyond the limit of excavation, by 1.10m NE-SW and 0.49m deep (Section 11, Figure 12). No artefactual material was recovered from its single silty sand fill, [128]. The precise function of these pits was not ascertained.
- 5.6.2 Pit [129] was overlain by a 0.15m thick sandy clay layer, [179], recorded in the north-west facing section extending for a distance of *c*. 20m (Section 11, Figure 12). Four fragments of pottery dating from the 17th century were recovered from this deposit along with clay tobacco pipe fragments of likely 18th-19th century date, suggesting that the pottery may be residual material. This was overlain by another layer, [178], comprising sandy clay mixed with ash and cinders, this up to 0.15m thick and recorded extending for a distance of 13.50m. Recorded in the north-easternmost portion of the section was a 0.30m thick sandy silt deposit, [282], overlying developed soil [100]. These deposits of material were presumably associated with post-medieval activity in the vicinity and may represent levelling dumps prior to the construction of buildings and roads in the area.
- 5.6.3 Fragments of three brick structures were recorded in section at the south-eastern limit of excavation (Section 11, Figure 12). The first, brick wall [174], within the central part of the section, measured *c*. 1.20m in length, while *c*. 3.0m to the west was the second, brick wall [176], which measured *c*. 1.90m in length. Some 3.0m to the west was the third structure, wall [223], this measuring *c*. 3.0m in length. These three fragments of wall are interpreted as representing the northern walls of three structures located along the south-eastern side of Bank Street, as shown on 19th century mapping.
- 5.6.4 Running along the north-eastern part of the section, overlying deposit [282], and aligned approximately ENE-SSW was part of a 0.50m wide culvert, [265], recorded for a length of 3.90m. This was constructed with brick walls, a slate base, [264], and sandstone slab capping. It joined another culvert, [276], which although of similar construction did not have a slate base, recorded for a length of 3.0m. These drains presumably ran along the south-eastern side of the former Bank Street.
- 5.6.5 Three brick structures, [1], [7] and [8], were exposed within the south-western part of the excavation area (Figure 7). On roughly the same alignment these likely represent the remains of a group of terraced buildings which fronted onto the north-western side of Bank Street, as recorded on 19th century mapping.

- 5.6.6 Of these structures, structure [1] was the most substantial. Rectangular in plan, measuring *c*. 8.0m NW-SE by 4.90m NE-SW, it had square projections at its north-western and south-eastern corners (Figure 8). The structure survived to a maximum height of 0.80m. Three of the external walls of the building were 0.23m wide and comprised up to eight courses of bricks, laid in English bond. The external south-western wall was 0.11m wide and comprised up to nine courses in stretcher bond. All the walls were built with unfrogged red bricks measuring 230mm x 110mm x 110mm, bonded with a light grey lime mortar. A NW-SE aligned wall measuring *c*. 4.60m NW-SE by 0.11m wide and at least 0.80m high, located centrally within the structure, formed an internal partition dividing the structure into two rooms. This wall comprised eight courses of unfrogged red bricks, of the same dimensions as those used in the external walls, laid in stretcher bond. Two stone sets towards the central point of the sub-division represent the position of a door threshold. The floor surface in both rooms comprised substantial flagstones, up to 1.20m by 0.80m in size and 50mm thick.
- 5.6.7 The south-easternmost room, Room 1, measured *c*. 3.40m NW-SE by *c*. 4.50m NE-SW. Adjoining the south-western wall was a brick-built oven and associated hearth measuring *c*. 2.0m by 0.40m with its wrought iron fixtures still in place and ash deposits noted during excavation (Plate 15). The floor of the room sloped down slightly to the south and a salt-glazed ceramic drain measuring 0.40m by 0.30m was situated in the floor, adjacent to the south-eastern wall of the building. The south-eastern annexe to Room 1 comprised a small brick-built structure measuring *c*. 1.80m square and surviving to a height of 0.39m. The concrete floor of this annexe sloped downwards to the south to a *c*. 0.66m wide opening giving access to Room 1. This annexe likely represents a coal-store, easily accessible to anyone using the oven and hearth in Room 1.
- 5.6.8 Room 2, the north-western room, measured *c*. 4.0m NW-SE by *c*. 4.50m NE-SW. The northwestern wall had three internal brick buttresses, these presumed to be later additions for strengthening. Adjoining the south-western wall were the remains of a flight of steps, *c*. 0.80m wide, which would have risen from the cellar to the ground floor, although only the lower two steps survived. They were constructed with brick and stone slabs and there was evidence that the space below the steps was used for storage. The stone floor of Room 2 also sloped down to the south and a ceramic drain had been inserted in the south-western corner.
- 5.6.9 A sub-square brick structure measuring *c*. 2.30m NW-SE by *c*. 1.80m abutted the north-western corner of Room 2. The south-eastern and south-western sides of this structure were built with a single width of brick, laid as headers; the north-western side did not survive. The floor, which was poorly-constructed mostly with part bricks and brick fragments, stood *c*. 0.75m higher than that of the adjacent cellar. It may represent an outbuilding with a lowered floor, accessed from ground floor level, presumably a coal store.
- 5.6.10 The two basement rooms are likely to have served different functions. Room 1 may have primarily functioned as a kitchen/dining area, with its oven and hearth along the south-western wall and coal store annexe to the south-east. Room 2 may have been the main living/sleeping area with the single entrance into the cellar located to the south-west, accessed by the steps. Pottery dating from the end of the 19th-20th century was recovered from material infilling structure [1].

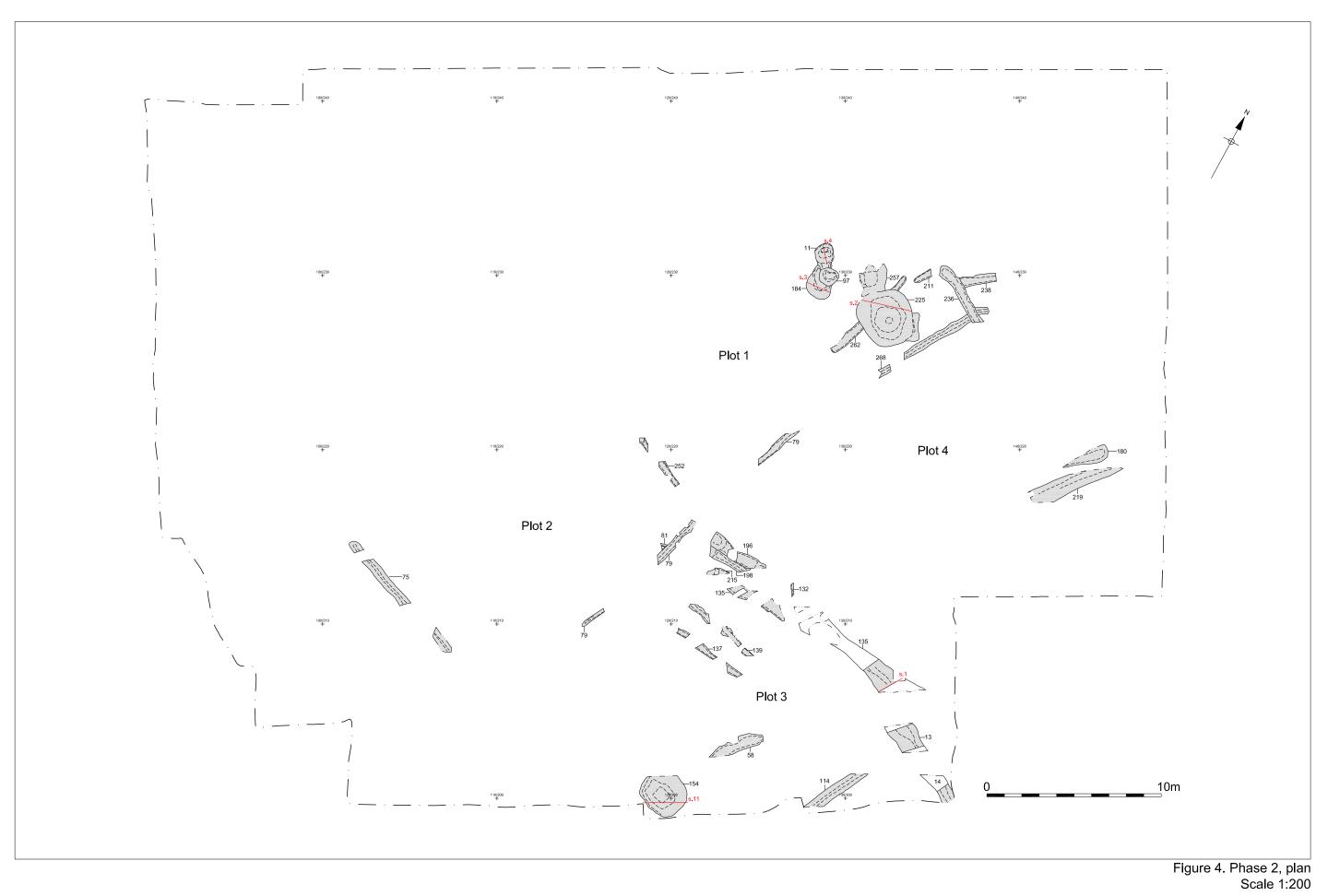
- 5.6.11 Located c. 2.60m south-west of structure [1] was a sub-square brick structure, [8], which measured c. 2.40m NW-SE by 1.90m NE-SW. Of its single brick wide walls, two courses survived, to a height of 0.25m, laid in English bond, using unfrogged red bricks measuring 230mm x 110mm x 110mm, bonded with a light grey lime mortar. The material infilling this structure was brick rubble in a dark grey sandy silt matrix, this likely to have derived from its demolition. The surviving wall bricks were blackened internally, this likely coal staining, therefore the feature is interpreted as an external coal-store, the only surviving portion of a dwelling to the south-west of structure 1.
- 5.6.12 Structure [7], located adjacent to the south-western limit of excavation area and *c*. 7.50m to the south-west of structure [8], measured 1.90m square. Its walls, two bricks wide, survived to a height of at least 0.30m, and these were built with identical bricks and mortar, in the same bond, as structure [8]. The structure was infilled with brick rubble in a mid grey sandy silt matrix, this likely to have derived from its demolition. This structure is also interpreted as a small out-house, possibly a coal store, associated with another house, this being the only surviving portion of that building.
- 5.6.13 A slightly curving drain, [2], was recorded within the north-eastern portion of the excavation area. This ran approximately NE-SW and was recorded for a distance of *c*. 9.0m, truncated to each end, and was 0.34m wide and 0.15m high. Its base was built with stone slabs and its walls with red bricks, these measuring 220mm x 80mm x 80mm and bonded with light grey lime mortar.
- 5.6.14 Drain [2] was truncated to the south by a similarly aligned drainage culvert, group number [4], which was aligned NE-SW. Towards the centre of the excavation area, an extension ran to the north-west. The culvert was a set within a vertical-sided construction cut, [301], 0.78m wide and up to 1.38m deep. Its walls, [302], were built with bricks measuring 220mm x 110mm x 110mm bonded with light grey lime mortar. While these bricks had also been used in some places to form the base, for the most part this, along with the capping, was constructed with sandstone slabs with average dimensions of 700mm x 500mm x 100mm thick. The culvert was traced for a distance of more than 46.0m on its main NE-SW alignment, continuing beyond the limit of excavation to the south-west, and for c. 11.0m along its NW-SE extension. Two short extensions, both brick-lined, also joined the main NE-SW aligned portion towards the south-eastern corner of the excavation area. The position and alignment of the culvert demonstrates that it probably ran along Bank Street, to the southeast of the dwellings represented by structures [1], [7] and [8], and along Arthur Street, these shown on 19th century mapping of the area. Pottery recovered from culvert [4] dates from the 19th century.
- 5.6.15 A sub-square brick structure, [307], was recorded adjacent to the north-western limit of excavation. This measured *c*. 9.0m ENE-WSW by *c*. 9.0m NNW-SSE, truncated to the south-east, with a *c*. 2m square projection from the north-western corner. It was only possible to examine the eastern wall of this building in detail due to Health and Safety considerations, This was two bricks (*c*. 0.25m) wide, built with red bricks measuring 230mm x 110mm x 70mm and bonded with a light brown cement mortar. Thirteen courses survived, laid in stretcher bond with random headers and one course of headers observed. The remnants of a cement render were noted on the internal face in the north-eastern corner of the building.

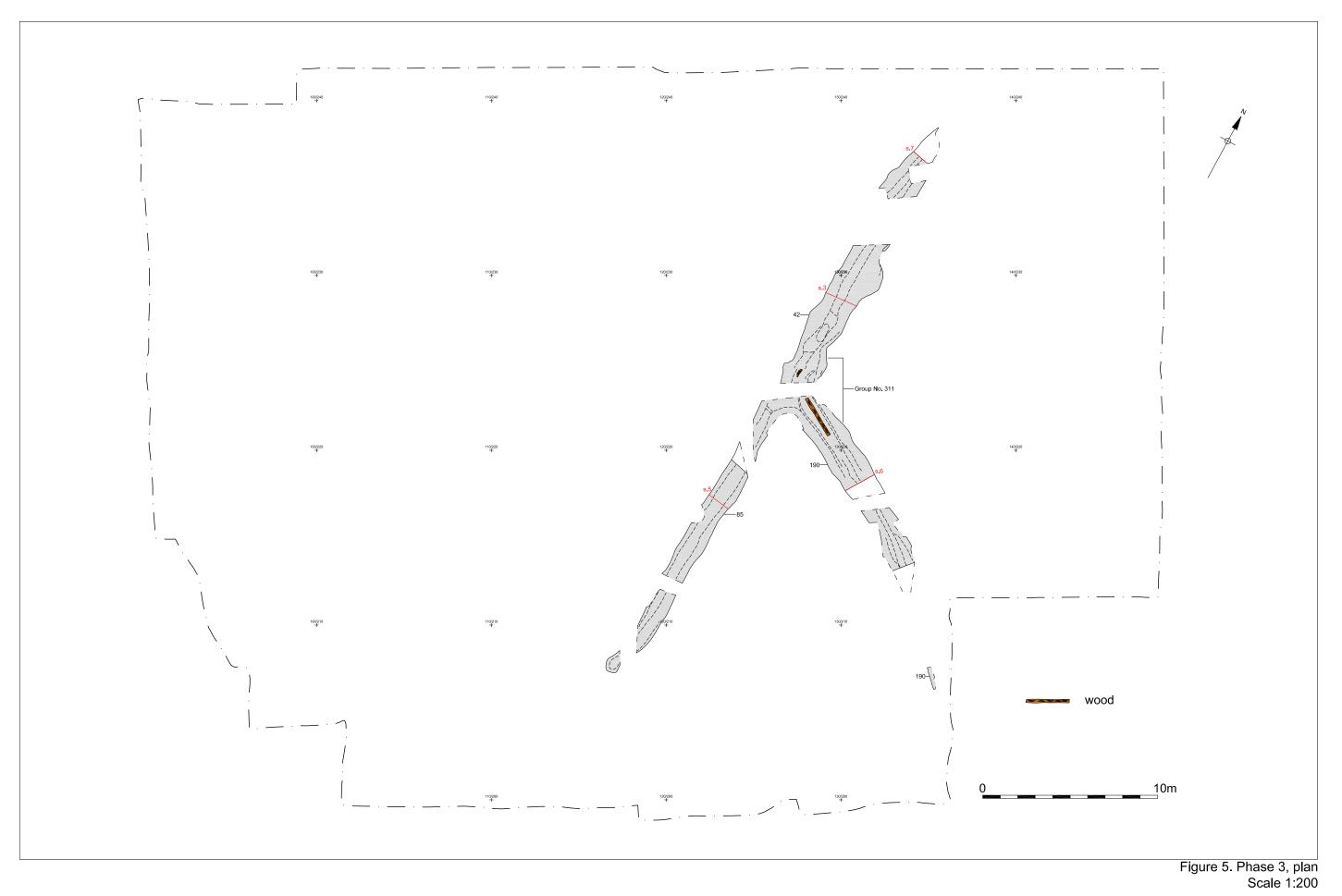
- 5.6.16 The floor of structure [307] comprised flagstones ranging in size from 250mm x 250mm x 50mm thick to 900mm x 800mm x 100mm thick. Set within the floor was a salt-glazed ceramic drain constructed with sections of pipe on average 450mm in length and 200m in external diameter, seemingly forming an open drainage system within the floor of the building (Plate 16). A section of this ran NNW-SSE approximately parallel to the eastern wall of the building then turned to run north-eastwards where it drained into a square salt-glazed ceramic down pipe located in the corner of the building. The south-eastern end of the drain turned at right angles to run towards the unexposed centre of the building. Another section ran parallel to this, joining the NNW-SSE aligned element. The flagstone floor sloped down to the north. 19th century mapping indicates that 'The Van Tavern' was located in this area and structure [307] is interpreted as representing the cellar of this public house.
- 5.6.17 Four small rectangular brick structures, [23], [110], [111] and [183], were located within the north-western portion of the excavation area. Structure [23] measured 2.15m NNW-SSE by 1.50m ENE-WSW. The walls, which were up to 0.26m wide, were constructed with red bricks measuring 230mm x 120mm x 120mm, these also being used for the other structures recorded in this area. Structure [110] measured *c*. 1.75m NE-SW by 1.0m NW-SE and structure [111] measured 2.10m NNW-SSE by 1.20m ENE-WSW. Structure [183] had been disturbed so its exact dimensions could not be calculated but it probably measured *c*. 3.0m NNW-SSE by 1.0m ENE-WSW. Pottery of 19th century date was recovered during the cleaning of this structure. Collectively, these brick structures are assumed to represent the remains of sub-ground outbuildings, such as coal sheds and privies, associated with 19th century buildings in the block of land bounded by Bank Street to the south, Bank Court to the east and Arthur Street to the west, as indicated on 19th century mapping.
- 5.6.18 A short distance to the west of structure [110] was a rectangular feature, [38], with vertical sides and a flat base, which measured 1.35m by 0.87m by 0.87m deep. Its fill, [39], contained large quantities of demolition material and general debris such as brick, glass, slate and hardened tar. This material presumably originated from the demolition of 19th century structures in this area and the feature may originally have been a privy.
- 5.6.19 Also in this area was a sub-circular pit, [50], measuring 0.56m by 0.46m by at least 0.20m deep, infilled with black silt, [51], which was notable for the inclusions of slate, glass and brick. A very similar feature, [46], was recorded towards the south-eastern limit of excavation. This had vertical sides and a flat base and measured 0.65m by 0.56m by 0.16m deep. Its infill, [47], comprised black silt with fragments of brick, from which three sherds of pottery of late 18th century date were recovered. These features were presumably associated with the 19th century structures in this area, possibly representing drainage features or small cesspits.

5.7 Phase 7: Modern Activity

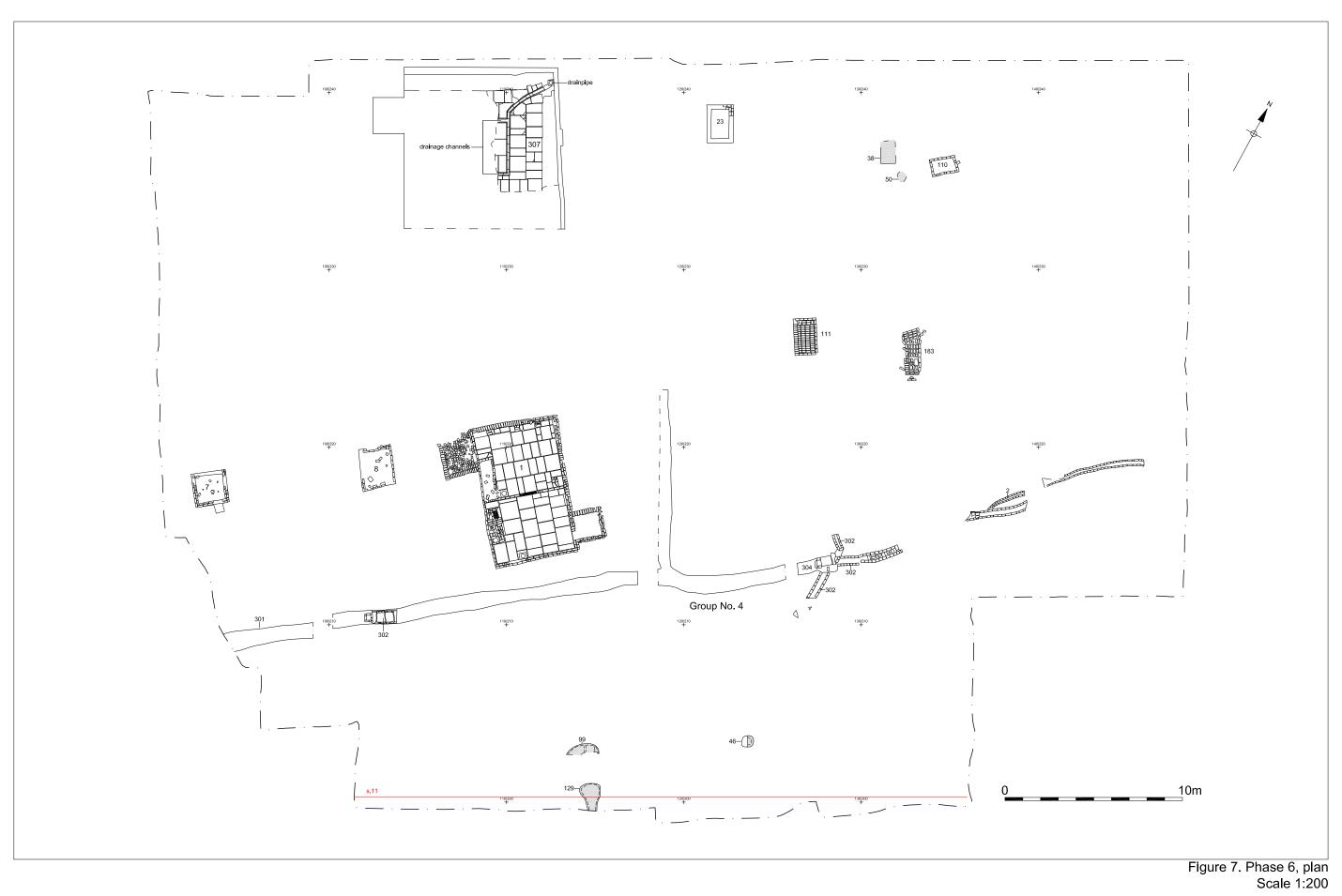
- 5.7.1 Towards the north-eastern end of the section which defined the south-eastern limit of excavation the aforementioned brick culverts [265] and [276] were overlain by a 0.50m thick sandy silt layer, [284], which contained frequent stone fragments. To the east, this was overlain by a 0.25m thick deposit, [283], comprising sand and cinders with stone fragments throughout. Further to the west, this was recorded as deposit [173]. These deposits are interpreted as levelling deposits of modern origin.
- 5.7.2 The uppermost deposit recorded across the area of excavation was a layer, [172], of rubble hardcore and an associated tarmac surface, up to 0.10m thick.

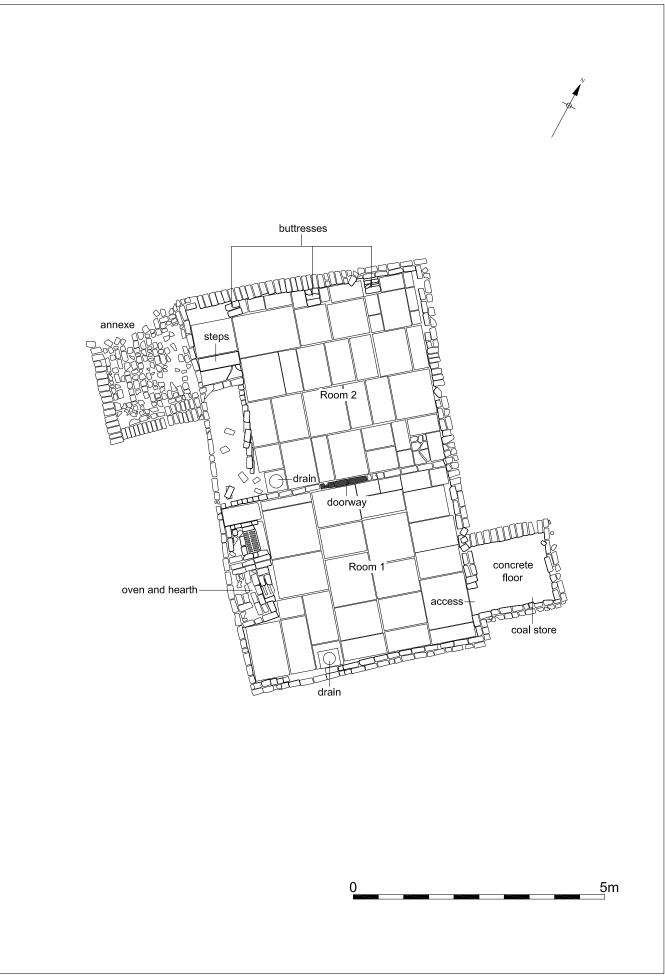


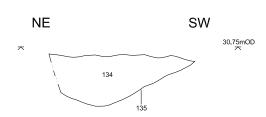




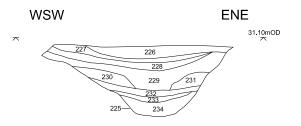




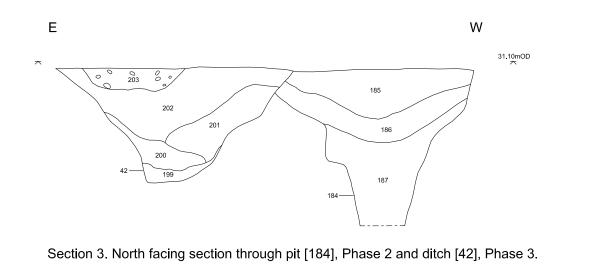


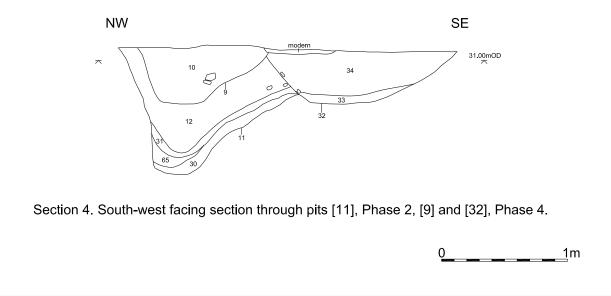


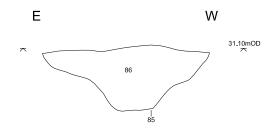
Section 1. North-west facing section through ditch [135], Phase 2.

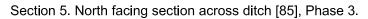


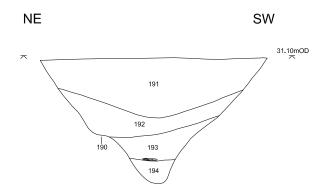
Section 2. SSE facing section through pit [225], Phase 2.

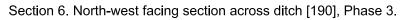


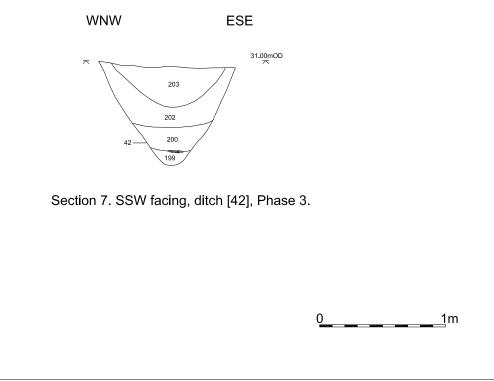


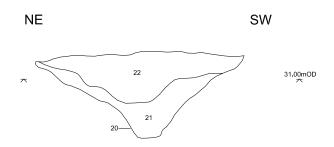




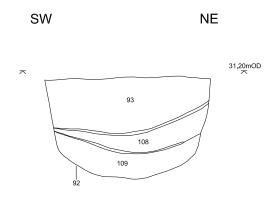




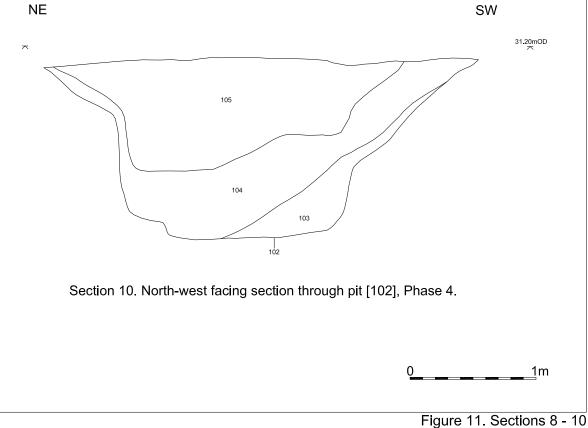


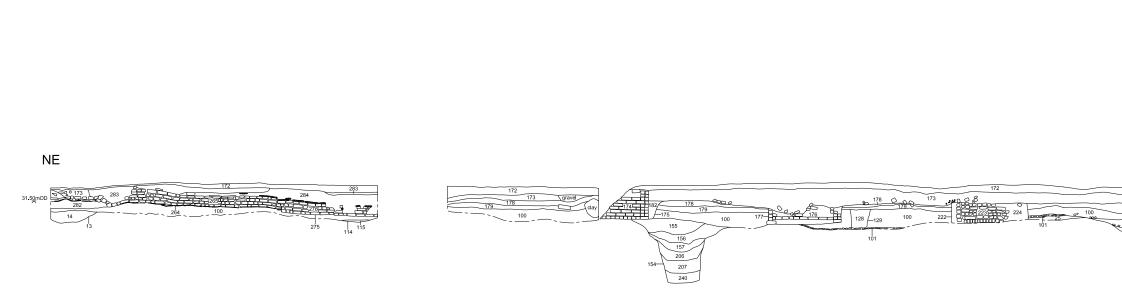


Section 8. North-west facing section across ditch [20], Phase 4.

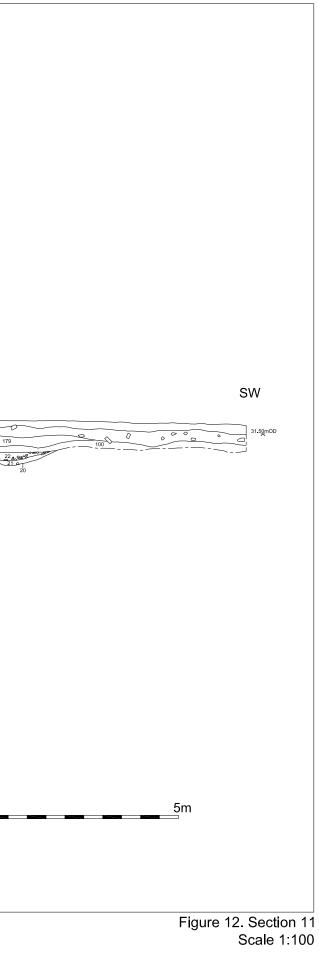


Section 9. South-east facing section through pit [92], Phase 4.





Section 11. North-west facing section of excavation area.



PART B: DATA ASSESSMENT AND CONCLUSIONS

6. STRATIGRAPHIC DATA

6.1 Paper Records

6.1.1 The paper element of the Site Archive comprises:

ltem	No.	Sheets
Context register	1	8
Context sheets	289	289
Section register	1	3
Section drawings	98	66
Plans	116	280
Environmental sample register	1	1
Environmental sample sheets	15	15
Small finds register	1	2

Table 6.1: Contents of the paper archive

6.2 Photographic Records

6.2.1 The photographic element of the Site Archive comprises:

Item	No.	Sheets
Colour slide register	5	9
Colour slides	166	10
Monochrome print registers	5	9
Monochrome prints	155	22
Monochrome negatives	155	9

Table 6.2: Contents of the photographic archive

6.3 Site Archive

- 6.3.1 The complete Site Archive, including the paper and photographic records, but with the exception of the Roman altar, is currently housed at the Northern Office of Pre-Construct Archaeology.
- 6.3.2 The archive will eventually be deposited with The Manchester Museum for permanent storage and the detailed requirements of the repository will be met prior to deposition. The altar has already been deposited with The Manchester Museum.

7. ROMAN POTTERY

By: T.S. Martin

7.1 Introduction

- 7.1.1 The excavations produced a total of 838 sherds of Roman pottery weighing 18.6kg. This figure includes the samian, as well as all of the other fine wares, coarse wares, amphoras and the mortaria. The assemblage was recovered from just 69 contexts. The following assessment has been compiled from the spot-dating archive and has been made with reference to the aims set out in the SCORP Report.²⁰ These may be refined down to:
 - 1. Using pottery (in conjunction with other finds) for dating.
 - 2. Providing new quantified assemblages to build on previous work.
 - 3. Seeing if the same general trends are detectable in the ceramic data from new sites compared with earlier published excavations, and discussing the resulting picture.
 - 4. Studying and reporting on pottery relating to the character of sites, or of intrinsic interest or with implications for pottery studies in general.

7.2 Method

- 7.2.1 The pottery was classified with reference to a number of previously published works relating to sites in Manchester itself and several neighbouring sites, as well as works of synthesis that are commonly referred to in the region. Particular use was made of Webster's report on earlier finds from the Deansgate area,²¹ Gillam's northern form typology²² and his BB1 synthesis.²³ In addition, the amphora rims were recorded with reference to the rim typology produced by Martin-Kilcher.²⁴
- 7.2.2 The pottery was also recorded with reference to the Guidelines issued by the Study Group for Roman Pottery²⁵ on A4 pro forma sheets and transferred to an Excel spreadsheet to allow computerised manipulation of the ceramic data. The fabric series used was the one devised by the author for the Beetham Tower site on Deansgate in 2004 to allow comparison with this important assemblage.²⁶ Full fabric descriptions were not compiled at this stage. A number of these, however, are included in the National Fabric Reference Collection²⁷ making detailed description unnecessary (Table 7.5).

7.3 Summary of the Pottery Records in the Site Archive

- 7.3.1 The following tasks have been completed:
 - 1. Spot-dating: a context by context paper record of all pottery recovered, listing fabrics (as quantified) and forms present and giving the date-range of each context.

²⁰ Young 1980, 1.

²¹ Webster 1974.

²² Gillam 1968.

²³ Gillam 1976.

²⁴ Martin-Kilcher 1987.

²⁵ Darling 1994.

²⁶ Martin in Pre-Construct Archaeology Limited 2005.

²⁷ Tomber and Dore 1998.

- 2. Comments on the condition of the pottery such as worn and abraded sherds are also identified.
- 3. General comments on how dating was arrived at and a note of the presence of any post-Roman material.
- 4. The identification of pottery of intrinsic interest or complete vessels that may be worth illustrating.
- 5. Quantification by sherd count and weight in grams and sorting of fabrics: an attempt to obtain a clearer indication of the quality of the dating evidence.
- 6. Transfer of spot-dating information onto a spreadsheet to allow manipulation of the data in the advent of any future research programme.

7.4 Preliminary Results

7.4.1 Although the following preliminary notes should be treated with caution in the absence of full stratigraphic analysis, the pottery from the site has already provided a significant amount of data concerning the date-range of the site. The types of pottery reaching the site can be shown to be very similar to that present on the Beetham Tower site, although the range of fabrics is narrower. This is perhaps to be expected considering that the Beetham Tower site produced in excess of 74kg of pottery, excluding the samian.

7.5 Assemblage Size and Quality

7.5.1 From the amounts of pottery recovered from each context, the range of assemblage sizes, based on sherd count, can be shown to be variable (Table 7.1). Using sherd count as a crude indicator of the quality of the dating evidence, the bulk (65%) of the contexts that produced pottery dating evidence contained ten or less sherds. Only 19 (27%) contexts produced between 11 and 35 sherds and just 5 (7%) contexts produced between 36 and 100 sherds. However, unlike the Beetham Tower site, there were no groups comprising in excess of 100 sherds. By and large, most contexts produced some dateable sherds, with only 25 producing groups that were not closely dateable. This suggests that the overall quality of the dating evidence was sufficient to provide a reasonably secure chronological framework for the site.

Very si (<10 sł		Small (11 - 35	sherds)	Medii (36 -	um 100 sherds)	Large (>100 s	herds)
No.	%	No.	%	No.	%	No.	%
45	65.2	19	27.5	5	7.2	0	0

Table 7.1. Assemblage sizes and their relative frequency (assemblage sizes exclude samian)

7.6 Date-range of the Assemblage

7.6.1 The spot-dating record shows that virtually all of the pottery from the site can be placed within a broad 2nd to early 3rd century AD date-range, with small quantities of material that are earlier and later (Table 7.6). The bulk of the pottery falls within an Antonine time-scale.

- 7.6.2 As with the Beetham Tower site, the presence of substantial amounts of BB1 (Table 7.3), a fabric that does not appear in the region until *c*. AD 120 and whose forms can be considered to be some of the most securely dated in the region, was crucial to establishing the chronology of the site. Important chronological indicators within this material were an absence of any BB1 jars with burnished wavy-line on the neck, which is common on early forms,²⁸ the absence of jars with obtuse lattice and the absence of incipient flanged and full bead-and flanged dish and bowl types.
- 7.6.3 Analysis of the spot-dating evidence shows that the main period of pottery deposition was in the second half of the 2nd century (Ceramic Phase 3). Other significant periods were the mid-2nd century (Ceramic Phase 2) and the late 2nd to early 3rd century (Ceramic Phase 4). There were no groups that are exclusively 4th century (Table 7.2 and Figure 13).
- 7.6.4 In comparison with previously published sites in Manchester, the Chester Road site seems to exhibit a more restricted chronology.²⁹ A similar situation was also encountered on the Beetham Tower site, although the Chester Road site can be shown to have more material of later 2nd and early 3rd century date. Preliminary analysis of the pottery from this site and previous work, both published and unpublished, suggests that pottery supply to Manchester can be discussed with a framework of seven Ceramic Phases. These are summarised in Table 7.2 below. However, only the first five are identifiable from the pottery recovered from the Chester Road site.

Ceramic Phase	Period (c. AD)	Present at Chester Road
1	80-120	Yes
2	120-160	Yes
3	160-200	Yes
4	200-250	Yes
5	250-300	Yes
6	300-360	No
7	360-400+	No

Table 7.2. Summary of suggested Ceramic Phases for Manchester

7.7 Sources of Pottery

7.7.1 The spot-dating programme has identified a range of sources for the pottery reaching the site (Tables 7.3 and 7.4; Figure 13) that seems to be largely in keeping with that previously identified. The assemblage was largely made up of four fabric groups, samian, BB1, South Spanish amphoras and Cheshire Plain type oxidised wares (Table 7.3 and Figure 14). As with the Beetham Tower site, the range of fine wares present was largely restricted to samian. The only other identifiable fine wares present comprised the base of a Colchester colour-coat beaker (probably mid-2nd century in date) and a small Nene Valley colour-coat rim sherd from a 'funnel-necked' beaker of uncertain form. This virtual absence of fine wares may in part be compensated by the supply of locally made rough-cast beakers, often in fairly fine Cheshire Plain fabric. Locally made grey wares were relatively rare with the only identifiable source in Cheshire Plain fabric.

²⁸ cf. Gillam 1976, nos 1-3.

²⁹ cf. Webster 1974 and Clark 1992.

- 7.7.2 The bulk of the mortaria reaching the site also appear to be derived from Cheshire Plain sources, with small amounts coming from Mancetter-Hartshill (Warwickshire) and Wroxeter. Mortaria do not occur in any significant quantity and those fabrics that are present are represented by no more than a few sherds. Only one Wroxeter vessel was present. This fabric has only been previously identified on the Beetham Tower site in Manchester and its presence here would seem to confirm that vessels from this source were reaching the area on a regular basis, albeit in small quantities.
- 7.7.3 The only other Romano-British traded ware identified was Verulamium Region white ware. This piece is interesting in itself. It comprises the rim and bodysherds of a type of small vessel that is described as an unguent jar³⁰ and bears external sooting, suggesting use over a fire. Verulamium region mortaria are absent from the current assemblage although their presence has been noted on the Beetham Tower site (MORT7).
- 7.7.4 Imports other than samian were restricted to amphora. The second most significant feature of the assemblage is the large quantity of Dressel 20 amphoras present Peacock and Williams Class 2. Although the amounts are not as significant as that present on the Beetham Tower site, vessels in this fabric do represent 23% of the total pottery recovered from the Chester Road site. The three rims recorded all fall within the period AD 70-200 in Martin-Kilcher's scheme. The only other amphora fabric recognised comprised a rim and several bodysherds of South Gaulish amphora, possibly from a Pélichet 47 Peacock and Williams Class 27.
- 7.7.5 The data provided by the current assemblage seems to indicate that coarse ware were mainly derived from three sources, Dorset for BB1, the Cheshire Plain for grey and orange wares, and southern Spain for amphoras. This is comparable to that seen on the Beetham Tower site.
- 7.7.6 Most of the identifiable samian comprised bowls of f37. This included a complete vessel from the fill of pit [124]. Other notable samian vessels comprised a miniature f33 cup from the fill of ditch [42]. Only one maker's stamp was present, this on the base of a f33 cup recovered from the fill of pit [257]. None of the samian, on the evidence of vessel form, need be 1st century in date with the common forms 29 and 27 apparently absent.

Source	Sherd count	% Sherds	Wt. (gms)	% Wt.
Southern Spain (Amphora)	36	4.2	4196	22.4
South Gaul (Amphora)	5	0.5	106	0.5
Dorset (BB1)	176	21.0	2325	12.4
Cheshire Plain/Wilderspool (reduced)	52	6.2	557	2.9
Cheshire Plain/Wilderspool (oxidised)	398	47.9	7745	41.5
Cheshire Plain/Wilderspool (all)	450	53.6	8302	44.5
Wroxeter	1	0.1	85	0.4
Other	170	20.2	3039	16.2
Totals	838	-	18653	-

Table 7.3. Breakdown by sherd count and weight of the main suppliers of pottery (excluding samian)

³⁰ cf. Davies *et al*. 1994, 36.175.

7.8 Function

- 7.8.1 The range of vessel classes represented was largely comprised of dishes, bowls, moratoria, jars, beakers, amphoras, and flagons. In this respect it is thus a typical Romano-British pottery assemblage. The best evidence for function comes from the BB1. This material exhibited clear evidence that both closed form (jars) and open forms (bowls and dishes) had been used over fires in the form of external sooting and instances of vessels with both external and internal sooting respectively. The only unusual BB1 piece comprised a base fragment with several holes drilled through post-firing to form a crude strainer. It has been suggested that these may have been produced to form a flower-pot with the hole being used for drainage,³¹ although the author remains to be entirely convinced of this.
- 7.8.2 It is also worth noting that the assemblage produced an example of a vessel form commonly described as a 'cheese press', this from the fill of pit [225]. This vessel occurred in a standard Cheshire Plains oxidised fabric (OW3).

7.9 Statement of Potential

- 7.9.1 The site has produced a useful assemblage for dating purposes. However, the absence of large securely dated groups means that the site offers little potential when it comes studying pottery supply through the analysis of quantified groups. The material recovered from pit [29] comprises the only exception. This group comprised 158 sherds weighing a 38.4kg in total and is dated largely on the presence of BB1 jars that are typologically late 2nd to early 3rd century in date. This is the only group that offers any potential for detailed analytical work using EVEs (Estimated Vessel Equivalence based on rim percentage). The group is, however, smaller than those identified on the Beetham Tower site. A '*Research framework for the study of Roman pottery in the north of Britain*' highlighted the need for the publication of quantified assemblages.³² The analysis and publication of this group would go some way to meeting this need.
- 7.9.2 In addition to this group, several vessels were present that, because of their completeness, offer potential for further study. These include vessels with holes drilled, post-firing. A notable piece in this category is the base of a BB1 jar that appears to be made into a strainer of some kind, which was recovered from the fill of pit [11]. It is also worth noting that rivet-holes were present on both grey ware and samian vessels in the fill of pit [16]. That vessels were being modified for secondary use and repaired in antiquity suggests that, even in small assemblages, there is some scope to comment on the incidence of these vessels.

³¹ cf. Hands 1993, 153.

³² Evans and Willis 1997, 23.

7.10 Recommendations for Further Work

- 7.10.1 There is little need for further quantification of the pottery from any other feature apart from that from pit [29] given the general absence of large groups from the site. A case could be made for looking at this group in more detail given that the material appears to be fairly homogeneous and that it appears to be later in date than any of the key groups identified on the Beetham Tower site. Analysis of this group would go some way in helping to understand pottery supply to Manchester in the period from the late 2nd to the early 3rd century AD.
- 7.10.2 A final report should be largely based around the analysis of the dating evidence for the site as a whole. The production of dating evidence sections would greatly assist in the interpretation of site stratigraphy. A brief synthesis of the pottery from pit [29] would be useful and should form the main analytical part of any publication report. The pottery from this group would also require illustration. Seven vessels in total require illustration from this group.
- 7.10.3 A number of pieces from other groups may be considered to be of intrinsic interest due to their completeness and the presence of later modifications such as holes drilled through their bases. These will require illustration and brief comment in any publication report.
- 7.10.4 The samian needs to be examined by a recognised samian specialist, which should result in more precise dating of contexts where this material occurs. Otherwise no work is required on this assemblage by other specialists. Some of the samian will require illustration.

Fabrics	Sherd Count	Wt. (gms)
Amphora	I	
South Gaulish (SGA)	5	106
South Spanish (SSPA)	36	4196
	I	
Samian (all sources)	116	2535
	•	
Black-burnished wares		
Black-burnished ware 1 (BB1)	176	2325
Cheshire Plain/Wilderspool Fabrics		
Grey wares (GW1)	48	465
(GW3)	4	92
Oxidised ware (MORT 2	2	203
(MORT 5)	5	352
(OW2-4)	327	5323
White ware (WW4)	11	87
White-slipped ware (WS1)	49	1745
(WS2)	4	35
Colchester Fabrics		
Colour-coat (COLC)	4	36
Miscellaneous body sherds, unspecifie	d wares, mostly local	
Colour-coats (UCC)	2	11
Mortaria (MORT 13	1	61
Grey wares (GW2)	11	120
(GW6)	8	81
(GW7)	8	93
White or buff wares (BUF)	5	10
Mancetter/Hartshill Fabrics		100
White ware (MORT 8)	2	123
Midlanda		
Midlands	1	102
White ware (MORT 10)	1	103
Nene Valley	<u> </u>	
Colour coat (NVCC)	1	2
		2
Verulamium region Fabrics		
White ware	3	33
Wroxeter Fabrics		
White wares (MORT 1)	1	85
		00

Table 7.4: General summary of all Roman pottery fabrics present

Fabrics	NFRC
South Gaulish (SGA)	GAL AM 1
South Spanish (SSPA)	BAT AM 1
Black-burnished ware 1 (BB1)	DOR BB 1
Cheshire Plain/Wilderspool Oxidised ware	WIL OX
Cheshire Plain/Wilderspool Red-slipped oxidised ware	WIL RS
Cheshire Plain/Wilderspool White-slipped ware	WIL WS
Colchester Colour-coat	COL CC 2
Mancetter/Hartshill White ware	MAH WH
Nene Valley Colour coat	LNV CC
Verulamium region White ware	VRW WH

Table 7.5: Roman fabric codes in National Fabric Reference Collection

Context	Feature	Feature Type	Date
10	9	pit	L2
31	11	pit	Had-Ant
12	11	pit	L2
14	13	ditch	Had-Ant
17	16	pit	Had-Ant
18	16	pit	L2-E3
19	19	pit	NCD
21	20	ditch	Had-Ant
26	29	pit	L2-E3
27	29	pit	L2-E3
28	29	pit	NCD
33	32	pit	E3
34	32	pit	L2
202	42	ditch	 L2
203	42	ditch	 M/L2
53	52	posthole	NCD
59	58	ditch	M/L2
60	60	posthole	NCD
68	69	ditch	M/L3-E4
82	81	?posthole	NCD
		ditch	L2
86	85		2 ?Had-Ant
93	92	pit	
92	92	pit	M/L2
95	94	pit	Had-Early Ant
126	97	pit	Had-Early Ant
127	97	pit	NCD
98	99	pit	NCD
100	100	layer	Had-Ant
101	101	cobble surface	Had-Ant
103	102	pit	Ant
105	102	pit	L2-E3
107	106	pit	NCD
115	114	ditch	E/M2
117	116	pit	Traj-E Ant
157	124	pit	M/L Ant
131	131	ditch	Had-Ant
130	131	ditch	NCD
140	141	posthole	NCD
142	143	posthole	NCD
167	166	posthole	NCD
169	168	ditch	E3
181	180	ditch	M/L2
186	184	pit	Had-Early Ant
191	190	ditch	?Had-Early Ant
279	190	ditch	Had-Ant
194	190	ditch	M2
278	190	ditch	NCD
195	196	ditch	NCD
197	198	ditch	NCD
204	205	ditch	NCD
209	208	posthole	NCD
213	212	posthole	Ant
214	215	ditch	NCD

Context	Feature	Feature Type	Date
218	219	ditch	E/M2
228	225	pit	?Had-Ant (or earlier)
235	225	pit	2nd c.
229	225	pit	70-110
234	225	pit	NCD
246	245	pit	L2
250	249	pit	Had-Ant
251	252	ditch	NCD
258	257	pit	Had-E Ant
259	257	pit	NCD
266	267	ditch	NCD
303	295	pit	M/L2
297	295	pit	NCD
305	306	posthole	NCD

Key: L = late; M = mid; E = early; 2, 3, *etc.*, = 2nd, 3rd centuries AD Traj = Trajanic; Had = Hadrianic; Ant – Antonine NCD – not closely datable

Table 7.6. Roman pottery 'spot-dates' in feature number order (NB. all dates are AD)

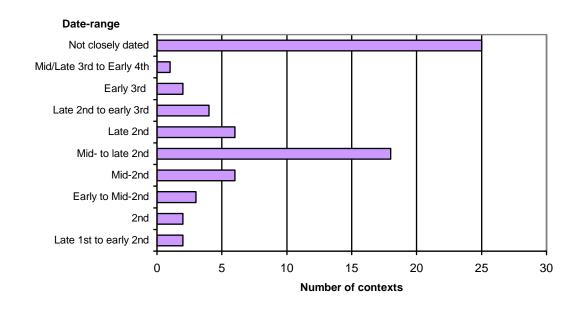


Figure 13. The incidence of each date-range identified during pottery spot-dating

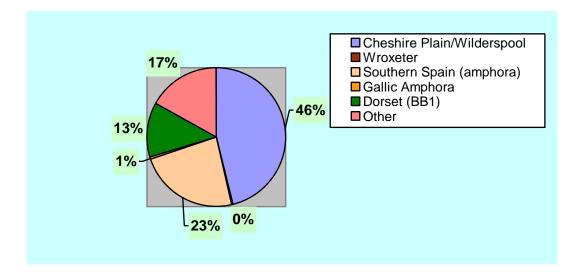


Figure 14. The proportions of each of the main suppliers expressed as a percentage of weight (excluding samian)

8. FIRED CLAY, DAUB AND CERAMIC BUILDING MATERIAL

By: Berni Sudds

8.1 Introduction

- 8.1.1 A total of 164 fragments of ceramic building material, weighing 9,306g, were recovered from the excavation.
- 8.1.2 Almost all of the assemblage is of Roman date with just four fragments dating to the postmedieval period. The assemblage is in mixed condition although the majority is fragmentary and abraded and much is likely to be re-deposited.

8.2 Methodology

- 8.2.1 With no existing ceramic building material fabric type series for the Manchester region, an internal site type series was created. Each fragment of building material was scanned under x20 magnification and designated a number relating to a loosely categorised fabric group based on major inclusions. Further sub-divisions could have been made within the broad fabric groups but this was not considered meaningful on such a small assemblage. The fabric groups are described below.
- 8.2.2 Attributes of form and condition were also recorded in addition to dimensions, fragment count and weight.

8.3 Fired Clay and Daub

- 8.3.1 Two thirds of the assemblage (66.5%) is comprised of fragments of burnt or fired clay. Over half of this material has been identified as burnt daub but the remainder was too small and abraded to determine form and has simply been recorded as fired clay.
- 8.3.2 More than one fabric is represented amongst the daub but these are not particularly meaningful and simply represent variations in the source of the clay or brickearth, the addition of different levigation, or simply the length and level of heat exposure.
- 8.3.3 Just one withy impression, indicative of wattle and daub construction, was identified.³³

8.4 Romano-British Brick and Tile

8.4.1 The range of fabric identified in the Romano-British brick and tile assemblage is fairly limited (see Table 8.1) and may indicate that building material was being sourced from just one or two production centres. The form range is fairly typical of the period comprised primarily of brick and roof tile. Most of the material is too fragmentary to determine form sub-types but a few *tegula* and *imbrex* and at least one of the larger brick examples, a *sesqipedalis* or *bipedalis* were identified.

³³ Hughes 2004.

- 8.4.2 Two fragments demonstrate scored keying. The first was recovered from fill [86] of Phase 3 ditch [85] and was knife scored to the underside (sanded side). The second fragment, a brick from fill [93] of Phase 4 pit [93], is more unusual in being scored to the upper surface. Keying is thought to have aided with the adherence of mortar and similar examples have been found on excavations within the *vicus*.³⁴ As at Chester Road, these are usually scored to the underside but two examples are scored to the upper face.³⁵ Scoring is thought to represent one of the earliest forms of keying on Roman brick and tile, generally pre-dating combing.³⁶
- 8.4.3 Just one specialised brick form was identified, this represented by a single fragment of boxflue tile (*tubuli*) with vertical wavy combed keying. Box-flue tiles are hollow rectangular tiles that would have been attached beneath the interior render and wall finish. They were intended to create a cavity within the wall through which the hot air from an under floor heating system (*hypocaust*) could circulate. Similar examples have been found within the *vicus*.³⁷

Fabric group	Colour range & hardness	Texture	Range of inclusions
1	Soft orange, pinkish orange and buff. Hard reddish orange or red throughout, red with reduced grey surfaces.	Sandy	Quartz sand, iron oxide, white calcareous and silt inclusions.
2	Soft orange	Sandy	Quartz sand, iron oxide, white calcareous and silt inclusions/ bands.
3	Soft orange	Silty	Little quartz sand, iron oxide, white calcareous and silt inclusions/ bands.

Table 8.1: Romano-British fabrics for ceramic building material

8.5 Post-medieval Brick and Tile

- 8.5.1 The small post-medieval assemblage from the site comprised two bricks and one roof tile.
- 8.5.2 The brick fragment sampled from the lining of Phase 6 culvert [4] was small but had a finely white speckled surface and is likely to date to the 18th or 19th century.
- 8.5.3 The second brick and the fragment of roof tile represent intrusive finds from the fill [86] of Phase 3 drainage ditch [85]. The roof tile is hard with fine moulding sand and the brick unfrogged but is 70mm thick, suggesting a date from the late 18th century onwards. Given that the brick tapers along one edge the possibility was considered that it might actually be a Roman *voussoir*, a tapering brick often used in the construction of arches. The fragment is incomplete, however, and while this remains a possibility, the fabric was not consistent with the remainder of the Roman assemblage.

³⁴ Speakman 2007, 130.

³⁵ ibid.

³⁶ Brodribb 1987, 109; I. Betts pers comm.

³⁷ Speakman 2007, 130.

Fabric group	Colour range & hardness	Texture	Range of inclusions
4	Moderately hard speckled fabric. Red/purple with fine white speckles	Sandy	White clay/ silt/ calcareous inclusions and clay/ calcareous dusted
5	Hard reddish orange	Sandy	Quartz sand, iron oxide and white calcareous inclusions

Table 8.2: Post-medieval fabrics for ceramic building material

8.6 Distribution and Discussion

- 8.6.1 The majority of the assemblage was derived from the fill of discrete or linear features but given the size and condition much is likely to be re-deposited. The largest feature assemblage was recovered from the fill of drainage ditch [85] but this was still small at less than 30 fragments. With the exception of the six fragments recovered or sampled from masonry features, the bulk of the assemblage, aside from dating individual features, largely provides background evidence for the presence and character of Roman structures in the vicinity.
- 8.6.2 Material was recorded from three masonry contexts, two post-medieval and one Roman. The fragments from the two post-medieval structures are not particularly diagnostic with a single small and abraded fragment of fired clay from brick structure [183] and two fragments of unknown form from culvert [4] in addition to the small fragment of 18th–19th century brick. The 3rd century cobbled surface [101] produced an abraded fragment of Roman tile or brick and the single example of box-flue tile recorded on site, evidently re-used in this context.
- 8.6.3 The quantity of daub represented on site is potentially under-represented given that it only generally survives when accidentally burnt, but with context assemblages weighing less than 500g much is likely to be highly residual.³⁸ Nonetheless the daub would suggest the presence of clay and timber structures in the immediate vicinity of site, although with just one withy impression, it is not possible to characterise the nature of these. Clay and timber construction represents the most widespread and long-lived building technique in Britain with origins in pre-history and continued use through to the 18th century. At Chester Road, much is likely to be contemporary with the Roman activity identified.
- 8.6.4 The presence of Roman brick and tile similarly indicates the existence of masonry structures in the vicinity but the small size and re-deposited nature of the assemblage again prevents any further characterisation. The box-flue tile recovered may have originated from a heated building in the vicinity but is evidently re-used on site in a cobbled surface. The brick and tile could have derived from a number of sources and may also have been re-used prior to deposition but unlike the daub the absence of evidence for Roman masonry structures on site might suggest that much derived from the *vicus*.

³⁸ Hughes 2004, 97.

8.7 Recommendations

8.7.1 The building material assemblage is relatively small, abraded and probably largely redeposited and as such warrants little further analysis or discussion. The group does, however, provide background information about the type of structures represented nearby and would be worth summarising at publication level for any future distributional studies undertaken on broader Roman Manchester.

Context	Phase	No. of fragments	Forms*	Provisional spot date
0	-	3	FC, IM	-
4	6	3	R, B	18th – 19th c.
10	4	1	R	Roman
12	2	6	DA, FC, R, RB	Roman
14	2	1	FC	?Roman
18	4	3	RT, TEG	Roman
21	4	4	R, RB	Roman
26	4	3	DA, FC, RB	Roman
33	4	1	R?	?Roman
34	4	3	DA, R	Roman
51	6	1	RB	Roman
68	4	1	R	Roman
86	3	27	DA, BU, R, RB, TEG, T	Roman
92	4	10	DA, FC	?Roman
93	4	6	DA, FC, R, RB	Roman
95	4	14	DA	?Roman
100	5	2	FC	?Roman
101	4	2	BX, R	Roman
103	4	9	DA, R	Roman
105	4	6	DA, FC, RT	Roman
107	4	7	DA, FC, R	Roman
115	2	4	FC	?Roman
130	4	7	DA, FC	?Roman
142	4	1	RT	Roman
169	4	7	FC, R	Roman
179	6	2	R	Roman
181	2	6	DA, FC, R	Roman
183	6	1	FC	?Roman
186	2	4	R	Roman
195	2	1	FC	?Roman
203	3	8	DA, FC, R, RB, RT	Roman
213	4	1	FC	?Roman
216		1	FC	?Roman
228	2	1	FC	?Roman
250	4	3	FC	?Roman
259	2		RB	Roman
279	3		FC	?Roman
297	4		FC	?Roman

 Key

 B = brick; BU = floor tile; BX = box-flue tile; DA = daub; FC = fired clay;

 R = Roman tile/brick; RB = Roman brick; RT = Roman tile; T = tile; TEG = tegula.

Table 8.3. Ceramic building material by context with provisional 'spot dates'

9. METAL FINDS

By: Dr. James Gerrard

9.1 Introduction

9.1.1 Seventy metal small finds (SFs) were submitted for assessment and, with the exception of a single copper-alloy coin, all were iron objects or lead waste. Small assemblages of glass and stone objects are the subjects of their own individual specialist reports.

9.2 Methodology

- 9.2.1 All metal finds were X-rayed prior to assessment and the identifications have been made based on the X-ray plates. The finds have been recorded using the PCA *Roman Small Finds Database* (*Access* 2000), which was originally developed for recording finds from a major urban excavation in the City of London. A copy of the database for Chester Road is held in the Site Archive.
- 9.2.2 Finds have been identified using standard catalogues³⁹ and functional categories have been assigned to each find using the scheme developed by Crummy⁴⁰ (Table 9.1). This scheme is not without its difficulties.⁴¹ However, it is widely used and thus useful for inter-site comparisons of assemblages.

9.3 Discussion

- 9.3.1 All the finds were in an extremely poor state of preservation and were, almost without exception, completely corroded. This rendered identification difficult in a number of cases. However, it is apparent (Table 9.2) that the vast majority of items are nails or nail fragments. Among the small number of exceptions to this rule are a number of objects from Phase 4 contexts. These include two fragments of chain link SFs 8 and 10 from context [34]. These could be Roman⁴² or of later date and served a multiplicity of functions. There is also an 'L' shaped wallhook SF 60 from context [218] as well as a possible knife tip SF 93 from context [181] and a pointed object, SF2 from context [10], that may have served as an awl or piercer.
- 9.3.2 The total number of objects from the site is too small to give any meaningful indications about the function(s) of the site. The nails would appear to indicate the presence of wooden furniture and timber structures and some are bent indicating their removal. The Phase 4 objects hint at domestic activities. It is particularly noticeable, given the presence of a stone altar (SF 44) of the Roman period, that there are no objects of obvious votive function.
- 9.3.3 The coin SF 42 from context [126] is too poorly preserved to be dated, but its size and thickness might suggest that it is an early 4th-century *follis*.

³⁹ Crummy 1983; Manning 1985.

⁴⁰ Crummy 1983, v.

⁴¹ Cool and Baxter 2000; Crummy 2007.

⁴² Manning 1985, 139.

9.4 Recommendations

- 9.4.1 The coin SF 42 from context [126] should be cleaned by a conservator to establish whether enough of its surface survives to allow identification.
- 9.4.2 No further conservation work is required on the iron objects. For publication it is recommended that wall hook SF 60, ?awl SF2, ?knife tip SF 93, and chain links SFs 8 and 10, be illustrated if possible.
- 9.4.3 The potential of the assemblage for further work is extremely limited. No further work on the finds (with the exception of that outlined above) need be undertaken and they can be written up in any published report from the information in this assessment document. There is no need for a 'formal' small finds report.
- 9.4.4 It is suggested (subject to local Museum guidelines) that the iron work be heavily rationalised and many of the poorly preserved nails and nail fragments be discarded.

Category No.	Description
1	Objects of personal adornment or dress
2	Toilet, surgical or pharmaceutical instruments
3	Objects used in the manufacture or working of textiles
4	Household utensils and furniture
5	Objects used for recreational purposes
6	Objects employed in weighing and measuring
7	Objects used for or associated with written communications
8	Objects associated with transport
9	Buildings and services
10	Tools
11	Fasteners and Fittings
12	Objects associated with agriculture, horticulture and animal husbandry
13	Military equipment
14	Objects associated with religious beliefs and practices
15	Objects and waste material associated with metalworking
16	Objects and waste material associated with horn and bone working
17	Objects and waste material associated with pottery working
18	Objects of unknown function

Table 9.1. Crummy's functional categories for the analysis of small finds

Phase	Tools	Fasteners & Fittings	Unknown	Other Objects
6	0	0	0	0
5	0	0 (1)	0	0
4	2	2 (14)	20	0
3	0	0 (1)	6	0
2	0	0 (17)	7	1 (coin)
1	0	0	0	0
Total	2	35	32	1

Table 9.2. Number of objects by phase and functional categories (figures for nails are given in brackets)

10. THE ALTAR

By: Paul Holder, with additional comments by Roger Tomlin

10.1 Introduction

- 10.1.1 The altar, SF 44, is of sandstone, probably of local geological origin, worked into the classic form of a column with larger base and capital. It is about 0.97m (38ins) tall with a maximum width of 0.375m (15ins) and a depth of 0.255m (10ins). On top of the capital is the focus for offerings which is framed by two bolsters decorated at the front but plain at the rear. Many other altars have carvings on the sides but here they are plain. Instead the tool marks made by a claw chisel and a flat chisel are clearly visible. It is also clear that an attempt had been made to smooth the surface with a file. This was perhaps because each side of the shaft is convex. Indeed study of the inscribed panel has also shown that it is convex with the highest part at the middle of line 4. Again it seems an attempt was made to reduce the curve by filing because the NE on line 3 and the OT on 4 are shallower than all other letters. The back has not yet been available for study.
- 10.1.2 At first glance the lettering looks clear and well cut. Line 4 has the smallest letters at about 35mm and line 1 the largest at 45mm; the other lines average 40mm. Care has been taken to position the first line as a guide line is visible along the tops of the letters. However, the text is not centred and inspection of the letters shows that each is different. This is immediately clear from the S at the end of lines 1-5. Two letters call for further comment. The penultimate letter of line 4 should be an I but what is visible we would call a 'lower case B'. The curved part of the letter was definitely cut although it is shallower than the rest of the letter. Something went wrong; whether the stonecutter lost concentration or whether his exemplar was wrong we do not know. The other letter is the first one on line 3. It consists of two uprights joined by a bar slanting upwards from left to right. Generally the bar of an H in Latin inscriptions is horizontal. This is certainly so in Britain although a slanted bar in an H is found elsewhere.⁴³ Here it is possible the stonecutter was trying to represent a more guttural K sound.⁴⁴ The punctuation marks on the last line are all leaf-stops. This is generally taken to be indicative of a date after the middle of the second century for a Latin inscription in Britain. Overall the impression is that the person responsible for dressing and carving the stone and, in all probability, cutting the inscription was not accustomed to this type of work.

10.2 The Text

10.2.1 The text reads:

DEABVS / MATRIBVS / HANANEFTIS / ET OLLOTOTIS / AELIVS / VICTOR / V S L L M which can be translated as:

To the mother goddesses Hananeftae and to the mother goddesses Ollototae, Aelius Victor gladly, willingly, and deservedly fulfilled his vow.

⁴³ Cagnat 1914, 16.

⁴⁴ This suggestion was independently made to the author by Ben Edwards and by Tony Birley.

- 10.2.2 The *Matres* to whom the altar was dedicated have been shown, by their iconography, to have been triple goddesses.⁴⁵ Geographically, worship of the cult can be found in *Gallia Narbonensis* (southern France) with a few examples in *Lugdunensis* (central and northern France) and Upper Germany. There are also groups of dedications in Northern Spain, Britain, Rome, and Lower Germany.⁴⁶ The epigraphic evidence from the latter area reveals that the *Matres* were only part of the cult. The same triple goddesses could also be called *Matronae*.⁴⁷ But is only in Lower Germany that the *Matres* and *Matronae* are recorded in the same area and even on the same altars.⁴⁸ Otherwise the location of *Matronae* monuments is different with most found in Cisalpine Gaul with a few elsewhere in Italy and in *Lugdunensis*. Even within these monuments to the *Matronae* there is a sharp difference in location between those without descriptive epithets and those with. Those without epithets are earlier in date and are largely restricted to Northern Italy, while the latter are later in date and are concentrated in an area of the Lower Rhine centred on Cologne and spreading up the Rhine to Bonn and down the Rhine to Xanten.⁴⁹
- 10.2.3 These descriptive epithets are common from the mid-2nd century AD onwards. Most commonly they are topographical and relate either to the locality of the shrine or to the origin of the dedicator. Sometimes the epithets relate to a wider geographical area. Yet others relate to Roman divinities or to specific roles for the goddesses. Over 1000 inscriptions naming *Matres* or *Matronae* have so far been discovered with most found in the area of the lower Rhine centred on Cologne.⁵⁰ There the cult was favoured by soldiers as can be seen from the large number of dedications by men of the rank of centurion and below and it is clear it was they who brought the cult to Britain. Some 60 monuments to the Mothers have so far been discovered in Britain, on 23 of which the *Matres* are recorded with no epithet.⁵¹
- 10.2.4 On this new inscription the epithets are *Hananeftae* and *Ollototae*. The latter is recorded elsewhere in Britain but nowhere else. Manchester is the third location for such a dedication. One altar was found in 1931 at the other end of the Roman Chester Road just outside Chester. It was discovered during excavation of a roadside settlement at Heronbridge along the line of the Roman road to Wroxeter. A terminus post quem for this altar is provided by the nomen of *Aelia Augustina*. This strongly suggests that her father or a member of an earlier generation had been granted citizenship by either Hadrian or Antoninus Pius as a result of service in the army. The other site where the *matres Ollototae* are recorded is Binchester.

⁴⁵ For a brief survey, see Green 1986, 79-83.

⁴⁶ Rüger 1987, 4-8.

 ⁴⁷ There have been numerous discussions of the Matres-Matronae and the growing corpus of inscriptions, cf. Rüger
 1987 for the most recent discussion.

⁴⁸ Rüger 1987, 4.

⁴⁹ ibid.

⁵⁰ Stolte 1986, 642.

⁵¹ Birley 1986, 49-51.

- 10.2.5 The origin and meaning of the prefix is debatable but it may be that *Ollototae* would mean 'other peoples' or 'foreign'.⁵² In conjunction with the epithet *'transmarinae'* at Binchester the meaning would be 'mother goddesses of other peoples or overseas'.⁵³ At Manchester they would be the 'mother goddesses Hananeftae and of other people'. More recently a third possibility has been suggested. Here *ollo-* is a celticisation of the German prefix *ala-* meaning 'all' which survives in Breton as 'oll' and 'holl' with the same meaning.⁵⁴ In which case there is an altar from Castlesteads which is dedicated to '*deabus matribus omnium gentium*' (RIB I 1988). The name of these mothers would be a Latin translation of *matres Ollototae*. The altar from Binchester would then be dedicated to the 'mother goddesses of all peoples or overseas'. The phrase '*deae Matres Hananeftae et Ollototae*' at Manchester would then mean 'the mother goddesses Hananeftae and all peoples'. Although subjective, this does seem appropriate.
- 10.2.6 Hananeftis is unique. It is certainly Germanic and seems to fit into the category of topographical epithets found on Lower German dedications to the mother goddesses. Indeed two altars from there record the *Matres* with similar epithets. Unfortunately both are lost so it is not possible to check the transmitted readings. In the past *Annaneptis* has been equated with *Hiannanef(tis)*.⁵⁵ But more recent research into the Germanic origin of the word suggests a different meaning.⁵⁶ The lack of the initial H is key. Then a Germanic prefix *ana* is clear. Latin *nepti* is an equivalent of germanic **nefti* 'relative'.⁵⁷ So the Xanten altar should best be disregarded. But there are now two examples of the epithet *Han(n)aneftae*. With a guttural sounding H as the equivalent of K which would normally be a C in Latin a geographical location is readily discovered.⁵⁸ The *Cannanefates* were a German tribe whose territory was down the Rhine from the Batavians, near to its mouth. Such an identification is in keeping with the names of other German tribes in epithets of the mother goddesses such as *Frisavae* (CIL XIII 8633), *Marsacae* (CIL XIII 8630, 8632), and *Suebae* (CIL XIII 8224).
- 10.2.7 To name specific mother goddesses suggests that Aelius Victor had good reason to do so. That he chose the Cannanefatian Mothers surely indicates that he belonged to that tribe. The *Cannanefates* had provided two auxiliary units for the Roman army and individuals are attested serving in the army. His nomen Aelius shows that citizenship had been awarded to him or to an earlier generation by Hadrian or by Antoninus Pius most likely after service in an auxiliary unit. If Victor had received citizenship one might expect him to record his praenomen. However, citizens rarely recorded it on private dedications such as this. So it is possible that when Victor dedicated the altar he was either serving in the army or had done so; a military man would have been one of the few who could have afforded to commission such a dedication.

⁵² Schmidt 1987, 147-148 and especially note 73.

⁵³ In RIB I 574 Ollototae is rendered as 'from other folk'.

⁵⁴ Fleuriot 1982, 124-125; Gutenbrunner 1936, 154; Schmidt 1957, 251.

⁵⁵ lhm 1887, 19.

⁵⁶ Schönfeld 1911, 22; Gutenbrunner 1936, 148-149; Neumann 1987, 125.

⁵⁷ Gutenbrunner 1936, 148-150; Horn 1987, 156.

⁵⁸ Gutenbrunner 1936, 146-147; Neumann 1987, 105.

10.3 Conclusions

- 10.3.1 This is the third surviving Latin inscription on stone from Manchester and it confirms that there was a group of shrines alongside the Roman road running south-westwards out of the settlement area.
- 10.3.2 Two groups of Mother Goddesses were named. The *matres Ollototae* have only been recorded in Britain. The *matres Hananeftae* recorded complete for the first time can now definitely be restored on an altar found in Cologne in Germania inferior. They represent the mother goddesses of the Cannanefatian tribe. Aelius Victor, the dedicant, by choosing to honour the *matres Hananeftae* was most likely a Cannanefatian.
- 10.3.3 No unit is named; but it seems likely Aelius Victor either had been in the army or still was, although no rank is recorded. At this time, generally, only the military could afford or want to commission an altar to fulfil a vow.

10.4 Significance of the Altar (*Comment by Roger Tomlin*)

- 10.4.1 The archaeological context of the find indicates a deposition date after the middle of the 2nd century. The altar itself cannot be closely dated, but the lettering is 2nd century. This accords with the information to be gleaned from the text and from similar finds. The name of the dedicator implies that he or an immediate ancestor was enfranchised in the reign of Hadrian (117-38).
- 10.4.2 This is only the third Roman altar ever found in Manchester, and the first to be found since 1832. Certainly it is one of the largest and most imposing Roman altars from Britain, and is unusually well preserved. Few altars found in the last 50 years equal it in interest and importance; perhaps six in all, the altars from Bath, London, *Vindolanda*, Carlisle, Carriden and Old Kilpatrick. In sum, it is of national, if not international, importance.

10.5 Recommendations

- 10.5.1 The altar should be examined by a petrologist to confirm the source of the stone.Comparisons with the lithologies of the other two surviving altars from Roman Manchester would also be useful
- 10.5.2 The back of the altar should also be examined so that a description can be included in the publication report.
- 10.5.3 The importance of the altar is such that a detailed 'stand-alone' publication paper on the item with illustrative material should be compiled by a specialist in Roman inscriptions for publication in an appropriate archaeological journal. A shorter description will obviously also be included in any publication report detailing the results of the excavation.

11. OTHER STONE OBJECTS

By: Dr. Kevin Hayward

11.1 Introduction and Aims

11.1.1 An assortment of stone objects and one complete beehive quern were retained from the site. This material was assessed in order to identify (under binocular microscope) the geological character and (where possible) geological source of the worked stone.

11.2 Methodology

11.2.1 The material was examined using the London system of classification with a fabric number allocated to each object. The application of a 1kg masons hammer and sharp chisel to each example ensured that a small fresh fabric surface was exposed. The fabric was examined at x20 magnification using a long arm stereomicroscope or hand lens (Gowland x10).

11.3 Worked Stone Objects

11.3.1 **3130** Millstone Grit: three quernstone fragments SF 41, context [122] and SFs 39 and 40, context [125]

Lithological Description

Medium to coarse grained quartz rich sandstone (quartz arenite). In the coarser two examples [125] <41> and [122] <39> the angular quartz forms an open almost sugary texture.

Geological Source

Quartz rich gritstones are a characteristic feature of sandstones from the lower part of the Upper Carboniferous (Namurian). The world famous Kinderscout Grit⁵⁹ lies just 10-15km west of Manchester and would have been accessible to the site by the nearby Roman road to the north. However, the site was also accessible to the Millstone Grit outcrops at Wharnecliffe Edge and Hathersage in the south-eastern part of the Pennines that lie 45km away, and linked to Manchester by a road that runs south-eastwards. These outcrops have been documented⁶⁰ as working quarries during the Iron Age and Roman period.

11.3.2 **3120 Fine Micaceous Sandstone: rubber SF 26, context [12]**

Lithological Description

Very fine grained sandstone with numerous flakes of black biotite and muscovite mica.

⁵⁹ Edwards and Trotter 1954, 37.

⁶⁰ Pearson and Oswald 2000.

Geological Source

Unclear – one possible source is a sandstone from the Upper Carboniferous (Westphalian) coal measures.⁶¹ These are younger sediments to the Millstone Grit and are more local to Manchester too. The main outcrop encircles the Manchester region to the north and east as close as 10km away.

11.3.3 3120 Bituminous Shale: from an offcut, SF 43, context [14]

Lithological Description

Fine dark grey carbon rich shales with small (aptychi) which form part of an ammonite and a plant stem [14] <43> 50g.

Geological Source

Upper Lias (Lower Jurassic). Nearest outcrop is Whitby, quarried since Roman times for jet which had a wide provincial distribution.⁶² Thus provides an example of Trans-Pennine supply during the Roman period.

11.3.4 **3117 Flint debitage, SF 56, context [181]**

Lithological Description

Hard black silica rich sediment.

Geological Source

Upper Cretaceous Upper Chalk nearest outcrops Humberside Coast to Flamborough Head, north of Flamborough Head there is no flint in the chalk. Another example of Trans-Pennine supply.

11.4 Comments on the Quernstones

11.4.1 The site has examples of lower rotary querns and a beehive quern, SF [41] from context 122] An unfinished beehive quern has been identified in a Roman quarry at Wharnecliffe Edge,⁶³ a source of Millstone Grit during the Roman Period. A distribution study of 120 beehive querns has also been undertaken in North Yorkshire⁶⁴ showing that these forms are quite common in northern England.

11.5 Conclusions

- 11.5.1 The rock types identified at the site are typical of Iron Age and Roman occupation in northern England. Because of the long date range associated with many of these materials, the date of these objects does not add anything to the chronology of the site as a whole.
- 11.5.2 The proximity of the site to the Trans-Pennine Roman road network likely had a major influence on the east-west supply of stone at *Mamucium* and beyond, not only from outcrops the Pennines (Millstone Grit) but also the Yorkshire coast (jet and flint).

⁶¹ Edwards and Trotter 1954, 42. Described as thinner and finer grained than the Millstone Grit.

⁶² Allason-Jones 1996 and 2002. Allason-Jones and Jones 1994 and 2001.

⁶³ Pearson and Oswald 2000.

⁶⁴ Hayes *et. al*. 1980.

11.6 Recommendations

11.6.1 The quernstones should be examined by a specialist and a description included in any final publication report. The complete beehive quern should be illustrated for inclusion in the publication.

12. GLASS

By: Sarah Carter

12.1 Introduction

12.1.1 Seven fragments of Roman glass were recovered from the site.

12.2 Description

- 12.2.1 All of the fragments are small, making identification imprecise, but they are in good condition. They are of the ubiquitous blue-green glass commonly found between the 1st and 3rd centuries AD, but also present in smaller quantities in the 4th century.
- 12.2.2 The glass fragments all appear to be from vessels, probably utilitarian in nature, and with one exception, are most likely to be from square bottles or jars. The exception is a base fragment, which may be from a jar or bowl.

Context	No. of Fragments	Colour	Form	Date
18	1	natural blue-green	vessel	1st – 3rd c.
26	2	natural blue-green	vessel	1st – 4th c.
33	1	natural blue-green	vessel	1st – 4th c.
92	1	natural blue-green	bottle/jar	1st – 2nd c.
138	1	natural blue-green	bottle/jar	1st – 2nd c.
213	1	natural blue-green	bottle/jar	1st – 2nd c.

Table 12.1. Distribution of glass

12.3 Recommendations

12.3.1 No further work is recommended on the glass assemblage. A short description of the material should be included in any final publication paper.

13. POST-MEDIEVAL POTTERY AND CLAY TOBACCO PIPE

By: Chris Jarrett

13.1 Introduction

- 13.1.1 The post-medieval pottery assemblage consisted of 47 sherds of pottery weighing 2,173g and represented a maximum of 30 vessels. The details of the assemblage are summarised in Table 13.1.
- 13.1.2 The clay tobacco pipe assemblage consists of ten fragments, comprising nine stems and one bowl heel. The material was present in only two contexts: one fragment from brick culvert [4] and nine fragments in leveling deposit [179].

13.2 Discussion

- 13.2.1 The pottery assemblage contains a small amount of 17th century wares, but it is mostly of a late 18th and 19th century date. Context [179] appears to be the earliest group of pottery, indicated by the presence of Frechen stoneware, post-medieval black glazed ware and a Midland's purple ware butter pot, inferring a 17th century date. However, the presence of clay tobacco pipe of likely 18th-19th century date indicates that the pottery may be residual.
- 13.2.2 Late 18th century pottery groups were also present in context [47], the infill of a pit, as indicated by the presence of Creamware and Agate ware, but all other contexts appear to be 19th century as evidenced by the occurrence of industrial finewares, often found in association with black glazed coarseware vessels. The latest dated context is probably demolition debris in structure [1], which contained a sherd from a Bristol-glazed stoneware whisky bottle with a black transfer; it dates to the late 19th to early 20th century.
- 13.2.3 The clay tobacco pipes are very difficult to date from both contexts and not enough of the bowl with the heel survives to give it a type. All stems are narrow in diameter and appear to be undecorated; a broad late 18th and 19th century date can be given to them all.

13.3 Conclusion

13.3.1 The post-medieval assemblage is small in size, rather mundane in its nature and does not require any further analysis.

Tr. Context		Туре	No.	Wt. (g)	ENV	Part	Form	Decoration	Date range	Notes
	1	English stoneware with a Bristol glaze	1	38	1	Shoulder	Flat bottle	Black transfer: 'N STRIPE''H WHISKY'	1830-1950	End of 19th-20th century
	4	Black Glazed Coarseware	1	114	1	Rim	Jar	Internal glaze	C 17th- C 19th	Collared rim
	4	Black Glazed Coarseware	1	41	1	Rim	Dish	Internal glaze	C 17th- C 19th	
	4	Black Glazed Coarseware	4	59	3	B/S	U/ID	Internal glaze, external iron wash	C 17th- C 19th	
	4	Brown Glazed coarse ware	1	13	1	Base	U/ID	Internal glaze	C 18th – C 19th	
	4	Derby stoneware	1	64	1	Base	U/ID	Ferruginous glaze	1700-1900	
	4	Developed Creamware	1	14	1	Base	Jug?	Clear glaze	1760-1830	
	4	Edged ware	1	6	1	Rim	Plate	Even scalloped shell edge rim	1800-1840	
	4	English stoneware with a Bristol glaze	1	8	1	BS	U/ID	External brown glaze, internal clear glaze	1830-1900	
	4	Factory made slip decorated Creamware	2	19	1	Body and handle	Jug	Inlaid brown slip lines and oval band	1775-1830	
	4	Factory made slip decorated Pearl ware	1	1	1	B/S	U/ID	Herring bone moulding, green glazed and brown and tan slip bands	1775-1840	
	4	Pearl ware	1	5	1	Handle?	U/ID	Possibly a moulded lug or figurine	1770-1840	
	4	Transfer-printed Pearlware	1	5	1	Base	Plate	Landscape design	<i>c</i> .1780-1840	
	47	Agate ware	1	10	1	Rim	Dish	White slip band on the rim with two incised sgraffito lines	1730-1780	
	47	Developed Creamware	2	1	1	B/S	U/ID	U/Dec	1760-1830	
	70	Black Glazed Coarseware	1	15	1	Handle	U/ID	External glaze	C 17th- C 19th	
	101	Transfer-printed Pearlware	1	1	1	B/S	U/ID	Uncertain	<i>c.</i> 1780-1840	
	150	Midland Yellow ware	2	33	1	Rim	Dish	Clear glazed internally and segmented stamps on the wall	1550-1700	
	150	Staffordshire Coarse ware	1	52	1	Base	Bowl	Internal clear glaze	1650-1800	
171		Flow Blue transfer printed whiteware	1	1	1	B/S	U/ID	U/Dec	1840-1900	
	179	Frechen stoneware	1	21	1	B/S	Jug	Salt-glazed	1550-1700	
	179	Midlands purple ware	1	316	1	Base	Butter pot	Internal & external glaze, rilled surface	1580-1750	
179		Post-medieval black glazed ware	2	9	1	B/S	Hollow ware	Internal & external glaze, rilled surface	1580-1700	
	183	Black Glazed Coarseware	7	1171	1	Rim	Handled bowl	Internal glaze, external rilling and iron wash	C 17th- C 19th	
	183	Black transfer-printed Pearl ware	3	36	1	Rim	Tea cup	Landscape design	1810-1840	
	183	Refined whiteware	1	111	1	Complete profile	Ointment pot	U/Dec	1800-1900	
	183	Transfer-printed whiteware	1	6	1	Rim	Plate	Willow Pattern	1780-1900	
	183	Transfer-printed whiteware	5	3	1	Rim	Tea cup	Chinoiserie design	1780-1900	
		Total	47	2173	30					

Table 13.1. Post-medieval pottery

14. BIOLOGICAL REMAINS

By: Dr. Helen Ranner, Bryan Atkinson, Richard Mason

14.1 Introduction

- 14.1.1 Plant macrofossil assessment was carried out on bulk samples taken from 15 pit and ditch fills.
- 14.1.2 The objective was to assess the plant macrofossil evidence within the samples, in order to establish their potential to provide information about the diet and agricultural practices of former inhabitants, and the palaeoenvironment of the site.

14.2 Method

14.2.1 Five litres of each bulk sample were manually floated and sieved through a 500µm mesh. The residues were described and scanned using a magnet for ferrous fragments. The flots were dried slowly and examined at ×40 magnification. Identification of the plant remains was undertaken by comparison with modern reference material held in the Environmental Laboratory at Archaeological Services Durham University. Plant taxonomic nomenclature follows Stace (1997).

14.3 Results

- 14.3.1 All the bulk samples contained small quantities of fire-waste. This was principally charcoal with occasional clinker, coal, coal shale and semi-vitrified fuel-waste. A small metal object was recorded in context [65], and pot sherds were present in contexts [65], [104], [157] and possibly [156]. Background levels of metal dust were recorded in nine contexts, and charred heather stems were present in contexts [104] and [156]. Wood fragments were recorded in context [199] and wood, which may have been worked, was present in context [279]. Vegetative material was recorded in most contexts, with a few uncharred seeds and occasional insect remains. Context [108] contained a few indeterminate fragments of burnt and calcined animal bone.
- 14.3.2 Barley, wheat, oats and a single indeterminate fragment of chaff were present in context[108], the fill of pit [92]. Indeterminate cereal grains were recorded in contexts [157] and [199], and a possible sloe fruitstone fragment, was present in context [65].
- 14.3.3 A few charred weed seeds from taxa favouring ruderal and wide niche habitats were identified in context [108]. Results are presented in Table 14.1. Material that is potentially suitable for radiocarbon dating is indicated in Table 14.1.

14.4 Discussion

14.4.1 The charred food plant remains are limited, but indicate that barley and wheat were being used. The additional presence of a few oat grains does not necessarily indicate the use of this cereal, as the absence of floret bases prevented their differentiation between the wild and cultivated species. Sloes were possibly gathered as wild food.

- 14.4.2 The low levels of fire-waste and charred food plant remains suggest a background level of domestic waste that is likely to have been associated with habitation, although there is no compelling evidence for deliberate waste disposal. In addition, the occasional charred heather stems probably derived from the purging of roofing material or animal litter. Burnt and calcined fragments of animal bone occur in context [108].
- 14.4.3 The few charred weed seeds suggest open and disturbed ground, with blackthorn possibly growing as an opportunistic shrub in areas of wasteland at the site.
- 14.4.4 Small suites of uncharred seeds with similar components are present in contexts [157], [207] and [240] from the lower fills of pit [154], and context [279], a fill of ditch [190]. The taxa recorded indicate a variety of habitats. The ruderal and wide niche taxa would have occupied open and disturbed ground at the site, with the woodland species white bryony, bramble and elder indicating nearby scrub vegetation. The presence of hemlock and lesser spearwort suggests the proximity of areas of wetland. The arable weeds species may have been growing in surrounding farm land or they may have arrived on site as contaminants of processed grain, thus growing as opportunistic invaders of the waste ground.
- 14.4.5 Material that is potentially suitable for radiocarbon dating is present in some of the contexts as indicated in Table 14.1.

14.5 Recommendations for Further Work

- 14.5.1 Full analysis is recommended for context [108], in order to provide further information about the diet of the former inhabitants of the site. The possible worked wood in context [279] should be examined by an appropriate specialist. The remaining contexts did not contain sufficient plant macrofossil material to warrant further analysis.
- 14.5.2 If material for radiocarbon dating is required, then processing of larger sub-samples from Contexts [104], [108] and [303] would be desirable to recover additional charred plant remains.

14.6 Retention and Disposal

14.6.1 Unless required for the recovery of additional material for radiocarbon dating or purposes other than the study of biological remains, all of the remaining unprocessed sediment may be discarded. The plant remains recovered from the processed sub-samples, together with the small amount of hand-collected bone, should be retained as part of the physical archive of the site for the present.

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 Key & Notes

 a-arable weed; c-cultivated; r-ruderal; t-woodland; w-wetland; x-wide niche

 Relative abundance is based on a scale from 1 (lowest) to 5 (highest)

 (✓) means there may be insufficient weight of carbon available for radiocarbon dating

Table 14.1. Data from plant macrofossil assessment

15. FAUNAL REMAINS AND WOOD

By: Louisa Gidney and Dr. Anwen Caffell (Faunal Remains); Jennifer Jones and Dr. Charlotte O'Brien (Wood)

15.1 Introduction

- 15.1.1 Small assemblages of bone and wood were recovered by hand and from bulk soil samples processed during this assessment phase.
- 15.1.2 The samples of bone were assessed in order to establish their potential to provide information about the former diet and animal husbandry practices undertaken at the site.
- 15.1.3 The wood was examined for work marks, and species identifications were carried out.
- 15.1.4 The faunal assessment was by Louisa Gidney. The bones were also examined by Dr. Anwen Caffell in order to establish if human remains were present. The wood samples were assessed by Jennifer Jones. Wood species identifications and report preparation was by Dr. Charlotte O'Brien.

15.2 Faunal Remains

- 15.2.1 Animal bones were recovered from six pit fills (contexts [30], [93], [105], [108], [216] and [229]) and two ditch fills (contexts [130] and [193]) of Romano-British date (Table 15.1). Preservation of the faunal remains was very poor. The burial environment has been extremely inimical to the survival of unburnt bone. Only cattle tooth enamel has survived in an unburnt condition, with examples from contexts [30, [130] and [229]. The majority of the fragments are calcined, but are too small and distorted for identification to be possible, with the exception of a single vertebra from context [92], which may be from a pig. None of the bone was human.
- 15.2.2 This small collection is unlikely to be representative of the refuse originally deposited on this site. Cattle are represented, as is pig (or similar size, medium ungulate). No further work is possible on this collection.

Recovery Method	Context	Species	Comments
Hand-recovered	30	Cattle	Tooth enamel fragments
		Indeterminate	Calcined fragment
	92	Pig size	Vertebra, unfused, calcined
		Indeterminate	Calcined fragments
	105	Cattle size	Rib, calcined
	130	Cattle	Tooth enamel fragments
	193	Indeterminate	Fragments
	216	Indeterminate	Calcined fragment
	229	Cattle	Tooth enamel fragments
From bulk sample	108	Indeterminate	Calcined & burnt fragments

Table 15.1. Catalogue of faunal remains	Table 15.	1. Catalogue	of faunal	remains
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15.3 Wood

- 15.3.1 Fragments of wood were hand-recovered from contexts [194] and [240], and sieved from the waterlogged bulk soil sample from context [279]. The samples were washed carefully and stored in cool conditions following examination. Species identification was carried out visually for the item, a stake, from context [194]. For the other pieces a small section was removed, and the transverse, radial and tangential surfaces were examined under high-powered magnification.
- 15.3.2 SF 46, context [194]. An almost complete wooden stake 427mm long. It is rectangular in section, 37mm x 31mm max, tapering to both ends. One end is pointed, the other blunted and burred. Approximately half the length of the stake is noticeably degraded and discoloured by iron salts, either from differential preservation in the burial environment or through being partly buried/immersed during use. Faint axe or adze finishing tool marks are visible on the better preserved part. The piece was visually identified as oak.
- 15.3.3 SF 57, context [240]. Two joining pieces of a radially split board, 210mm long overall, and
 76mm maximum width. The short ends are possibly cut and original. Its thickness tapers from
 11-3.5mm, and part of its width is missing. Axe or adze dressing tool marks are visible on
 both faces. These pieces are also oak.
- 15.3.4 Context [279]. Highly degraded wood fragments, some with bark attached. Possibly worked, but too degraded to be certain, and no tool marks are visible. Five pieces were identified, and all are alder.

15.4 Recommendations

- 15.4.1 No further work is possible on the faunal remains from the site.
- 15.4.2 The wooden stake from context [194] is considered to be an artefact, and examination by a suitable specialist is recommended. Conservation would be necessary if it is to be deposited with the Site Archive, since museums will not, as a rule, receive wet organic material. No further work is necessary on the other wood pieces.

16. SLAG AND RELATED HIGH TEMPERATURE DEBRIS

By: Lynne Keys

16.1 Introduction and Methodology

16.1.1 A very small assemblage (581g) of material, initially identified as slag, was recovered from the site. For this report, it was examined by eye and categorised on the basis of morphology. Each slag or other material type in each context was weighed (details are given in Table 16.1, below).

Context	Feature	Slag type	Wt. (g)	Comment
68	69	vitrified hearth lining	188	oxidised
169	168	iron	10	with charcoal fragments
191	190	vitrified hearth lining	36	incl. some undiagnostic; same as below?
191	190	vitrified hearth lining	302	incl. some undiagnostic
191	190	undiagnostic	40	-
250	249	ferruginous concretion	5	-
		Total Wt. (g)	581	

Table 16.1. Quantification of slag

16.2 Discussion

16.2.1 The assemblage is not indicative of any activity involving iron having taken place on the site. The very few pieces of slag are undiagnostic and are almost certainly fragments of redeposited smithing slags away from any focus of smithing activity. The vitrified hearth lining in the assemblage may derive from a variety of high temperature activities - including domestic fires - and cannot be taken on its own to indicate it was produced by iron-working, except for the pieces from context [191] which have some undiagnostic slag adhering to them.

16.3 Recommendations for Further Work

16.3.1 No recommendations are made for further work and the slag only merits a brief mention in any publication if it is thought relevant to a particular context in the light of other material recovered.

^{16.3.2} If storage space is an issue, the assemblage suggests itself as a candidate for disposal.

17. SUMMARY DISCUSSION

17.1 Phase 1: Natural Deposits

17.1.1 Natural deposits were encountered as the basal material across the excavated area at Chester Road. These were of variable composition, as is typical of the glacially derived drift geology of the area, but generally comprised mottled sand or sand and gravel overlying clay. The natural sub-stratum was encountered at a highest level of 31.28m OD in the southwestern corner of the excavation area, with a very slight slope away to the north-east, reflecting the natural topography of this area, on relatively high ground above the southern valley side of the River Medlock.

17.2 Phase 2: Roman Land Management and Use, Early to Mid-2nd Century AD

- 17.2.1 The earliest archaeological remains at Chester Road comprised fragments of truncated Roman ditches. These represent a system of boundary features that divided the land at the site into a fairly regular grid of plots aligned with the south side of the Roman road as it approached the Medlock and then continued into the eastern portion of the extramural settlement associated with the Roman fort of *Mamucium*. West of the Medlock, the south-westwards course of this road which ran onto *Condate* (Northwich) and then the legionary fortress of *Deva* (Chester) is likely reflected by that of the present day A56, Chester Road, which runs only *c*. 30m to the north-west of the excavation area. A number of features were recorded within the plots and these were probably contemporary with the features that delimited the plots.
- 17.2.2 Dating evidence recovered from the plot boundaries and internal features indicates that the plots were laid out and occupied during the early to mid-2nd century AD. Therefore, the excavated evidence indicates that, despite lying on the opposite side of the Medlock to the fort, this area likely lay within the southern limit of the extramural settlement at this date. The evidence for land apportionment suggests that, like other recorded areas of the *vicus*, land use was an ordered and planned process. A similar system of plot boundaries of early to mid-2nd century date was excavated at the Beetham Tower site, Deansgate, towards the presumed eastern extent of the *vicus*.⁶⁵ At that site, the remains of timber buildings were recorded, along with a group of refuse pits. At nearby Barton Street, in the very core of the *vicus*, land boundaries of similar date were also recorded, these containing timber buildings fronting onto a road exiting the north gate of the fort.⁶⁶ A large group of refuse pits was also associated with the Barton Street buildings.

⁶⁵ PCA 2005.

⁶⁶ Gregory 2007.

- 17.2.3 Although little survived of the internal areas of most of the Chester Road plots due to truncation, a group of relatively well-preserved features was recorded within the south-eastern corner of Plot 1, the northernmost of those identified. The more substantial examples of a group of refuse pits in this area may originally have been dug as quarry pits for the extraction of sand and gravel and clay, before being utilised for waste disposal. Material from the quarry pits was presumably utilised in the construction of roads, streets and buildings within the *vicus*. Substantial sand and gravel quarry pits, also evidently later utilised as refuse pits, were recorded at the Beetham Tower site.
- 17.2.4 Based on the evidence from other excavations within the *vicus* of *Mamucium*, it is reasonable to assume that the Chester Road plots were closely associated with buildings, given that cultural debris within the refuse pits indicates the presence of habitation in the near vicinity. These most likely fronted onto the road to the north, and thus probably lay beyond the limit of the overall site, although the possibility that buildings once lay within the actual excavation area cannot be discounted entirely. Building remains from other areas of the *vicus* are typically ephemeral, being of clay and timber construction, comprising shallow foundations, beam slots and clay floors, and it is feasible that all traces of such buildings could have been truncated by later activity at Chester Road.
- 17.2.5 The pottery assemblage recovered from Phase 2 pits at Chester Road is described as a typical Romano-British assemblage, with a range of vessel classes represented, largely comprising dishes, bowls, mortaria, jars, beakers, amphoras, and flagons. External sooting on BB1 jars and external and internal sooting on BB1 bowls and dishes provides clear evidence that these vessels had been used over fires. Preservation of faunal remains and charred plant remains was extremely poor due to the acidic ground conditions, but fragments of bone identified as cattle were recovered from Phase 2 features, along with indeterminate cereal grains. Bulk samples of feature fills produced fire waste in the form of charcoal, clinker, coal, and semi-vitrified fuel waste. The primary fills of one substantial pit comprised decaying organic matter. All of this material indicates that the pits were utilised for the disposal of domestic refuse, with habitation therefore likely in the very near vicinity, if not on the site itself. Many of the bulk soil samples taken from Phase 2 features also contained metal dust, indicating that some industrial activities may have been undertaken in the locality.
- 17.2.6 Of very great significance is the inscribed altar from a Phase 2 pit, adjacent to the southwestern limit of excavation at Chester Road. Antiquarian discoveries close to Chester Road of three sculptures attributed to the worship of the god Mithras, a god closely associated with the military, suggest that a dedicated temple stood in the vicinity. Three altars, two bearing dedications related to the military, were also found during 19th century re-development of the area. In the 1830s Charles Roeder noted the discovery of a tile tomb on the south side of the River Medlock near Great Jackson Street, close by the Roman road. Roeder also noted that several other Roman sepulchral stones had been found in this area. Roeder's map of 'Roman Manchester' shows the south side of Chester Road annotated with the word 'Tombs', only a short distance to the west of the site herein described.

- 17.2.7 In sum, these discoveries demonstrate that the section of the Roman road on the approach to the fording point of the Medlock had particular religious, ritual and ceremonial significance. Altars were erected wherever appropriate, sometimes within temple precincts, sometimes at roadside shrines or sometimes simply at sacred locations. Although it is not possible to closely date the manufacture of the altar, material recovered from the refuse pit within which it was placed demonstrates that it was disposed of during the mid to late 2nd century, therefore implying that its period of manufacture predated this. The lettering on the altar is of 2nd century style and the name of the dedicator implies that he or an immediate ancestor was enfranchised in the reign of Hadrian (117-38). The shrine is therefore likely to have been set up along the roadside at some time during the earlier part of the 2nd century.
- 17.2.8 Current knowledge of *Mamucium* indicates four principal periods (Periods 1-4) of development, as described in Section 2.5, above. Unlike the parts of the *vicus* to the north and east of the fort, there was no indication at Chester Road for late 1st century AD activity, corresponding with Period 1 occupation of the fort, which was founded *c*. AD 79. This perhaps suggests that the *vicus* did not extend across the Medlock at this date. Phase 2 at Chester Road corresponds with Period 2 (*c*. AD 90-140?) which saw the fort ramparts strengthened, the north gate replaced and the defensive ditch system altered, whilst buildings and industrial areas were constructed within the northern *vicus*. This period appears to have ended with the demolition of the existing fort and possibly the abandonment of the northern *vicus*.⁶⁷

17.3 Phase 3: Further Roman Land Management; Late 2nd Century AD

- 17.3.1 The subsequent phase of activity at Chester Road evidently witnessed a notable reorganisation in the layout of the land to the south of the Roman road. The previous network of relatively small, fairly regular plots defined by relatively slight ditches, was seemingly superseded by a system of more substantial boundary ditches. The excavated evidence suggests that this initially comprised a splayed L-shaped ditch, with substantial elements aligned roughly north-south and NW-SE. Fragmentary remains of an oak box drain and an associated lead fitting, possibly a junction between two sections, were recorded in the base of this ditch. Dating evidence indicates that this land management system was in place in the late 2nd century.
- 17.3.2 Internal features associated with this system of boundaries were not identified, but cultural debris recovered from the ditches themselves provide an indication of activities undertaken in the near vicinity. Fragments of slag indicate that metalworking may have been carried out in this area and such industrial activity is well attested in other parts of the *vicus*. Evidence for iron smithing was recorded at the Beetham Tower site, this probably comprising secondary iron processing associated with the repair of objects. Similar evidence was also recovered from the work at Barton Street in the heart of the *vicus*.

⁶⁷ Brennand 2006.

17.3.3 A defensive boundary system surrounding the western edge of the *vicus* to the north of the fort was excavated in the 1970s; this was later interpreted as a double palisade feature.⁶⁸ A similar defensive system, comprising a ditch and palisade, was recorded at 340 Deansgate, this representing the eastern extent of the defended enclave. However, both eastern and western defensive systems were evidently dismantled by the early 2nd century AD, with the *vicus* expanding rapidly eastwards during this period. Since the Phase 3 boundary ditches at Chester Road are evidently of later date than those defensive systems, it may be that they correspond with Period 3 of *Mamucium*. During this period, from c. AD 160, the fort was rebuilt in turf and timber and extended further west. Despite their relatively substantial dimensions, the Chester Road boundaries did not appear to be defensive in nature, and they may have been simply concerned with delimiting land at the southern extent of the *vicus*, as well as facilitating drainage.

17.4 Phase 4: Final Roman Land Management and Use, 3rd Century AD

- 17.4.1 Phase 4 witnessed further reorganisation in the layout of the land at Chester Road with the relatively substantial ditches of Phase 3 being replaced by another system of boundary features. This was similar to that of Phase 2 and the aim again seems to have been to delimit a network of plots alongside and south of the road, for the most part respecting its SW-NE orientation. The south-westernmost element of this system, a ditch which defined the south-western sides of two plots, was more substantial than the other boundaries and it may be that this feature actually delimited the south-western extent of the *vicus* in this area at this time.
- 17.4.2 Truncated fragments of several linear features, interpreted as possible beam slots, and several postholes within the plots potentially represent the remnants of timber buildings. The presence of habitation in the near vicinity is also attested by numerous refuse pits recorded within the plots. The better preserved building plots excavated at Barton Street have been interpreted as similar to the 'strip' buildings commonly found in Roman urban settlements.⁶⁹ Such buildings generally comprised a street frontage, often housing a shop, built with wattle and daub and a tile or thatch roof. Domestic quarters were located to the rear with a yard or workshop behind.
- 17.4.3 The Phase 4 refuse pits at Chester Road contained material similar to that recovered from the Phase 2 pits. Habitation in the near vicinity was indicated by the metal finds and pottery assemblages, faunal remains, fire waste, cereal remains, including barley, wheat and oat, and a quernstone. A mid-2nd century AD building at Barton Street had a group of rubbish pits to the rear which probably contained refuse that had accumulated during the lifetime of the structure.⁷⁰
- 17.4.4 The surviving parts of a metalled surface were recorded in an area interpreted as the entrance between two of the Phase 4 plots at Chester Road. Whether this signifies an access route of some significance with a greater volume of traffic or whether it simply means that this particular area required a greater degree of consolidation due to localised ground conditions is not clear.

⁶⁸ Gregory 2007.

⁶⁹ *ibid*.

⁷⁰ ibid.

17.4.5 Dating evidence, along with the stratigraphic evidence, indicates that Phase 4 corresponds with the earliest stages of Period 4 occupation of the fort, which began *c*. AD 200 when the fort was rebuilt in stone. In common with other investigations in the *vicus*, there was little sign of occupation at Chester Road during the latter part of the 3rd century. Although the fort seems to have been occupied into the 4th century, widespread abandonment of the *vicus* seemingly occurred during the 3rd century,⁷¹ and this certainly seems to have been the case at Chester Road.

17.5 Phase 5: Late and Post-Roman

- 17.5.1 Roman features at the site were overlain by a developed soil up to 0.50m in thickness. This material would have begun to accumulate following the abandonment of this part of the *vicus* some time during the 3rd century AD.
- 17.5.2 Excavations within other parts of the *vicus* of *Mamucium* indicate that the area occupied by the civilian settlement remained largely deserted until utilisation for agricultural land began in the post-medieval period. Green's map dating to 1787-94 shows that the Chester Road site was occupied by agricultural land at this time. The developed soil representing Phase 5 therefore likely accumulated over a considerable period of time. A similar sequence of deposition was recorded at the Beetham Tower site to the north-east of Chester Road, with a developed soil beginning to accumulate here following the abandonment of the *vicus*.

17.6 Phase 6: 19th Century Housing Development

- 17.6.1 Banck's map from 1831 indicates that extensive development in the area of the site occurred during the 1820s. Arthur Street traversed the site NW-SE and was crossed by a broad road, shown as Bank Street on later maps, running from the south-western corner of the site on a SW-NE alignment. Much of the site had been infilled with housing, including along the Jackson's Lane frontage to the west, along both sides of the central and along the Owen Street frontage to the east.
- 17.6.2 Fragments of structures derived from industrial era housing development were recorded across the excavation area. These included a brick-built cellar dwelling comprising two separate rooms with a coal store attached. Surviving internal features included an iron fireplace and oven and flagstone floors with ceramic drains. A small outbuilding with a lowered floor that would have likely been attached to the ground floor was also recorded. Fragments of outbuildings from other houses were also recorded in the vicinity. Cartographic evidence demonstrates that these structures represent the remains of a group of terraced houses fronting onto the north-western side of Bank Street. Brick and stone drains and culverts were also encountered across the excavation area, including an extensive culvert that would have run along Bank Street and Arthur Street. A group of four brick structures recorded in the north-western portion of the excavation area presumably represent the remains of outbuildings, such as coal stores and privies, associated with 19th century buildings in this block of land, bounded by Bank Street to the south, Bank Court to the east and Arthur Street to the west.

⁷¹ ibid.

- 17.6.3 Adjacent to the north-western limit of excavation was a brick structure with flagstone floor with integrated ceramic drainage system, this representing the cellar of The Van Tavern. Cartographic evidence shows that this public house was in existence by 1844 and disused by 1948.
- 17.6.4 The remains of the terraced houses and associated outbuildings recorded at Chester Road represent 19th century urbanisation, as required by the rapid industrialisation of Manchester. The Bridgewater Canal, which opened in 1765, allowed Manchester to develop as an inland port and the Liverpool and Manchester Railway opened in 1830. These transport links facilitated the industrial growth of the city, which became known as 'Cottonopolis', and the growth of urban expansion is clearly evident on late 18th and 19th century mapping.⁷²
- 17.6.5 Slater's Directory of Manchester from 1848 lists a variety of artisans and professionals occupying the buildings within and around the Chester Road site. The more prosperous shopkeepers and tradespeople lived in street frontage properties in this period, and fronting Chester Road were shopkeepers, such as a draper, butcher, watchmaker, milliner, newsvendor and beer retailer, and other occupations, such as a blacksmith, cooper, wheelwright and picture frame maker. An earthenware dealer, school teacher, provision dealer, butcher, cashier, surveyor, professor of music and silk merchant lived on the east side of Great Jackson Street. In general, the poorer members of society, including lesser tradespeople, occupied smaller cottages to the rear of the street frontage, arranged around small courtyards. Each cottage was probably occupied by more than one family, with some families possibly occupying only a single room. Cellar rooms formed wretched living spaces for some of the poorest members of early to mid-19th century Manchester. The worst of this type of accommodation comprised rooms 4-6 feet below street level often accessed through hatches in the ground floors of the properties. These cellars were without proper windows and had unflagged earthen floors which often became waterlogged.⁷³ Cellar accommodation of a higher standard was offered by basement rooms such as the example from Chester Road, which would be accessed by steps via a front door. Such accommodation generally comprised two adjoining rooms with a fireplace in the front room which was used for living and cooking.⁷⁴ Windows were only partially below street level allowing light and ventilation into the property.

⁷² McNeil and Newman 2006, 174.

⁷³ Burnett 1986, 60.

⁷⁴ ibid.

18. SUMMARY OF POTENTIAL FOR FURTHER ANALYSIS

18.1 Introduction

- 18.1.1 The Phases 2-4 Roman period archaeological remains recorded at Chester Road are of significance at a local, regional and national level. Assessment has demonstrated that stratigraphic, artefactual and palaeoenvironmental evidence from these elements of the archaeological data-set warrant further analysis and full publication of the results.
- 18.1.2 Relevant parts of the archaeological Research Framework for North West England are discussed in Section 3.2, above. Two main items on the Research Agenda for the Romano-British period were discussed that are of particular relevance to the site. The importance of opportunities to investigate further areas of the vici of the region is covered within the first of these agenda items, 'Settlement and Landuse'. With the precise southern extent of the Mamucium vicus never having been precisely defined, the excavation herein described provided an opportunity to contribute information regarding this particularly poorly understood part of the extramural settlement. Certainly the excavation evidence supports the long-held theory that the vicus extended beyond the River Medlock. Since there is a general gap in our knowledge regarding the decline of the vici of the region - most do not appear to have continued beyond the end of the mid-3rd century - any new information regarding this avenue of research is clearly crucial in expanding overall knowledge of the later Roman period, thus the information recorded at Chester Road is of obvious worth in this respect. At a local level, the Site Archive has contributed important information concerning the evolution and development of the vicus, as well as the closely related history of the fort, so that, at a regional level, the Site Archive may reflect the history of Roman occupation of North West Britain.
- 18.1.3 The second relevant item on the Research Agenda for the Romano-British period is 'Ritual, Religion and Ceremony'. While no funerary material was encountered at the site, the Roman altar was a remarkable discovery. The item is certainly of national significance at least, this being one of the largest and most imposing Roman altars from the entire province. It is unusually well preserved and few altars found in the last 50 years equal it in interest and importance.
- 18.1.4 The Research Framework for North West England highlights the importance of swift analysis and publication of data from excavations and points to the backlog of unpublished excavations, specifically many from Roman sites in Manchester. It emphasises the need for public dissemination of information from excavations of Romano-British sites in the region and also highlights the importance of publishing excavations of military sites such as the fort at Manchester and their associated *vicus* settlements. Furthermore, the initiative specifically regarding Roman period artefacts set out within the aforementioned agenda item 'Settlement and Landuse' is worth repeating here: 'Systematic publication of excavated assemblages from the region...is a priority...'.
- 18.1.5 In summary, it is considered that dissemination of the archaeological evidence from the site through publication would contribute vital information to current understanding of the evolution of the *vicus* settlement in Manchester, the general history of Roman Manchester and knowledge of Roman occupation in North West England.

18.2 Summary of the Potential for Further Analysis

18.2.1 Roman Pottery (excluding Samian Wares)

- 18.2.1.1 The need for the publication of quantified pottery assemblages from the north of Britain generally was highlighted more than a decade ago.⁷⁵Certainly, analysis and publication of the group of pottery from Phase 4 pit [29] at Chester Road would be of great benefit in this respect. However, given the general absence of large groups of pottery from the site there is little need for further quantification of the material, apart from the material recovered from pit [29]. This group should be studied in more detail given that the material appears to be fairly homogeneous and that it appears to be later in date than any of the key groups identified on the nearby Beetham Tower site. Analysis of this group would go some way in helping to understand pottery supply to Manchester in the period between the late 2nd and the early 3rd century. The material recovered from this pit also offers potential for detailed analytical work using EVEs.
- 18.2.1.2 Several vessels amongst the Roman pottery assemblage also offer potential for further study because of their completeness. It is also worth noting that rivet-holes were present on both grey ware and samian vessels and the fact that such vessels were being modified for secondary use and repaired in antiquity suggests that, even in small assemblages, there is some scope to comment on the incidence of these vessels.
- 18.2.1.3 A synthesis of the pottery from pit [29] will form the main analytical part of any publication report. Seven vessels from this group require illustration. A number of pieces from other groups may be considered to be of intrinsic interest due to their completeness and the presence of later modifications such as holes drilled through their bases. These will require illustration and brief comment.

18.2.2 Samian Wares

- 18.2.2.1 A description and discussion detailing the samian assemblage, including the integration of the material recovered from the evaluation phase of work, should be included in any final publication report.
- 18.2.2.2 Some of the samian vessels will require illustration.

18.2.3 The Altar

- 18.2.3.1 The altar is considered to be of national, indeed international, importance and a full report is to be prepared by a Roman inscription specialist as a stand-alone publication text. The back of the altar should be examined so that a description can be included in the publication report. Detailed illustrations and photographs of the altar will be prepared.
- 18.2.3.2 The altar should be examined by a petrologist to confirm the source of the stone utilised for this object. Comparisons with the lithologies of the other two surviving altars from Roman Manchester would also be useful.

⁷⁵ Evans and Willis 1997, 23.

18.2.4 Small Finds and Glass

- 18.2.4.1 The potential of the assemblage for further analysis is extremely limited. No further work on the finds (with the exception of that outlined below) need be undertaken and they can be 'written up' in the published report from the information in this Assessment Report. There is no need for a 'formal' small finds report.
- 18.2.4.2 The coin, SF 42 from context [126], should be cleaned by a conservator to establish whether enough of the surface survives to allow identification.
- 18.2.4.3 No further conservation work is required on the iron objects. For publication it is recommended that the wall hook SF 60, ?awl SF 2, ?knife tip SF 93 and chain links SFs 8 & 10 be illustrated. It is suggested, subject to the guidelines of The Manchester Museum, that the iron work be heavily rationalised and many of the poorly preserved nails and nail fragments be discarded.
- 18.2.4.4 No further work is recommended on the glass assemblage. A short description of the material should be included in any final publication paper.
- 18.2.4.5 The quernstones should be examined by a specialist and a description included in any final publication paper. The complete beehive quern should be illustrated for inclusion in the publication.

18.2.5 Tile, Fired Clay and Daub

18.2.5.1 No further analysis is recommended on this assemblage. The material does, however, provide background information about the type of structures represented nearby and would be worth summarising at publication level for any future distributional studies undertaken on broader Roman Manchester.

18.2.6 Slag

18.2.6.1 No further analysis of this assemblage is necessary.

18.2.7 Post-medieval Finds

18.2.7.1 No further work is recommended on the post-medieval ceramic and clay tobacco pipe assemblages.

18.2.8 Biological Remains

- 18.2.8.1 Charred cereal remains comprising barley, wheat, oats and a single indeterminate fragment of chaff were present in context [108], a fill of Phase 4 pit [92]. A few charred weed seeds from taxa favouring ruderal and wide niche habitats were also recovered from this deposit.
- 18.2.8.2 Full analysis is recommended for the bulk sample from context [108], in order to provide further information about the diet of the former inhabitants of the site. The remaining contexts sampled did not contain sufficient plant macrofossil material to warrant further analysis.

18.2.9 Faunal Remains and Wood

- 18.2.9.1 Only a small assemblage of faunal remains was recovered from the site, with cattle and possibly pig identified. The poor preservational conditions suggest that this material is unlikely to be representative of the refuse originally deposited on this site.
- 18.2.9.2 No further analysis is possible for the faunal remains.
- 18.2.9.3 The wooden stake from context [194] is considered to be an artefact, and examination by a suitable specialist is recommended. Conservation would be necessary if it is to be deposited with the Site Archive, as museums will not generally receive wet organic material. No further analysis is necessary for the other wood pieces.

18.2.10 Stratigraphic Evidence

18.2.10.1 Further examination of the stratigraphic evidence in relation to the results of the further work recommended for the artefactual and palaeoenvironmental evidence will be undertaken.

18.3 Publication Proposal

- 18.3.1 It is considered that several elements of the archaeological data-set merit publication in the form of a detailed synthesised report published in a suitable regional archaeological journal, such as the *Transactions of the Lancashire and Cheshire Antiquarian Society.*
- 18.3.2 A full assessment of the data-set has been undertaken and a summary of the potential of each element for further research/analysis is set out in the preceding sub-section. However, any publication of the site should, as a minimum, contain the following:
 - Abstract. This introductory paragraph will summarise the site publication including its location, period, finds and significance.
 - *Introduction*: The introduction will describe the setting of the site, detail the background to the investigations and outline the methodology employed.
 - **Geological and Topographical Background**: This section will detail the geology and topography of the site.
 - Archaeological and Historical Background: This section will set the results in context, with a particular focus on Hadrianic and Antonine Roman military occupation in the north.
 - **Archaeological and Artefactual Evidence**: This will detail the results of the investigations and will include a synthesised description of the evidence from the evaluation and excavation.
 - **Discussion of the Evidence**: This will propose an interpretation of the archaeological remains based on the excavated features and the artefactual evidence.
 - *Illustrations*: Including: site location plan; location plan of the excavation area; plans and sections of archaeological features, along with interpretative plans.
- 18.3.3 It is proposed that a separate article detailing the Roman altar be prepared for inclusion in the 'Notes' section of *Britannia*. This will include a full description of the object, including illustrations and photographs, along with a discussion of this very significant object.

PART C: REFERENCES AND ACKNOWLEDGEMENTS

19. ACKNOWLEDGEMENTS AND CREDITS

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PCA Credits

Fieldwork: Aaron Goode (Site Supervisor), Catherine Ambrey, Martina Burns, Charlotte Burton, Jennifer Davies, Sarah Duffy, Eleri Farley, David Fell, Charlotte Vallance, Christopher Watts, Richard Woolley.

Report: Aaron Goode, Jenny Proctor and Robin Taylor-Wilson Project Management: Robin Taylor-Wilson Post-Excavation Management: Robin Taylor-Wilson and Jenny Proctor CAD: Adrian Bailey Ceramic Building Material: Berni Sudds Stone Objects: Dr. Kevin Hayward Glass: Sarah Carter Post-medieval Finds: Chris Jarrett Small Finds and Slag: Dr. James Gerrard Other Credits Biological Remains: Dr. Helen Ranner, Bryan Atkinson and Richard Mason (ASDU)

Faunal Remains: Louisa Gidney and Dr. Anwen Caffell (ASDU)

The Altar: Dr. Paul Holder (University of Manchester Library) and Dr. Roger Tomlin (Oxford University)

Roman Pottery: Scott Martin

Wood: Jennifer Jones and Dr. Charlotte O'Brien (ASDU)

Field Survey: Jim Wright

20. REFERENCES

Allason-Jones, L., 1996. Roman Jet in the Yorkshire Museum, The Yorkshire Museum.

- Allason-Jones, L., 2002. 'The jet industry and allied trades in Roman Britain', in P. Wilson and J. Price (eds.), Aspects of Industry in Roman Yorkshire and the North, Oxbow Books, 125-132,
- Allason-Jones, L., and Jones, J.M., 1994. 'Jet and other materials in Roman artefact studies', *Archaeologia Aeliana* 5th series, XXII, 265-72.
- Allason-Jones, L. and Jones, J.M., 2001. 'Identification of 'jet' artefacts by reflected light microscopy', *European Journal of Archaeology* 4, No. 2, 233-51.
- Bauchhenß, G. and Neumann, G. (eds.), 1987. Matronen und verwandte Gottheiten. Ergebnisse eines Kolloquiums veranstaltet von der Göttinger Akademiekommission für die Altertumskunde Mittel- und Nordeuropas [Matrons and related deities. Results of a congress organized by the Göttinger Academy Commission for the Archaeology of Central and Northern Europe], Beihefte der Bonner Jahrbucher 44, Rheinland-Verlag.
- Birley, E., 1986. 'The deities of Roman Britain', Aufstieg und Niedergang der Römischen Welt [The Rise and Fall of the Roman World] II.18.1, 3-112.
- Brennand, M., 2006. An Archaeological Research Framework for North West England. Volume 1 The Resource Assessment, Archaeology North West Volume 8.
- Brennand, M., 2007. An Archaeological Research Framework for North West England. Volume 2 Research Agenda and Strategy, Archaeology North West Volume 9.
- Brodribb, G., 1987. Roman brick and tile, Alan Sutton.
- Brown, D.H., 2007. Archaeological Archives. A guide to best practice in creation, compilation transfer and curation, Archaeological Archives Forum.
- Burnett, J., 1986. A Social History of Housing; 1815-1985. Methuen.
- Cagnat, R., 1914. Cours d'épigraphie latine, Quatrième Édition.
- Clark, R., 1992. *Deansgate, Roman Manchester. The Coarse Pottery and Mortaria,* unpublished MA thesis, University of Leicester.
- Cool, H. and Baxter, M., 2002. 'Exploring Romano-British finds assemblages', Oxford Journal of Archaeology 21(4), 365-380.
- Crummy, N., 1983. *The Roman Small Finds from excavations in Colchester 1971-9*, Colchester Archaeological Report 2.
- Crummy, N., 2007. 'Six honest serving men: a basic methodology for the study of small finds', in R. Hingley and S. Willis (eds.), *Roman Finds*, Oxbow Books, 59-66.
- Darling, M.J. (ed.), 1994. *Guidelines for the Archiving of Roman Pottery*, Study Group for Roman Pottery Guidelines Advisory Document 1.
- Davies, B., Richardson, B. and Tomber, R., 1994. *A dated corpus of early Roman pottery from the City of London,* Council for British Archaeology Research Report 98.

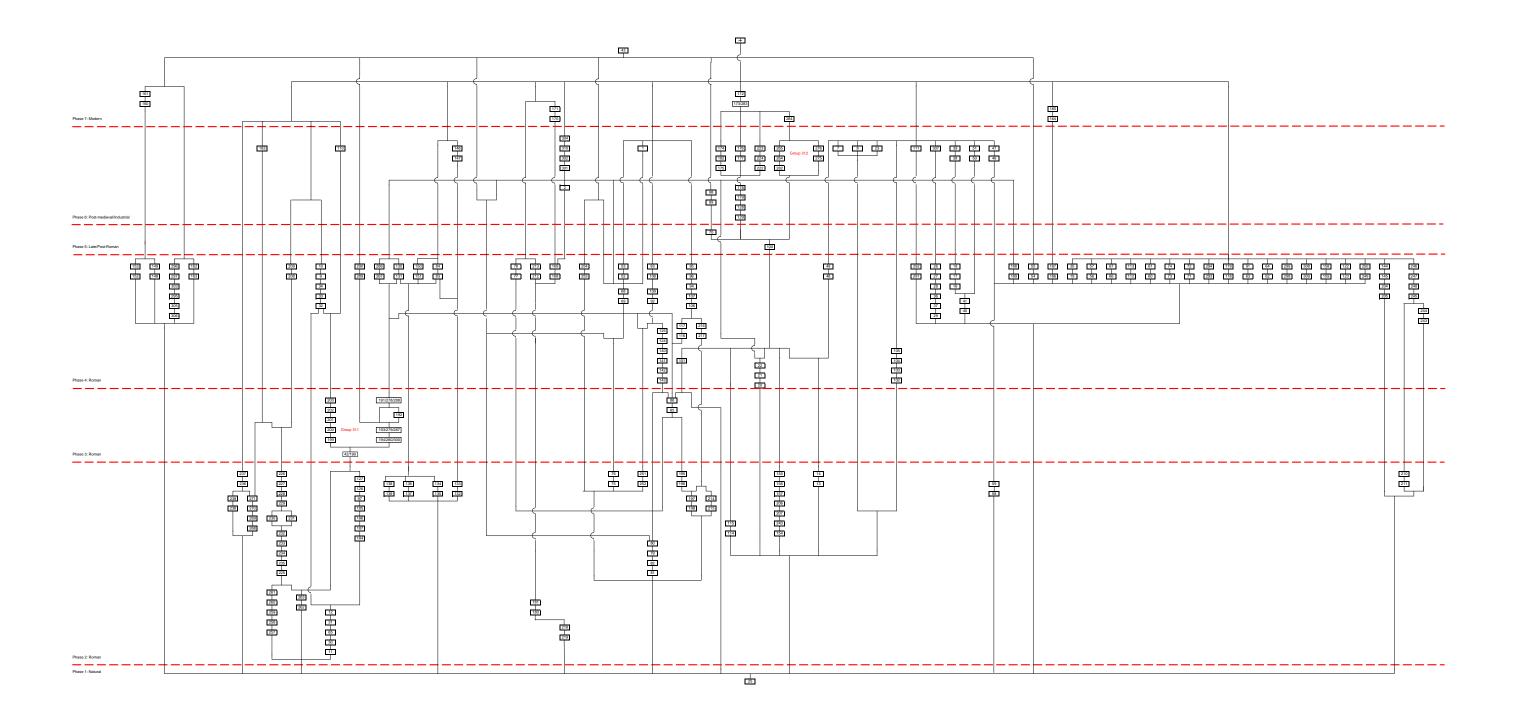
- Department of the Environment, 1990. *Planning Policy Guidance: Note 16 'Archaeology and Planning*', HMSO.
- Edwards, W. and Trotter, F.M., 1954. British Regional Geology: The Pennines and Adjacent Areas, HMSO.
- English Heritage, 2006. *Management of Research Projects in the Historic Environment,* English Heritage.
- Evans, J. and Willis, S., 1997. 'Research framework for the study of Roman pottery in the north of Britain', in S. Willis *(ed.), Research Frameworks for the Study of Roman Pottery*, Study Group for Roman Pottery.
- Fleuriot, L., 1982. 'Notes sur le celtique antique', Études Celtiques 19, 121-128.
- Gillam, J.P., 1968. *Types of Coarse Pottery Vessels in Northern Britain,* Second Edition, Oriel Press.
- Gillam, J.P., 1976. 'Coarse fumed ware in north Britain and beyond', *Glasgow Archaeological Journal* 4, 57-80.
- Green, M., 1986. The Gods of the Celts, Allan Sutton.
- Gregory, R., 2007. Roman Manchester. The University of Manchester's Excavations within the Vicus 2001-5, Oxbow Books.
- Gutenbrunner, S., 1936. *Die germanischen Götternamen der antiken Inschriften* [The names of Germanic gods from ancient inscriptions], Max Niemeyer Verlag.
- Hands, A.R., 1993. The Romano-British Roadside Settlement at Wilcote, Oxfordshire: I Excavations 1990-92, British Archaeological Reports, British Series 232.
- Hayes, R. H., Hemingway, J.E. and Spratt, D.A., 1980. 'The distribution and lithology of beehive querns in north-east Yorkshire', *Journal of Archaeological Science*, 7, 297-324.
- Horn, I., 1987. 'Diskussionsbemerkung zu Ikonographie und Namen der Matronen'
 [Discussion of the iconography and names of the matrons], in G. Bauchhenß and G. Neumann (eds.), 155-156.
- Hughes, R., 2004. 'Wattle and daub: A technical and experimental study based on materials from the National Portrait Gallery', in J. Leary, *Tatberht's Lundenwic: Archaeological Excavations in Middle Saxon London*, Pre-Construct Archaeology Monograph 2, 115-140.
- Ihm, M., 1887. 'Der Mütter- oder Matronenkultus und seine Denkmäler' [The 'mother cult' and its monuments], Bonner Jahrbücher 83, 1-200.
- Institute of Field Archaeologists, 2001. *Standard and guidance for archaeological excavation*, IFA unpublished.
- Institute for Archaeologists, forthcoming. *Standard and guidance for the creation, compilation, transfer and deposition of archaeological archives,* IfA.
- Manning, W., 1985. *Catalogue of the Romano-British Iron Tools Fittings and Weapons in the British Museum*, British Museum Press.

- Martin-Kilcher, S., 1987. Die römischen Amphoren aus Augst und Kaiseraugst. Ein Beitrag zur römischen Handels- und Kulturgeschichte. 1, Die südspanischen Ölamphoren,
 Gruppe 1 [The Roman amphorae from Augst and Kaiseraugst. A contribution to Roman commerce and cultural history. Volume 1. The Southern Spanish Ölamphoren, Group 1],
 Forschungen in Augst 7, Römermuseum Augst.
- Newman, R. and McNeil, R., 2007. 'The Industrial and Modern Period Research Agenda' in M. Brennand (ed.), 133-158.
- Neumannn, G., 1987. 'Die germanischen Matronen-Beinamen' [The Germanic-surnamed matrons], in G. Bauchhenß and G. Neumann (eds.), 103-132.
- Peacock, D.P.S and Williams, D.F., 1986. Amphorae and the Roman Economy: an introductory guide, Longman.
- Pearson, T. and Oswald, A., 2000. *Quern manufacturing at Wharncliffe Rocks, Sheffield*, English Heritage unpublished.
- Philpott, R. and Brennand, M., 2007. 'The Romano-British Period Research Agenda' in M. Brennand (ed.), 55-72.
- Pre-Construct Archaeology Limited, 2008. *Field Recording Manual Revised*, PCA unpublished.
- Pre-Construct Archaeology Limited, 2005. An Archaeological Excavation at the Beetham Tower Site, Deansgate, Manchester. Post-Excavation Assessment Report, PCA unpublished.
- Pre-Construct Archaeology Limited, 2006. An Archaeological Desk-Based Assessment of the Tom Garner Motors Site, Chester Road/Great Jackson Street, Manchester, PCA unpublished.
- Pre-Construct Archaeology Limited, 2007a. An Archaeological Evaluation at Chester Road/Great Jackson Street, Manchester, PCA unpublished.
- Pre-Construct Archaeology Limited, 2007b. Written Scheme of Investigation for an Archaeological Excavation at Chester Road/Great Jackson Street, Manchester, PCA unpublished.
- Roeder, C., 1900. 'Recent Roman discoveries in Deansgate and on Hunt's Bank, and Roman Manchester re-studied (1897-1900)', *Transactions of the Lancashire and Cheshire Antiquarian Society* 17 (for 1899), 87-212.
- Rüger, C.B., 1987. 'Beobachtungen zu den epigraphischen Belegen der Muttergottheiten in den lateinischen Provinzen des Imperium Romanum' [Observations on the epigraphic evidence of the mother goddesses in the Latin provinces of the Roman Empire], in G. Bauchhenß and G. Neumann (eds.), 1-30.
- Schmidt, K.H., 1957. 'Die Komposition in gallischen Personennamen', Zeitschrift fur Celtische Philologie 26, 33-301.
- Schmidt, K. H., 1987. 'Die keltischen Matronennamen' [The Celtic Matronennamen], in G. Bauchhenß and G. Neumann (eds.), 133-154.

- Schönfeld, M. (ed.), 1911. *Wörterbuch der altgermanischen Personen- und Völkernamen* [Dictionary of ancient Germanic people and people's names], Carl Winter.
- Speakman, J., 2007. 'Roman Ceramic Building Material' in R. Gregory, 126-134.
- Stace, C., 1997. New Flora of the British Isles, Second Edition, Cambridge University Press.
- Stolte, B.H., 1986. 'Religiöse Verhältnisse in Niedergermanien' [The Religious Situation in Lower Germany], Aufstieg und Niedergang der Römischen Welt [The Rise and Fall of the Roman World] II.18.1, 591-671.
- Tomber, R, and Dore, J., 1998. *The National Roman Fabric Reference Collection: A Handbook,* MoLAS Monograph 2.
- United Kingdom Institute for Conservation, 1983. *Guidelines No. 2: Packaging and storage* of freshly excavated artefacts from archaeological sites, Archaeology Section of the UKIC.
- Walker, K., 1990. *Guidelines for the preparation of excavation archives for long-term storage*, United Kingdom Institute for Conservation.
- Watkinson, D. and Neal, V., 2001. *First Aid for Finds,* Third Edition Revised, Rescue and Archaeology Section of the United Kingdom Institute for Conservation.
- Webster, P., 1974. 'The Coarse Pottery', in Jones, G.B.G. and Grealey, S., Roman Manchester, 89-118.
- Young, C.J., 1980. Guidelines for the Processing and Publication of Roman Pottery from *Excavations,* Department of the Environment Occasional Paper 4, Department of the Environment.

APPENDIX 1 STRATIGRAPHIC MATRIX





APPENDIX 2 CONTEXT INDEX

Context	Phase	Type 1	Type 2	Interpretation
1	6	masonry	structure	brick cellar with flagstone floor
2	6	masonry	structure	brick-lined culvert
4	6	masonry	structure	brick and stone-lined culvert
7	6	masonry	structure	brick structure
8	6	masonry	structure	brick structure
9	4	cut	discrete	refuse pit filled by [10]
10	4	deposit	fill	backfill of refuse pit [9]
11	2	cut	discrete	refuse pit filled by [12], [30], [31], [65]
12	2	deposit	fill	backfill of refuse pit [11]
13	2	cut	linear	boundary ditch filled by [14]
14	2	deposit	fill	backfill of ditch [13]
16	4	cut	discrete	refuse pit filled by [17], [18]
17	4	deposit	fill	backfill of refuse pit [16]
18	4	deposit	fill	backfill of refuse pit [16]
19	4	cut	discrete	refuse pit filled by [35]
20	4	cut	linear	boundary ditch filled by [21], [22]
21	4	deposit	fill	backfill of ditch [20]
22	4	deposit	fill	backfill of ditch [20]
23	6	masonry	structure	brick structure
25 26	1 4	deposit deposit	layer fill	natural backfill of refuse pit [29]
20 27	4	deposit	fill	backfill of refuse pit [29]
28	4	deposit	fill	backfill of refuse pit [29]
20	4	cut	discrete	refuse pit filled by [26], [27], [28], [36], [37]
30	2	deposit	fill	backfill of refuse pit [11]
31	2	deposit	fill	backfill of refuse pit [11]
32	4	cut	discrete	refuse pit filled by [33], [34]
33	4	deposit	fill	backfill of refuse pit [32]
34	4	deposit	fill	backfill of refuse pit [32]
35	4	deposit	fill	backfill of refuse pit [19]
36	4	deposit	fill	backfill of refuse pit [29]
37	4	deposit	fill	backfill of refuse pit [29]
38	6	cut	discrete	refuse pit filled by [39]
39	6	deposit	fill	backfill of refuse pit [38]
40	4	cut	discrete	refuse pit filled by [41]
41	4	deposit	fill	backfill of refuse pit [40]
42	3	cut	linear	boundary ditch filled by [199], [200], [201], [202], [203]
43	7	deposit	structure	concrete foundation
44	2	cut	linear	same as [135]
45	2	deposit	fill	same as [134]
46	6	cut	discrete	refuse pit filled by [47]
47 48	6	deposit	fill	backfill of refuse pit [46] posthole filled by [49]
48 49	4	cut deposit	discrete fill	backfill of posthole [48]
49 50	6	cut	discrete	refuse pit filled by [51]
50 51	6	deposit	fill	backfill of refuse pit [50]
52	4	cut	discrete	posthole filled by [53]
52	4	deposit	fill	backfill of posthole [52]
54	4	cut	discrete	timber slot filled by [55]
55	4	deposit	fill	backfill of timber slot [54]
56	4	cut	discrete	timber slot filled by [57]
57	4	deposit	fill	backfill of timber slot [56]
58	2	cut	linear	boundary ditch filled by [59]
59	2	deposit	fill	backfill of ditch [58]
60	4	cut	discrete	posthole filled by [61]
61	4	deposit	fill	backfill of posthole [60]
62	4	cut	discrete	posthole filled by [64]
63	4	cut	discrete	posthole filled by [91]
64	4	deposit	fill	backfill of posthole [62]
65	2	deposit	fill	backfill of refuse pit [11]
66	4	cut	discrete	posthole filled by [67]

Context	Phase	Type 1	Type 2	Interpretation
67	4	deposit	fill	backfill of posthole [66]
68	4	deposit	fill	backfill of ditch [69]
69	4	cut	linear	boundary ditch filled by [68]
70	5	deposit	layer	developed soil
71	4	cut	discrete	timber slot filled by [72]
72	4	deposit	fill	backfill of timber slot [71]
73	4	cut	discrete	posthole filled by [74]
74	4	deposit	fill	backfill of posthole [73]
75	2	cut	linear	boundary ditch filled by [76]
76	2	deposit	fill	backfill of drainage ditch [75]
77	4	cut	discrete	posthole filled by [78]
78	4	deposit	fill	backfill of posthole [77]
79	2	cut	linear	drainage gully filled by [80]
80	2	deposit	fill	backfill of drainage gully [79]
81	2	cut	discrete/linear	?posthole filled by [82]
82	2	deposit	fill	backfill of ?posthole [81]
83	4	cut	linear	boundary ditch filled by [84]
84	4	deposit	fill	backfill of ditch [83]
85	3	cut	linear	boundary ditch filled by [86]
86	3	deposit	fill	backfill of drainage ditch [85]
91	4	deposit	fill	backfill of posthole [63]
92	4	cut	discrete	refuse pit filled by [93], [108], [108]
93	4	deposit	fill	backfill of refuse pit [92]
94	4	cut	discrete	refuse pit filled by [95], [96]
95	4	deposit	fill	backfill of refuse pit [94]
96	4	deposit	fill	backfill of refuse pit [94]
97	2	cut	discrete	refuse pit filled by [126], [127]
98	6	deposit	fill	backfill of refuse pit [99]
99	6	cut	discrete	refuse pit filled by [98]
100	5	deposit	layer	developed soil
101	4	masonry	surface	cobbled surface
102	4	cut	discrete	quarry pit filled by [103], [104], [105]
103	4	deposit	fill	backfill of quarry pit [102]
104	4	deposit	fill	backfill of quarry pit [102]
105	4	deposit	fill	backfill of quarry pit [102]
106	4	cut	discrete	refuse pit filed by [107]
107	4	deposit	fill	backfill of refuse pit [106]
108	4	deposit	fill	backfill of refuse pit [92]
109 110	4	deposit	fill	backfill of refuse pit [92]
110	6 6	masonry	structure	brick structure
112	4	masonry	structure	brick structure posthole filled by [113]
112		cut deposit	discrete fill	backfill of posthole [112]
113	4 2	cut	linear	boundary ditch filled by [115]
114	2	deposit	fill	backfill of drainage ditch [114]
115	4	cut	discrete	refuse pit filled by [117]
117	4	deposit	fill	backfill of refuse pit [116]
117	4	cut	discrete	timber slot filled by [119]
119	4	deposit	fill	backfill of timber slot [118]
122	4	deposit	fill	posthole filled by [123]
122	4	cut	discrete	posthole filled by [123]
123	4	cut	discrete	refuse pit filled by [125]
125	4	deposit	fill	backfill of refuse pit [124]
126	2	deposit	fill	backfill of refuse pit [97]
127	2	deposit	fill	backfill of refuse pit [97]
128	6	deposit	fill	backfill of irregular feature [129]
129	6	cut	discrete	irregular feature filled by [128]
130	4	deposit	fill	backfill of ditch [131]
131	4	cut	linear	boundary ditch filled by [130]
132	2	cut	linear	drainage ditch filled by [133]
133	2	deposit	fill	backfill of ditch [132]
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Context	Phase	Туре 1	Type 2	Interpretation
134	2	deposit	fill	backfill of ditch [135]
135	2	cut	linear	boundary ditch filled by [134]
136	2	deposit	fill	backfill of ditch [137]
137	2	cut	linear	boundary ditch filled by [136]
138	2	deposit	fill	backfill of ditch [139]
139	2	cut	linear	boundary ditch filled by [138]
140	4	deposit	fill	backfill of post-pit [141]
141	4	cut	discrete	post-pit filled by [140]
142	4	deposit	fill	backfill of post-pit [143]
143	4	cut	discrete	post-pit filled by [142]
144	4	deposit	fill	backfill of ditch [145]
145	4	cut	linear	boundary ditch filled by [144]
145	6	deposit	fill	backfill of intrusion [147]
147	6	cut	discrete	intrusive feature filled by [146]
148	4	cut	linear	boundary ditch filled by [149]
149	4	deposit	fill	backfill of ditch [148]
150	4	deposit	fill	backfill of ditch [151]
151	4	cut	linear	boundary ditch filled by [150]
152	4	cut	discrete	pit/posthole filled by [153]
153	4	deposit	fill	backfill of pit/posthole [152]
154	2	cut	discrete	quarry pit filled by [155], [156], [157], [206], [207], [240]
155	2	deposit	fill	backfill of quarry pit [154]
156	2	deposit	fill	backfill of quarry pit [154]
157	2	deposit	fill	backfill of quarry pit [154]
158	4	deposit	fill	backfill of post pit [159]
159	4	cut	discrete	post pit filled by [158]
160	7	cut	linear	intrusive feature filled by [161]
161	7	deposit	fill	backfill of intrusion [160]
162	4	deposit	fill	backfill of ditch [163]
163	4	cut	linear	
				drainage ditch filled by [162]
164	7	cut	discrete	intrusive feature filled by [165]
165	7	deposit	fill	backfill of intrusion [164]
166	4	cut	discrete	posthole filled by [167]
167	4	deposit	fill	backfill of posthole [166]
168	4	cut	linear	boundary ditch filled by [169]
169	4	deposit	fill	backfill of ditch [168]
170	7	cut	discrete	intrusive feature filled by [171]
171	7	deposit	fill	backfill of intrusion [170]
172	7	deposit	surface	tarmac surface
173	7	deposit	layer	refuse dump
174	6	masonry	structure	brick structure
175	6	cut	discrete	construction cut for structure [174]
176	6	masonry	structure	brick structure
177	6	cut	discrete	construction cut for structure [176]
178	6	deposit	layer	refuse dump
179	6	deposit	layer	refuse dump
180	2	cut	linear	boundary ditch filled by [181]
181	2	deposit	fill	backfill of ditch [180]
181			fill	
	6	deposit		backfill of structure [174] cut [175]
183	6	masonry	structure	brick structure
184	2	cut	discrete	refuse pit filled by [185], [186], [187]
185	2	deposit	fill	backfill of refuse pit [184]
186	2	deposit	fill	backfill of refuse pit [184]
187	2	deposit	fill	backfill of refuse pit [184]
188	4	deposit	fill	backfill of pit/ditch [189]
189	4	cut	discrete/linear	pit/ditch filled by [188]
190	3	cut	linear	boundary ditch filled by [191], [192], [193], [194], [278], [279], [280]
191	3	deposit	fill	backfill of ditch [190]
192	3	deposit	fill	backfill of ditch [190]
	3	deposit	fill	backfill of ditch [190]

Context	Phase	Type 1	Type 2	Interpretation
194	3	deposit	fill	backfill of ditch [190]
195	2	deposit	fill	backfill of ditch [196]
196	2	cut	linear	boundary ditch filled by [195]
197	2	deposit	fill	backfill of ditch [198]
198	2	cut	linear	boundary ditch filled by [197]
199	3	deposit	fill	backfill of ditch [42]
200	3	deposit	fill	backfill of ditch [42]
201	3	deposit	fill	backfill of ditch [42]
202	3	deposit	fill	backfill of ditch [42]
203	3	deposit	fill	backfill of ditch [42]
204	4	deposit	fill	backfill of ditch [205]
205	4	cut	linear	boundary ditch filled by [204]
206	2	deposit	fill	backfill of quarry pit [154]
207	2	deposit	fill	backfill of quarry pit [154]
208	4	cut	discrete	posthole filled by [209]
209	4	deposit	fill	backfill of posthole [208]
210	2	deposit	fill	fill of possible timber slot [211]
211	2	cut	linear	possible timber slot filled by [210]
212	4	cut	discrete	posthole filled by [213]
213	4	deposit	fill	backfill of posthole [212]
214	2	deposit	fill	backfill of ditch [215]
215	2	cut	linear	drainage ditch filled by [214]
216	4	deposit	fill	backfill of refuse pit [217]
217	4	cut	linear	refuse pit filled by [216]
218	2	deposit	fill	backfill of ditch [219]
219	2	cut	linear	drainage ditch filled by [218]
222	6	cut	discrete	construction cut for structure [223]
223	6	masonry	structure	brick structure
224	6	deposit	fill	backfill of structure [223] cut [222]
225	2	cut	discrete	quarry pit filled by [226], [227], [228], [229], [230], [231], [232],
				[233], [234], [235]
226	2	deposit	fill	backfill of quarry pit [225]
227	2	deposit	fill	backfill of quarry pit [225]
228	2	deposit	fill	backfill of quarry pit [225]
229	2	deposit	fill	backfill of quarry pit [225]
230	2	deposit	fill	backfill of quarry pit [225]
231	2	deposit	fill	backfill of quarry pit [225]
232	2	deposit	fill	backfill of quarry pit [225]
233	2	deposit	fill	backfill of quarry pit [225]
234	2	deposit	fill	backfill of quarry pit [225]
235	2	deposit	fill	backfill of quarry pit [225]
236	2	cut	linear	boundary ditch filled by [237]
237 238	2	deposit	fill	backfill of ditch [236]
238 239	2	cut deposit	linear fill	boundary ditch filled by [239] backfill of ditch [238]
239 240	2		fill	backfill of quarry pit [154]
240 243	4	deposit cut	discrete	pit/posthole filled by [244]
243 244	4	deposit	fill	backfill of pit/posthole [243]
244 245	4	cut	discrete	refuse pit filled by [246], [247], [248]
245 246	4	deposit	fill	backfill of refuse pit [245]
240 247	4	deposit	fill	backfill of refuse pit [245]
247 248	4	deposit	fill	backfill of refuse pit [245]
240 249	4	cut	discrete	refuse pit filled by [250]
249 250	4	deposit	fill	backfill of refuse pit [249]
250 251	2	deposit	fill	backfill of ditch [252]
252	2	cut	linear	boundary ditch filled by [251]
252	4	cut	discrete	timber slot filled by [254]
255 254	4	deposit	fill	backfill of timber slot [253]
254 257	2	cut	discrete	quarry pit filled by [258], [259], [260], [261]
258	2	deposit	fill	backfill of quarry pit [257]
259	2	deposit	fill	backfill of quarry pit [257]
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Context	Phase	Type 1	Type 2	Interpretation
260	2	deposit	fill	backfill of quarry pit [257]
261	2	deposit	fill	backfill of quarry pit [257]
262	2	cut	linear	?timber slot filled by [263]
263	2	deposit	fill	fill of ?timber slot [262]
264	6	cut	linear	construction cut for culvert [265]
265	6	masonry	structure	brick and stone-lined culvert
266	4	deposit	fill	backfill of ditch [267]
267	4	cut	linear	boundary ditch filled by [266]
268	2	cut	linear	boundary ditch filled by [269]
269	2	deposit	fill	silting of drainage ditch [268]
270	2	cut	linear	boundary ditch re-cut filled by [271]
271	2	deposit	fill	silting of ditch [270]
275	6	cut	linear	construction cut for culvert [276]
276	6	masonry	structure	brick and stone-lined culvert
278	3	deposit	fill	backfill of ditch [190]
279	3	deposit	fill	backfill of ditch [190]
280	3	deposit	fill	backfill of ditch [190]
282	6	deposit	layer	refuse dump
283	7	deposit	layer	ground levelling dump
284	7	deposit	layer	ground levelling dump
287	3	deposit	fill	backfill of ditch [190]
288	3	deposit	fill	backfill of ditch [190]
289	4	cut	discrete/linear	pit/ditch filled by [290]
290	4	deposit	fill	backfill of pit/ditch [289]
291	4	cut	discrete/linear	pit/ditch filled by [292]
292	4	deposit	fill	backfill of pit/ditch [291]
293	4	cut	discrete	posthole filled by [294]
294	4	deposit	fill	backfill of posthole [293]
295	4	cut	discrete	refuse pit filled by [296], [297], [303]
296	4	deposit	fill	backfill of refuse pit [295]
297	4	deposit	fill	backfill of refuse pit [295]
298	4	cut	discrete	posthole filled by [299]
299	4	deposit	fill	backfill of posthole [298]
300	3	deposit	fill	backfill of ditch [190]
301	6	cut	linear	construction cut for culvert [302]
302	6	masonry	structure	brick and stone-lined culvert
303	4	deposit	fill	backfill of refuse pit [295]
304	6	deposit	fill	backfill of culvert [302]
305	4	deposit	fill	backfill of posthole [306]
306	4	cut	discrete	posthole filled by [305]
307	6	masonry	structure	brick and stone slab structure
308	4	deposit	fill	backfill of posthole [309]
309	4	cut	discrete	posthole filled by [308]
310	6	deposit	fill	silting of culvert [302]
311	3	group number	linear	boundary ditch comprising [42], [190], [191], [192], [193], [194],
	Ŭ	group number		[199], [200], [201], [202], [203], [278], [279], [280], [287], [288], [300]
312	6	group number	structure	culvert comprising [264], [265], [276], [275]

APPENDIX 3

ROMAN POTTERY CATALOGUE

Context	Feature No.	Feature type	Fabric	Sherds	Wt. (g)	Comments
10	9	pit	BB1	5	93	Rims - Gillam 1976.17 (L2) with ext. sooting, Gillam 1976.41 (L2) with int. and ext. sooting; misc b/s
10	9	pit	OW2	6	125	Abraded base (closed form; misc abraded b/s
10	9	pit	OW3	4	123	Rim abraded bow-jar; spalled b/s poss. Same vessel; base - closed form ?jar
10	9	pit	OW4	3	29	Rims - narrow-necked jar, bowl-jar type vessel - all abraded
12	11	pit	BB1	21	162	Rims - Gillam 1976.41 - burnt and abraded (L2), Gillam 1976 4 (L2); bases - open and closed forms (inc closed form with hole drilled post-
						firing); misc b/s (closed forms)
31	11	pit	BB1	1	22	B/s with band of acute lattice
12	11	pit	GW1	6	62	Rims - neckless bead-rimmed jar, immitation Gillam 1976.4, necked jar; misc b/s
31	11	pit	GW1	1	4	B/s
12	11	pit	GW4	1	11	Beaker base
12	11	pit	MORT1	1	85	Rim - burnt Gillam 243 type (100-140)
12	11	pit	MORT5	1	117	Base
12	11	pit	OW2	3	35	Abraded rim - cf. Wilderspool Kilns 57; misc abraded b/s
31	11	pit	OW2	4	40	Rim - bowl-jar type vessel; misc
12	11	pit	OW3	9	119	Rim - abraded bowl-jar; misc b/s; 1 ?base
31	11	pit	OW3	1	13	B/s
12	11	pit	OW4	4	13	B/s - same vessel
12	11	pit	SGA	1	55	Rim - Gauloise 4 (Peacock and William Class 27)
12	11	pit	SSPA	1	62	B/s
31	11	pit	SSPA	1	82	B/s
12	11	pit	TSG	3	21	Rim - ?f37; misc b/s (inc. ?F33
14	13	ditch	TSG	1	28	Rim - 137
18	16	pit	BB1	8	176	Rims - Gillam 1976.62 (M2), Gillam 1976.65 with lattice (L2), Gillam 1976.64 (M/L2); misc b/s - claed forms (inc 1 with wide zone of acute lattice
10	10	ph	221	Ŭ		and internal white residue)
17	16	pit	GW2	4	20	B/s with acute lattice
18	16	pit	GW2	2	17	Misc b/s with acute lattice
18	16	pit	GW3	1	63	B/s with rivet-hole
10	16	pit	GW6	2	3	Joining b/s
18	16	pit	MORT5	1	19	Abraded flange frag.
18	16	pit	NVC	1	2	Rim - 'funnel-necked beaker (E/M3)
18	16	pit	OW2	4	36	Rim - beaker - bag-shaped form, abraded necked jar; misc abraded b/s
17	16	pit	OW2 OW3	4	9	B/s - 1 very abraded
18	16	pit	OW3	2	16	Misc abraded b/s
18	16	pit	OW4	3	35	Base - closed form; misc b/s
18	16	pit	SSPA	3	398	Misc b/s - 1 with handle scar
18	16	pit	TSG	4	33	Rim - f37 with rivet-hole; base - platter or dish; misc b/s
35	19	pit	GW1	4	14	Rim - abraded jar - v. fragmentary; misc b/s
35	19	pit	OW1 OW2	4	93	Abraded rim - bag-shaped beaker or small jar; abraded bases - closed forms; b/s
35	19	pit	TSG	1	11	B/s - dish
35	19	pit	WS2	1	15	Base - ?flagon
35 21	20	ditch	BB1	3	19	Base and b/s with acute lattice
21	20	ditch	GW1	4	25	Abraded b/s
21	20	ditch	OW2	2	3	Misc abraded b/s
21	20	ditch	OW2 OW4	6	3 76	Base - platter type vessel with foot-ring; misc b/s
21	20	ditch	TSG	1	3	Base - platter type vessel with root-ring, misc b/s B/s
21 26	20	pit	BB1	64	3 468	B/s Rims - Gillam 1976.77 (L2/E3) with base (joins with vessel in con. 27); Gillam 1976.8 (M3) x2
26 27	29	pit	BB1	2	24	Rims - Gillam 1976.37 (L2/E3) with base (joins with vessel in con. 27), Gillam 1976.8 (M3) x2 Rims - Gillam 1976.34 (E/M2), Gillam 1976.77 (L2/E3) - joins with vessel in con. 26
27 27	29		COLC	2		
	-	pit	GW6	4	36 46	Base of bag-shaped beaker (2nd cent) abraded
27 27	29	pit		1		B/s
	29	pit	MORT10	1	103	Base
26	29	pit	MORT5	4	76	Base - worn interally
27	29	pit	MORT5	1	119	B/s

Context	Feature No.	Feature type	Fabric	Sherds	Wt. (g)	Comments
	29	pit		2	24	Abraded base - closed form
	29	pit	-	6	74	Rim - cf. Wilderspool 65; misc b/s
	29	pit		20	376	Rim - immitation samian f31; jar base; misc b/s - jar with cordons ?narrow-necked form; misc b/s
	29	pit		2	19	
	29	pit	SGA	1	26	B/s
	29	pit		1	90	Burnt b/s - very fine-walled
	29	pit		1	524	B/s - partly burnt
	29	pit		1	94	Base - f18/31
27	29	pit	TSG	1	29	B/s - ?31
	29	pit		43	1664	Rim - Flagon - single handled type, abraded but substantially complete [Illust.]
27	29	pit		1	15	B/s
28	29	pit	WS2	1	3	B/s
	29	pit	WW4	2	26	Flagon handle and b/s
28	29	pit		2	9	B/s
33	32	pit		3	152	Rim Gillam 1976.6 (E3); misc b/s or base - open form
34	32	pit	BB1	8	101	Rims - Gillam 1976.4 (L2) x2; misc b/s
33	32	pit	GW2	1	44	Rim - unsusal form ?rouletted beaker
33	32	pit	OW2	1	56	B/s
34	32	pit	OW2	4	28	Bases - 1 with foot-ring, 1 closed form; misc abraded b/s
33	32	pit	OW4	1	4	B/s
34	32	pit	OW4	2	14	Burnt b/s
34	32	pit	SSPA	1	24	Abraded b/s
33	32	pit	TSG	4	26	Base - ?f37; misc b/s (f37's)
34	32	pit	WS1	1	8	Abraded base (closed form)
202	42	ditch	BB1	1	53	Rim - Gillam 1976.41 (L2)
203	42	ditch	BB1	11	286	Rims - Gillam 1976.4 (L2) with ext. sooting x2, Gillam 1976.40 (M/L2) with internal sooting, Gillam 1976.61 (M2), Gillam 1976.75 (E/M2), Gillam
						1976.76 (M/L2)
203	42	ditch	GW1	2	16	Misc b/s - inc. upper part of jar
203	42	ditch	GW6	2	12	Joining b/s
202	42	ditch	MORT13	1	61	Rim - burnt and v. coarse fabric [New Fabric] (E2 or ?L1) - Source unk.
202	42	ditch	OW2	1	100	Burnt and abradede base - closed form
203	42	ditch	OW3	7	50	Rim - necked jar (Traj-Had form); misc mostly abraded b/s
203	42	ditch	TSG	6	60	Rims - f33 - miniature version, f31; base - plate or dish; misc b/s - inc. abraded f37
202	42	ditch	WW4	4	14	Abraded b/s
53	52	posthole	BUF	5	10	Rim - with ext. sooting - small jar or ?beaker
59	58	ditch	GW7	2	7	Jar neck and b/s, poss.same vessel
59	58	ditch	OW4	3	16	Rim and b/s cf. Wilderspool Kilns 25, but not rough-cast
61	60	posthole		2	3	Misc b/s
	69	ditch	GW1	5	10	Misc abraded b/s
68	69	ditch		1	38	Rim - Gillam 282 (230-340) Mancetter type
	69	ditch	OW2	4	91	Strap-handle, large and abraded; misc abraded b/s
68	69	ditch	WS1	1	10	Flagon handle
	69	ditch		1	2	Ring necked flagon - abraded
82	81	gully	GW1	1	25	B/s
86	85	ditch		2	31	Rim - Gillam 1976.4 (L2) with sooted ext.
	85	ditch	GW1	10	46	Misc abraded b/s
	85	ditch	OW2	7	33	Misc abraded b/s
86	85	ditch		5	31	Rim v. abraded ?plain-rimmed bowl (?f37 immitation; misc abraded b/s (Inc ?jar)
86	85	ditch	SSPA	3	24	Burnt b/s
86	85	ditch	TSG	3	20	Rim - f36 abraded; b/s f37
93	92	pit cut	BB1	10	164	Rim - Gillam 1976.65 with lattice and int. and ext. sooting (M/L2); misc bases open and closed forms (inc chamfered open form); b/s
93	92	pit cut	GW3	1	24	Base - rough cast beaker

Context	Feature No.	Feature type	Fabric	Sherds	Wt. (g)	Comments
93	92	pit cut	OW2	3	34	Base - closed form prob. Small jar or beaker; misc b/s
93	92	pit cut	OW2 OW4	1	9	B/s
93 93	92	pit cut	SSPA	1	3 336	B/s in v. ppor condition
93 93	92	pit cut	TSG	6	58	Rims - f18/31, ?f37; misc b/s (inc f37)
93 93	92	pit cut	VRW	3	33	Rim - ungent jar (cf. Davies et al 1994, 36.175), prob. Antonine with ext sooting [Illust.]
93 93	92	pit cut	GW1	3	56	B/s
		1	GW1 GW3	2	5	B/s
93	92 92	pit		2	5	
93		pit	GW7	1	4	Burnt b/s
93	92	pit	MORT3	1	121	Base
93	92	pit	SSPA	1	67	B/s with traces of graffiti
93	92	pit	TSG	'	243	Rim and base, almost complete f18/31
95	94	pit	BB1	4	85	Rim - Gillam 1976.57 (E/M2); base - open form (oxidised)
95	94	pit	GW1	1	14	Abraded jar rim
95	94	pit	MORT3	4	291	Base and b/s - abraded - same vessel
95	94	pit	OW2	2	85	Rims - abraded bowl-jar, beaker or small jar
95	94	pit	OW3	2	24	Misc abraded b/s
95	94	pit	OW4	6	26	Misc abraded b/s
95	94	pit	SSPA	1	69	B/s
95	94	pit	TSG	3	52	Rim - f30; misc b/s (inc f37)
95	94	pit	WS1	1	35	Flagon neck - abraded
95	94	pit	WW4	1	4	B/s
126	97	pit	BB1	2	41	Rims - Gillam 1976.36 (M2), Gillam 1976.16 (M2)
126	97	pit	OW2	1	8	Rim - cf. Wilderspool Kilns 65
126	97	pit	TSG	1	1	Rim - plate or dish
127	97	pit	TSG	1	3	B/s
98	99	pit	OW2	1	1	Small abraded b/s
100	100	layer	OW2	4	26	Misc abraded b/s
100	100	layer	OW4	5	12	Misc abraded b/s
100	100	layer	TSG	4	13	Foot-ring base - abraded? F33; b/s f37, misc abraded b/s
101	101	cobbled surface	OW2	4	30	Misc abraded b/s
101	101	cobbled surface	OW4	1	2	Abraded b/s
101	101	cobbled surface	SSPA	1	18	Abraded b/s
101	101	cobbled surface	TSG	2	14	Rim - plate or dish; b/s - v. abraded f37
105	102	pit	BB1	7	170	Rims - Gillam 1976.4 (L2) abraded with traces of ext. sooting, a poosible example of a Gillam 1976.40 (M/L2) and a ?Gillam 1976.35; open form
100	102	Pit	221			base with chamfer; b/s
103	102	pit	GW1	1	50	Rim - bowl-jar type vessel - burnt
105	102	pit	GW1	2	17	Misc abraded jar rims - forms uncertain
105	102	pit	GW6	2	6	Rouletted b/s - beaker
103	102		OW2	5	66	Abraded rim - cf. Wilderspool Kilns 51 (Ant. Form); misc b/s (inc rouletted beaker (abraded)
103	102	pit		-		Abraded rim - ci. wilderspool klins 51 (Ant. Form), misc b/s (inc fouletted beaker (abraded) Abraded rim - bag-shaped beaker; misc abraded b/s; a lamp frag. [illust.]
105		pit	OW2	11	88 94	
	102	pit	OW3	1		Rim - bowl - plain f37 or f30 immitation [illust.)
105	102	pit	OW3		5	B/s
103	102	pit	OW4	1	4	B/s
105	102	pit	OW4	1	4	Abraded base - ?closed form
103	102	pit	SSPA	1	168	Rim - Dr 20 Martin-Kilcher E (110-150)
103		pit	TSG	4	25	Rim - bowl - ?f31; b/s f37, 1 burnt fragment
105	102	pit	TSG	4	32	Rim - ?f18/31; misc b/s - several f37's
103	102	pit	WS1	1	18	Flagon base; b/s
107	106	pit	WS1	1	2	Abraded b/s
107	106	pit	WW4	1	7	B/s
115	114	ditch	BB1	3	14	Misc b/s (inc chamfered open form)
115	114	ditch	MORT2	1	105	Rim - cf. Wilderspool Kilns 102 (90-160) - burnt
115	114	ditch	WW4	1	27	Rim - ?2-handled flagon
				1	1	

Context	Feature No.	Feature type	Fabric	Sherds	Wt. (g)	Comments
	116	pit	TSG	1	14	Rim - f18/31
130	131	ditch		2	46	Misc b/s
130	131	ditch	TSG	1	14	B/s f37
130	131	ditch	OW4	1	1	Abraded small b/s
140	141	post-pit	TSG	1	1	Chip
142	143	post-pit	OW4	1	4	Abraded b/s
142	143	post-pit	TSG	1	1	Chip
157	154	pit	OW2	1	28	Abraded rim - cf. Wilderspool Kilns 9 or 10 type narrow-necked jar
157	154	pit		5	29	Base - closed form; misc b/s
157	154	pit	OW4	2	3	Abraded b/s
157	154	pit	TSG	15		Rim and base - complete f37; misc b/s - 1 poss. Made into a counter, f37 x2
167	166	posthole		2	31	Abraded base (?); abraded b/s
169	168	ditch		7		Rim - Gillam 1976.6 (E3); misc b/s - open and closed forms
169	168	ditch		5	62	Rims - neckless jar with bead rim, abraded jar rim - form uncertain; misc b/s
169	168	ditch	GW2	1		Rouletted b/s - ?burnt
169	168	ditch	GW7	2		Misc b/s
169	168	ditch	OW2	- 15	166	Rims - abraded bag-shaped beakers x2; misc bases (inc beaker pedestal ?made into a counter, misc closed forms; misc abraded b/s
169	168	ditch	OW4	2	3	Misc abraded b/s
169	168	ditch	SSPA	1	2	Abraded b/s
169	168	ditch	TSG	11	131	Rim - ff37; base - f31R; misc b/s (inc f37)
169	168	ditch		2	11	Misc b/s -1 with white painted decoration (beakers)
181	180	ditch		7		Rim - Gillam 1976.64 (M/L2) with wide-spaced lattice; misc b/s (closed forms)
181	180	ditch	GW1	3		Rim - abraded jar; misc b/s
181	180	ditch	GW4	1	3	B/s
181	180	ditch	OW2	13	-	Rim - cf. Wilderspool Kilns 37; misc b/s
181	180	ditch	OW3	1	36	B/s
181	180	ditch	OW4	1		B/s - poss Cheshire Plains fabric (not cert.)
181	180	ditch		3		B/s - prob. Same vessel
181	180	ditch	TSG	14	149	Rim - ?f31; base - f37; misc b/s
186	184	pit	SSPA	1	7	Abraded b/s
186	184	pit		2	5	Rim - f18/31
194	190	ditch	BB1	1	20	Rim - Gillam 1976.35 (M2)
279	190	pit	GW2	1	19	Rim - fat-rimmed dish (Had-Ant)
194	190	ditch	OW3	7	81	Abraded base - closed form, burnt ext.; misc b/s
279	190	pit	OW3	1	19	Rim - bowl cf. Wilderspool Kilns 56
191	190	ditch	OW4	4	11	Misc abraded b/s
278	190	ditch	OW4	2	28	Misc abraded b/s - 1 also burnt
279	190	pit	OW4	1	4	Abraded b/s
191	190	ditch		3	50	Misc b/s
191	190	ditch	TSG	4	14	Rim - f18/31; b/s - f37 and ?f36
194	190	ditch	TSG	1	8	Rim - f18/31
279	190	pit	TSG	1	5	V. fargmentary rim (dish or plate)
195	196	ditch	OW2	2	14	Joining b/s
197	198	ditch	OW3	1	5	Abraded b/s
	205	ditch	GW4	1	5	B/s
	208	posthole			8	Base - small jar or beaker - abraded
	208	posthole	SSPA	1	18	Abraded b/s
	212	posthole	BB1	1		B/s - open form with burnished lattice
	212	posthole	GW2	1		B/s - rouletted beaker, poss. Bag-shaped type
	212	posthole		4		Rim - necked jar (form uncertain); misc abraded b/s
	212	posthole	SSPA	1		B/s
	212	posthole	TSG	1		B/s
214	215	ditch	OW2	1	18	Abraded base - closed form

Context	Feature No.	Feature type	Fabric	Sherds	Wt. (g)	Comments
218	219	ditch	BB1	4	52	Rims ?Gillam 1976.4, Gillam 1976.56 (E/M2)
218	219	ditch	MORT5	1	21	Flange fragment
218	219	ditch	OW2	1	30	Abraded b/s
218	219	ditch	OW4	2	18	Misc abraded b/s
218	219	ditch	SSPA	3	306	Joining b/s - fresh breaks
218	219	ditch	TSG	1	7	B/s
228	225	pit	OW2	6	109	Misc abraded b/s in v. poor condition, 1 unabraded sherd, jar necks - forms uncertain
229	225	pit	OW2	10	171	Rim of necked jar; misc b/s (pulverised)
234	225	pit	OW2	27	936	Rim - and large portion of a large flagon with 1 handle [illust.]
235	225	pit	OW2	2	357	Rim - cheese press (Gillam 350) [illust.]; b/s
228	225	pit	OW3	15	295	Rim - neckless jar; base - closed form; flagon neck; misc b/s
229	225	pit	OW3	4	87	Misc b/s - closed forms
228	225	pit	OW4	2	12	Misc abraded b/s
228	225	pit	SGA	3	25	V. abraded b/s
228	225	pit	SSPA	2	43	B/s
229	225	pit	SSPA	2	740	Rim - Dr 20 - complete (1Eve) Martin-Kilcher D (70-110)
228	225	pit	TSG	1	5	Rim ?f18
246	245	pit	GW2	1	5	B/s with acute lattice
246	245	pit	MORT8	1	85	Rim/flange (cf. Gillam 261 - 160-210)
246	245	pit	TSG	1	4	B/s
250	249	pit	OW3	1	2	Abraded b/s
250	249	pit	TSG	1	8	B/s F37
251	252	ditch	GW6	1	14	Base - closed form
251	252	ditch	OW2	1	2	B/s
258	257	pit	MORT2	1	98	Rim - Gillam 249 type (130-160)
258	257	pit	OW3	8	382	Rim - cf. Wilderspool Kilns 10; base poss. Same vessel as previous; flagon neck
259	257	pit	OW3	1	13	B/s with groove - ?open form
258	257	pit	OW4	1	10	Abraded b/s
258	257	pit	TSG	1	24	Base - F33 stamped OVC
266	267	ditch	OW2	1	8	Abraded b/s
303	295	pit	BB1	1	16	Rim - Gillam 1976.38 (M/L2)
297	295	pit	GW7	1	60	Jar base
297	295	pit	TSG	1	4	B/s - f33
297	295	pit	WS1	1	8	Abraded flagon neck
305	306	posthole	GW7	2	2	B/s
286	u/s		OW2	1	35	Neck of narrow-necked jar - cf. Wilderspool Kilns 9 - abraded
285	u/s		SSPA	3	1042	Complete Dr 20 rim - Martin-Kilcher D (70-110)

APPENDIX 4 PLATES



Plate 1. Machine excavation February 2008, north-western part of excavation area, looking north (Beetham Tower in rearground, right).



Plate 2. Machine excavation February 2008, north-western part of excavation area, looking north.



Plate 3. View of the excavation, March 2008, looking north-east.



Plate 4. View of the central part of the excavation area, March 2008, looking south-east.



Plate 5. The altar, as first exposed, looking south-west (1m scale).



Plate 6. The altar, during excavation, looking south-east.



Plate 7. The altar, cleaned during excavation.

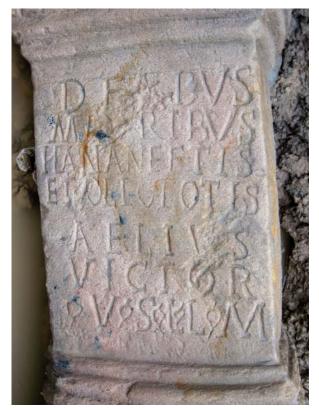


Plate 8. The altar, cleaned during excavation.



Plate 9. Phase 2, ditches [196] and [198], sectioned, looking south-east (1m scale).



Plate 10. Phase 2, pit [154], fully excavated, looking north-west (2m and 1m scales).



Plate 11. Phase 3, ditch [190], sectioned, looking south-east (2m scale).



Plate 12. Phase 3, ditch [190], detail of timber, looking north-west (2m scale).



Plate 13. Phase 4, pit [102], half-sectioned, looking north-west (2m scale).



Plate 14. Phase 4, pit [92], half-sectioned, looking north-east (1m scale).



Plate 15. Phase 6, Structure [1], Room 1. Oven and hearth, looking south-west (0.5m and 1m scale).



Plate 16. Phase 6, Structure [307], cellar floor of Van Inn, looking south-east (2m scale).