

# Little Chester, Derby, Derbyshire

Archaeological Evaluation Assessment Report



# **Oxford Archaeology North**

April 2014

## **Environment Agency**

OA North Job No: L10592 Report No: 2014-15/1519 NGR: 435255 337350 - 435460 337890 **Document Title:** 

LITTLE CHESTER, DERBY, DERBYSHIRE

**Document Type:** 

**Archaeological Evaluation Assessment Report** 

**Client Name:** 

**Environment Agency** 

**Issue Number:** 

2014-15/1519

**OA North Job Number:** 

L10592

**National Grid Reference:** 

435460 337890

Prepared by:

Andrew Frudd

Position:

Project Supervisor

Date:

July 2013

Checked by:

Ian Miller

Position:

Senior Project Manager

Date:

April 2014

Approved by:

Alan Lupton

Position:

Operations Manager

Date:

April 2014

### Oxford Archaeology North

Mill 3 Moor Lane Mill Moor Lane Lancaster LA1 1GF t: (0044) 01524 541000

t: (0044) 01524 541000 f: (0044) 01524 848606

w: www.oxfordarch.co.uk e: info@oxfordarch.co.uk © Oxford Archaeology Ltd (2014)

Janus House Osney Mead Oxford

OX2 0EA t: (0044) 01865 263800 f: (0044) 01865 793496

Oxford Archaeology Limited is a Registered Charity No: 285627

#### Disclaimer:

This document has been prepared for the titled project or named part thereof and should not be relied upon or used for any other project without an independent check being carried out as to its suitability and prior written authority of Oxford Archaeology Ltd being obtained. Oxford Archaeology Ltd accepts no responsibility or liability for the consequences of this document being used for a purpose other than the purposes for which it was commissioned. Any person/party using or relying on the document for such other purposes agrees, and will by such use or reliance be taken to confirm their agreement to indemnify Oxford Archaeology Ltd for all loss or damage resulting therefrom. Oxford Archaeology accepts no responsibility or liability for this document to any party other than the person/party by whom it was commissioned.

# CONTENTS

SUMN	MARY	4
ACKN	NOWLEDGEMENTS	6
1. In	TRODUCTION	7
1.1	Circumstances of Project	7
1.2	Site Location	7
2. M	ETHODOLOGY	9
2.1	Written Scheme of Investigation	9
2.2	Trial Trench Evaluation	9
2.3	Archive	9
3. H	ISTORICAL BACKGORUND	11
3.1	Background	11
4. Ev	VALUATION RESULTS	14
4.1	Introduction	14
4.2	Trench 1	14
4.3	Trench 2	15
4.4	Trench 3	16
4.5	Trench 4	18
4.6	Trench 5	19
4.7	Trench 6	20
4.8	Trench 7	21
4.9	Trench 8	22
4.10	Trench 9	23
4.11	Trench 10	26
4.12	Trench 11	29
4.13	Trench 12	30
4.14	Trench 13	32
4.15	Trench 14	34
4.16	Trench 15	35
4.17	Overview of Significance and Impact	37
5. M	ATERIAL ASSESSED	38
5.1	Introduction	38
5.2	The Stratigraphic Data	39

5.3	Photographic Data	40
5.4	Digital Data	40
5.5	Roman Pottery	40
5.6	Medieval and Post-medieval Pottery	41
5.7	Ceramic Building Material	43
5.8	Metalwork	43
5.9	Ironwork	43
5.10	Industrial Residues	44
5.11	Glass	44
5.12	Animal Bone	44
5.13	Human Bone	46
5.14	Worked Stone	47
5.15	Charred and Waterlogged Plant Remains Assessment	47
<b>6. P</b> U	BLIC ENGAGEMENT	.49
6.1	Public Engagement	49
<b>7.</b> Cu	RATION AND CONSERVATION	51
7.1	Recipient Museum	51
7.2	Conservation	51
7.3	Storage	51
7.4	Packaging	52
7.5	Discard Policy	52
8. STA	ATEMENT OF POTENTIAL	53
8.1	Introduction	53
8.2	Principal Potential	53
8.3	National Potential	54
8.4	National Research Priorities	55
8.5	Regional Research Priorities	57
9. UP	DATED PROJECT DESIGN	59
9.1	Aims and Objectives of the Programme of Analysis	59
10. M	IETHOD STATEMENT	.61
10.1	Programme Structure	61
10.2	Management, Monitoring and Review	61
10.3	Stratigraphy: Analysis and Synthesis	61
10.4	Digital Data in the Analysis Phase	62
10.5	Processing and Transport of Artefact Assemblages	62

10.6	Roman Pottery (Samian, Mortaria, Amphora and Coarsewares)	62
10.7	Other Roman and Post-Roman Finds	63
10.8	Palaeoenvironmental Analysis	63
10.9	Radiocarbon Dating	64
10.10	Integration of Datasets and Synthesis	64
10.11	Illustrations	64
10.12	Production of Text and Publication.	64
10.13	Archive Deposition	64
11. P	RESENTATION OF RESULTS	65
11.1	Introduction	65
11.2	Proposals	65
12. O	THER MATTERS	67
12.1	Health and Safety	67
12.2	Insurance	67
12.3	Project Monitoring	67
Bibli	OGRAPHY	68
APPEN	NDIX 1: WRITTEN SCHEME OF INVESTIGATION	71
APPEN	NDIX 2: SUMMARY FINDS CATALOGUE	83
ILLUS	TRATIONS	99
Figure	·S	99

#### **SUMMARY**

The Environment Agency, in partnership with Derby City Council, is planning to develop new flood defences in Derby, which will involve the construction of new embankments along the River Derwent as it flows through Little Chester in Derbyshire. Situated a short distance to the north of Derby city centre, Little Chester is well-known as the site of a Roman fort (*Derventio*), whilst significant Romano-British, Anglo-Saxon and medieval deposits have also been discovered in the area. The new flood defences are likely to take a route across Parker's Piece (centred on NGR SK 3524 3739), situated between the known sites of the Roman fort and an associated bath house, and Darley Playing Fields (NGR SK 3549 3778), which overlies a significant element of the Roman civilian settlement.

In order to understand and manage the archaeological risks associated with the proposed scheme, the Environment Agency (EA) commissioned Oxford Archaeology North (OA North) to undertake an archaeological evaluation of potential flood defence alignments. The evaluation was intended to establish whether any buried remains of archaeological significance survive within the area of the proposed scheme. In the first instance, six trenches were excavated across Parker's Piece in April 2013, whilst a further nine trenches were placed across Darley Fields, situated to the north of the site of the Roman fort, during May and June 2013.

The results obtained from the trial trenches have demonstrated that the site has considerable potential for the survival of buried archaeological remains, particularly those pertaining to the Roman period. Whilst a few of the trenches in the western part of the study area did not contain any remains of archaeological interest, physical evidence for the defences associated with the Roman fort were uncovered in the northern part of Parker's Piece, adjacent to the boundary of the Roman fort. Some evidence was also provided for Roman occupation layers in this part of the site, together with an isolated inhumation burial that lay immediately below the modern topsoil.

The area to the north of the fort has considerable potential for the survival of buried archaeological remains, particularly those pertaining to the Roman period. The well-preserved remains of a substantial metalled surface, probably representing Ryknield Street, survive at a shallow depth in the central part of the field. Adjacent to the road are considerable elements of a civilian settlement associated with the Roman fort, with good evidence for craft-working or industrial activity that includes secondary ironworking and possibly the production of querns and/or larger grindstones. Several spreads of rubble may have derived from collapsed stone buildings, some of which appeared to have metalled surfacing in their interior. A series of small ditches revealed along the eastern side of Darley Fields may represent a field system, suggesting that this may mark the edge of the Roman settlement.

The results obtained from the evaluation demonstrate clearly that the study area has considerable archaeological potential. It is most likely that any development works associated with the proposed flood defences that carried out across Darley Fields and Parker's Piece will have an impact on significant archaeological remains, and that this impact will require a robust programme of archaeological mitigation.

Following completion of the fieldwork, a rapid assessment has been made of the project archive, with a view to defining the costs of completing a programme of post-excavation analysis and publication. This assessment examined the results of the evaluation, and assessed the potential for further analysis of each category of data with regard to the project's research aims. The process has been designed to correspond to the objectives laid out in the guidance document *Management of Research Projects in the Historic Environment*; English Heritage 2006). The results obtained from the assessment have concluded that the dataset has considerable potential for further analysis. An updated project design is therefore presented, and an appropriate programme of analysis outlined. It is recommended that, after analysis, the results are published in an appropriate manner.

#### **ACKNOWLEDGEMENTS**

Oxford Archaeology North (OA North) would like to thank Ed Wilson, Senior Archaeologist for the National Environmental Assessment Service within the Environment Agency, and Kevin Thomas, Project Manager for the Environment Agency, for commissioning and supporting the project. Thanks are also expressed to Steve Baker, the Development Control Archaeologist for Derbyshire County Council Archaeological Services, and the Tim Allen of English Heritage, for their advice and support. OA North is also grateful to the Jackson Civil Engineering Group for logistical support. Especial thanks are due to Joan d'Arcy, and her colleagues of the Derbyshire Archaeological Society, for providing invaluable background information.

The evaluation was directed by Andrew Frudd, who was assisted by Paul Dunn, Aiden Parker and Jon Onraet. The report was compiled by Andrew Frudd and Ian Miller, and the illustrations were produced by Mark Tidmarsh. The finds were examined by Chris Howard-Davis. The project was managed by Ian Miller, who also edited the report.

#### 1. INTRODUCTION

#### 1.1 CIRCUMSTANCES OF PROJECT

- 1.1.1 The Environment Agency, in partnership with Derby City Council, is planning to develop new flood defences in Derby, which will involve the construction of new embankments along the River Derwent as it flows through Little Chester. Situated a short distance to the north of Derby city centre, Little Chester is the site of an important Roman fort (the site of which is afforded statutory designation as a Scheduled Monument), whilst Romano-British, Anglo-Saxon and medieval deposits have also been discovered in the area. The new flood defences will be located at Darley Playing Fields and Parker's Piece, situated between the sites of the Roman fort and a Roman bath house, which is similarly designated a Scheduled Monument.
- 1.1.2 In order to understand and manage the archaeological risks associated with the proposed scheme, the Environment Agency commissioned Oxford Archaeology North (OA North) to undertake an archaeological evaluation of potential flood defence alignments. The evaluation was intended to establish whether any buried remains of archaeological significance survive within the area of the proposed scheme.
- 1.1.3 In the first instance, OA North produced a Written Scheme of Investigation that allowed for the excavation of six trenches across Parker's Piece, and nine trenches across Darley Playing Fields (*Appendix 1*). It was intended that all trenches would measure 30 x 1.8m, and would be excavated to the surface of significant archaeological remains. Following the formal approval of the Written Scheme of Investigation by the Development Control Archaeologist and the Environment Agency, the evaluation of Parker's Piece was carried out in April 2013, with the second phase of the evaluation being undertaken during May and June 2013.

#### 1.2 SITE LOCATION

- 1.2.1 The Roman fort at Little Chester, known as *Derventio*, lies in the north-eastern suburbs of Derby, some 1km from the modern city centre, on the flood plain east of the River Derwent (Fig 1). The floor of the river valley at Little Chester is approximately 1.5km wide, with the ground to the east rising gradually to Breadsall. Darley Fields (centred on NGR 435460 337890) lies immediately to the north of the Roman fort, and Parker's Piece (centred on NGR 435255 337350) lies immediately to the south of the Roman fort, on the east bank of the river.
- 1.2.2 The geology of the Derwent flood plain comprises gravel and sand, which are sealed by varying depths of loam and silt. The higher ground to the east and west comprises interleaved bands of Triassic Mudstone (Keuper Marl), whilst the hill on the west bank of the river, which is occupied by Strutt's Park, comprises bands of marl and sandstone capped by boulder clay (Mello 1876).

1.2.3 Darley Fields and parker's Piece are both in use currently as sport's fields and recreation grounds (Plate 1). The study area lies at a relatively uniform height of approximately 46m above Ordnance Datum (aOD).



Plate 1: Aerial view across Parker's Piece and Darley Fields

#### 2. METHODOLOGY

#### 2.1 WRITTEN SCHEME OF INVESTIGATION

2.1.1 All work was carried out in accordance with the Written Scheme of Investigation (*Appendix 1*), and was consistent with the relevant standards and procedures of the Institute for Archaeologists (*Standard and Guidance for Archaeological Evaluations*, 2008), and generally accepted best practice.

#### 2.2 TRIAL TRENCH EVALUATION

- 2.2.1 In total, 15 trial trenches were excavated across the study area, with six being placed across Parker's Piece, and nine across Darley Fields (Fig 2). Each measured 30m long and 1.8m wide, and all were excavated to the top of significant archaeological remains, with excavation thereafter limited to establishing the nature, date and significance of individual deposits and features, whilst endeavouring to minimise the damage or disturbance to the archaeological resource. Following the removal of the turf, the upper deposits in each trench were excavated using a 5-ton tracked machine fitted with a 1.8m wide toothless bucket. The machine operated under close archaeological supervision, down to the first archaeological deposits, whereupon all further excavation was completed manually. All spoil was scanned for artefacts.
- 2.2.2 Recording comprised a full description and preliminary classification of the deposits and materials revealed on OA North *pro-forma* sheets. The trenches were located with a Total Station Theodolite (TST) and tied into the Ordnance Survey grid. Hand-drawn plans were produced showing the contents of the trenches, with representative sections being drawn at a scale of 1:10 or 1:20 as appropriate. An indexed photographic record using monochrome and digital formats was maintained.

#### 2.3 ARCHIVE

- 2.3.1 The results of the archaeological evaluation will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (English Heritage 1991; 2006). The project archive represents the collation and indexing of all the data and material gathered during the course of the project.
- 2.3.2 OA North conforms to best practice in the preparation of project archives for long-term storage. The archive and the excavated material will be deposited with the Derby Museum and Art Gallery on The Strand, Derby. In addition, a copy of the archive can be made available for deposition in the National Archaeological Record. In addition, the Arts and Humanities Data Service (AHDS) online database project *Online Access to index of Archaeological Investigations* (OASIS) will be completed as part of the archiving phase of the project.

2.3.3 The material and paper archive generated from the evaluation will be transferred in accordance with the guidelines provided by *Procedures for the Transfer of Archaeological Archives* (2003). The Derby Museum and Art Gallery accession number is DBYMU 2012-329.

#### 3. HISTORICAL BACKGORUND

#### 3.1 BACKGROUND

The first Roman fort at Little Chester was established soon after AD 50 at 3.1.1 Strutts Park, on the west bank of the River Derwent (Forrest 1967). This was one of a small number of Neronian forts in Derbyshire, which included Chesterfield (Ellis 1989), and possibly the Castle Hill Camp fortlet between Pentrich and South Wingfield (Kay 1961). However, the fort in Strutts Park had been replaced by AD 80 with a fort on the present site, which formed the focus for an associated settlement known as Derventio. In addition to its strategic location at an important crossing point of the River Derwent, the fort lay at the junction of several Roman roads, including Ryknield Street (Plate 2). This military highway ran from Gloucestershire to Templeborough in South Yorkshire, and provided *Derventio* with a direct link to the fort at Wall in Staffordshire and thus Watling Street, the principal route to North Wales. Another road headed south-east from *Derventio* to Sawley, on the River Trent, providing the fort with a link to the river for water traffic. A further road headed west, leading to Rocester, near Uttoxeter.

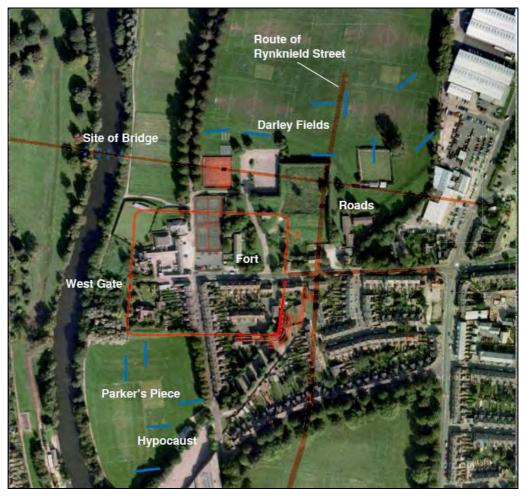


Plate 2: The projected footprint of the Roman fort and the courses of the Roman roads, with the location of the evaluation trenches

- The Roman fort at Little Chester was surveyed in 1724 by the pioneering antiquarian, William Stukeley, who noted a stone wall and surrounding ditch (Stukeley 1724, 50), although no trace of this survives in the modern landscape. A series of excavations carried out during the twentieth century concluded that the line of the defences surveyed by Stukeley overlay Flavian and early Antonine occupation on a different alignment. The excavated remains dating to this initial phase of extensive Roman occupation included timber buildings of probable military and civilian type, which seemingly spanned the late first- to mid-second century (Beswick and Fowkes 2002). An excavation in 1968 also revealed the foundations of a stone gate, suggesting the presence of an early defensive circuit. The eastern defences of the fort were found to comprise an Antonine clay rampart that had been cut back to allow the stone wall to be inserted in the late third century, with some remodelling of the defensive ditches (Brassington 1996). It was also noted that the eastern stone defences appeared to be of slightly different date from those on the west and south; the western and southern stone defences appeared to date from the mid-second century, although the excavation report does not refer to clay ramparts. The defensive circuit was found to comprise two outer ditches that seemingly enclosed an area of some seven acres. There is also evidence to suggest that a broad ditch, some 6.6m wide, was dug c 20m from the wall on the eastern side of the fort in the fourth century.
- 3.1.3 It seems that this defended area was given over to civilian settlement in the late second century, and some substantial buildings were erected within the defences, and also at the junction of the roads to the east (Brassington 1982a). These buildings included what may have been a *mansio* or a bath-house, the remains of which were discovered in 1924 during the construction of a school pavilion (Brassington 1982b; Plate 3).



Plate 3: The remains of a Roman hypocaust discovered on Parker's Piece in 1924

- 3.1.4 Roman burials have also been discovered at Little Chester, particularly along the edges of the main roads. Part of a Roman cemetery was also uncovered at Darley Grove, where graves containing skeletons, coins and other artefacts were discovered in 1820.
- 3.1.5 By the early third century, much of the area was under cultivation and no longer in military occupation. *Derventio* was abandoned by the end of the fourth century, although evidence for post-Roman settlement in the area is provided by cemetery close to the east gate of the fort, which is known to have been in use during the late fifth and early sixth centuries. Fragments of brooches, shields, a spearhead and a bowl, all dated to the sixth century, have been recovered from excavations in this cemetery. The focus of settlement shifted south to the modern city centre thereafter.
- 3.1.6 In the later Anglo-Saxon period, a rubble platform outside the rounded south-eastern corner of the Roman wall may have supported a strengthening of the wall or the addition of a bastion. Thereafter, the ground was given over to agriculture until the eighteenth century, when the fort defences were destroyed and farm buildings erected on the site, to be succeeded in the nineteenth century by the railway embankment, now replaced by housing.

#### 4. EVALUATION RESULTS

#### 4.1 Introduction

4.1.1 In total, 15 trenches were excavated across the proposed route of the new flood defences at Little Chester, each trench measuring 20m long and 2m wide. In the first instance, six trenches were excavated across Parker's Piece (Fig 3), with an additional nine trenches placed across Darley Fields subsequently (Fig 4). The following section provides a summary of the results obtained from the trenches.

#### **4.2** TRENCH 1

- 4.2.1 Trench 1 formed the north-western of the trenches placed across Parker's Piece, and was aligned north/south parallel to the River Derwent (Fig 3). Topsoil 101 was removed mechanically to a depth of 0.32m below the modern ground surface. Underlying deposits (102 and 103) were excavated to depths below the modern ground surface of 0.38m and 0.44m respectively. No features or deposits of archaeological interest were identified in the trench, suggesting that this part of the site may have lain beyond the edge of the Roman settlement associated with the fort.
- 4.2.2 The natural geology (104) was encountered at a depth of 1.14m below the current ground level. This was overlain by two distinct subsoil deposits (102 and 103), which were sealed by the topsoil (101). The only feature exposed in the excavated trench was the edge of a small pit or linear feature (105) that had been cut through the topsoil, and contained large pieces of sandstone and some brick (Plate 3).



Plate 3: East-facing view of feature 105, recorded in the section of the trench

#### 4.3 TRENCH 2

- 4.3.1 Trench 2 was placed a short distance to the east of Trench 1, and was similarly aligned broadly north/south (Fig 3). Topsoil **202** was removed mechanically to a depth of 0.28m. Remains of archaeological interest were encountered in this trench, including a poorly-preserved inhumation burial.
- 4.3.2 A dark silty clay deposit was revealed along the base of northern 12m of the excavated trench. The deposit was investigated via the excavation of seven separate sondages (Fig 5), some of which were excavated by machine due to the depth of the feature. Sondages 4 and 5 at the northern end of the ditch revealed discrete deposits (215 and 216) that tipped sharply to the north, indicating that they probably represented discrete fills of a large pit or ditch. Excavation of further sondages confirmed this features to have been a large ditch, almost certainly represent part of the defence system associated with the Roman fort.
- 4.3.3 The upper fill of the ditch was cut by a shallow, linear feature (207). The fill (203) of feature 207 contained abundant cinders, indicative of a late date (Plate 4). It is likely that feature 207 represented a boundary feature.



Plate 4: The west-facing section of ditch 207, cut into the Roman defensive ditch

- 4.3.4 Two small, shallow pits (212 and 214) were revealed in the southern part of the trench. Excavation of these pits yielded fragments of Roman pottery and abundant charcoal flecks.
- 4.3.5 The poorly-preserved remains of a human skeleton (201) were revealed immediately below the topsoil and adjacent to pit 214 (Plate 5). The remains comprised the legs, pelvis and left arm of an individual of small stature. The skeleton was in a supine position with the left arm beside the body and the feet together, it was aligned north/south. The condition of the bone was such that none of the bones could be lifted intact. The precise date of the burial is uncertain, although it is likely to be late Roman or post-Roman.

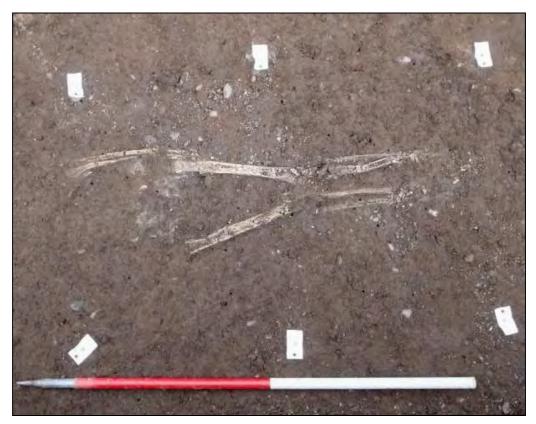


Plate 5: Skeleton 201

#### **4.4** TRENCH 3

- 4.4.1 Trench 3 was placed a short distance to the east of Trench 2 on Parker's Piece, and was aligned north-east/south-west (Fig 3). Topsoil 301 was removed mechanically to a depth of 0.12m. This sealed a levelling deposit (302) of recent date, and a buried soil horizon (303) that contained fragments of post-medieval pottery. Deposits 302 and 303 were exposed at depths of 0.14m and 0.4m below the modern ground surface respectively. Significant archaeological remains pertaining to the Roman period were encountered in the trench.
- 4.4.2 The most significant of these features was ditch 311, with a width of 4.6m and a depth of approximately 1.5m. This feature almost certainly represented part of the fort's defences. The lowest deposit (329) excavated within the ditch comprised a bluish-grey to black silty clay that contained well-preserved organic material. It also contained three adjoining sherds of decorated samian ware. Due to the small scale of the excavation it was not possible to fully expose this deposit.
- 4.4.3 Deposits 328, 327 and 326 seemingly represented the natural silting of ditch to a depth in excess of 1.1m. These deposits had been truncated by the re-cutting of the ditch (325). The northern edge of re-cut 325 was not as well-defined as the southern side, probably due to the erosion of the initial fills into the new ditch. Once the ditch had finally gone out of use, deposit 312/321 formed, perhaps as a result of plough drag across the feature.

- 4.4.4 The rounded terminal of another liner feature (306) was exposed at the northern end of the trench, with another linear feature (308) identified in the central part of the trench (Fig 5). Ditch 308 was aligned broadly east/west, and probably represented a boundary ditch rather than another element of the fort's defences.
- 4.4.5 Ditch re-cut 325 was cut through a deposit of loamy clay (305), which yielded fragments of Roman pottery and ceramic building materials, and seemingly represented a Roman occupation layer. This layer was overlain stratigraphically by a spread of stone tumble (314), which was interpreted as the rubble core of the wall (Plate 6). This is not thought to be *in-situ*, but rather tumble that had been discarded when the stone wall of the fort had been robbed out.



Plate 6: Some of rubble core material 314 at the north-eastern end of Trench 3

4.4.6 Layer 305 was also overlain by small but discrete patches of charcoal (315 and 316). Excavation of these deposits did not yield any artefacts or datable material, although they are likely to have been of Roman origin on stratigraphic evidence.

#### 4.5 TRENCH 4

- 4.5.1 Trench 4 was aligned broadly east/west across the eastern part of Parker's Piece (Fig 3). No remains of archaeological interest were identified in the trench.
- 4.5.2 Topsoil **401** was mechanically removed to a depth of 0.7m, and the underlying subsoil (**402**) was excavated for a further 0.3m (Plate 7). These two layer contained fragments of ceramic building material, together with several fragments of Roman pottery. However, no archaeological features were identified in the trench.



Plate 7: General view along Trench 4

#### 4.6 TRENCH 5

- 4.6.1 Trench 5 was aligned broadly east/west across the approximate centre of Parker's Piece (Fig 3). It was targeted across the position of an anomaly that was identified during the initial geophysical survey. No remains of archaeological interest were identified in the trench.
- 4.6.2 Topsoil **501** was removed mechanically to a depth of 0.27m. This overlay a thin layer of sand (**502**), which presumably represented a levelling deposit associated with the landscaping of the area as a sports pitch.
- 4.6.3 Below the topsoil at the eastern end of the trench was a deposit of firm, red clay (506), which continued to the north and south beyond the limits of the excavated trench. Excavation yielded no artefacts from this deposit, although it may again have been associated with modern landscaping activity. This deposit overlay subsoil 503, which in turn sealed natural palaeo-channels (504 and 505). The palaeo-channels almost certainly accounted for the anomaly identified during the geophysical survey.



Plate 8: General view along Trench 5

#### 4.7 TRENCH 6

- 4.7.1 Trench 6 was aligned broadly east/west across of the south-western part of Parkers' Piece (Fig 2). The simple stratigraphic sequence revealed was very similar to that for Trench 5, with no features of archaeological interest being encountered.
- 4.7.2 Topsoil *601* was removed mechanically to a depth of 0.26m. The underlying subsoil (*602*) was also excavated mechanically to a depth of 0.4m. The topsoil and subsoils contained small fragments of sandstone which appeared to retain tool marks, and were potentially of a Roman date, although had clearly been redeposited. Subsoil *602* sealed another palaeo-channel, the position of which similarly correlated with an anomaly identified by the geophysical survey.



Plate 9: General view along Trench 6

#### 4.8 TRENCH 7

- 4.8.1 Trench 7 formed the westernmost of the trenches placed across Darley Fields, and was aligned broadly east/west (Fig 4). Topsoil 701 was removed mechanically to a depth of 0.20m below the modern ground surface. Excavation continued to a depth of 1.6m (Plate 10), although no features of archaeological significance were identified within the trench, suggesting that this part of the site may have lain beyond the edge of the Roman settlement associated with the fort.
- 4.8.2 The earliest deposit encountered was a layer (711) of alluvium, which seemingly represented the natural geology. This was sealed by a subsoil deposit (710), which was similarly devoid of any evidence for anthropogenic activity and is likely to have been of natural origin. Subsoil 710 was overlain stratigraphically by a layer of reddish-pink sandy gravel (709), which appeared to represent a levelling deposit of modern origin. This layer was cut in the eastern part of the trench by a series of three shallow pits (703, 705 and 706; Fig 6), which all contained a mixture of industrial and domestic detritus, including pottery dating to the late nineteenth and twentieth centuries.



Plate 10: South-facing section of the excavated trench, showing feature 703

#### **4.9** TRENCH 8

- 4.9.1 Trench 8 was placed a short distance to the east of Trench 7, and was similarly aligned broadly east/west (Fig 4). Topsoil 800 was mechanically removed to a depth of 0.14m, and the underlying subsoil (801) was excavated to a maximum depth of 0.4m. Layer 801 was cut by two pits (803 and 805), which clearly represented material dumped on Darley Fields during the late nineteenth and early twentieth centuries. Several features of archaeological significance, all dating to the Roman period, were sealed by layer 801.
- 4.9.2 The earliest feature encountered in the trench was exposed in the western part of the trench (Fig 6). This comprised an ill-defined linear feature (813) that was very shallow, and is likely to have been of natural origin. The feature was sealed by deposit 809, which contained several small fragments of Roman pottery, including sherds of samian ware.
- 4.9.3 Deposit 809 was cut by several features (Fig 6). Pit 819 measured 3 x 0.8 x 0.44m deep, and comprised a sub-rectangular feature that was filled by deposit 818. This deposit contained a small amount of charcoal and a single fragment of ceramic building material. It has been interpreted provisionally as a quenching pit due to its association with hearth 815/817.
- 4.9.4 The hearth was recorded as two separate elements (815 and 817), although it almost certainly represented a single feature with separate components (Plate 11). Sub-oval cut 815 was filled with charcoal-rich deposit (814). The adjacent cut (817) was similarly sub-oval in plan, and contained a lining of partially fired clay, indicative of it having been subject to high temperatures. It seems likely that 817 represented a fire pit, and 815 rake-out pit, consistent with known examples of Roman hearths used for secondary iron-working.



Plate 11: View of hearth elements 815 and 817, 0.5m scale

- 4.9.5 Excavation further to the east revealed a posthole (811), which extended beyond the edge of the excavated trench (Fig 6). This contained large stones, which had been used to either pack around the post, or to provide a foundation pad.
- 4.9.6 Excavation at the eastern end of the trench revealed a stone deposit (808), which comprised an irregular spread of angular stones (Plate 12). This seemingly represented the vestiges of a stone wall that had collapsed, or the material discarded from the robbing of the wall. Fragments of Roman pottery and a copper-alloy brooch were recovered from amongst the stones.



Plate 12: West-facing view of stone structure 808 and deposit 807, 1m scale

#### 4.10 TRENCH 9

4.6.1 Trench 9 was placed a short distance to the east of Trench 8, and was aligned broadly east/west (Fig 4) across the project line of Ryknield Street, one of the principal Roman military roads. Topsoil 901 was removed mechanically to a depth of 0.2m to expose pit 904 and pit group 906, which comprised numerous modern dumps of material. Pit 904 lay directly over the remains of a metalled surface (907), and may be an intentional back-filling of an archaeological excavation carried out in 1926. The fill (903) of pit 904 contained numerous glass bottles, many of which were complete, suggesting that some care had been taken in their deposition. These pits were all cut into the subsoil (902), and clearly represented the dumping of industrial and domestic waste during the nineteenth and twentieth centuries. Layer 902 sealed two deposits (916 and 917), which have been interpreted as late Roman occupation/abandonment layers. These layers sealed a sequence of features that contained a broad range of Romano-British pottery, animal bone and a small amount of metalwork.

4.6.2 Deposit **916** overlay **910** (Plate 13), a cobbled surface with a large amount of associated rubble that was revealed at the eastern end of the trench (Fig 7). It possibly represented a cobbled surface, which was overlain partially by the remains of a collapsed wall. A Roman coin was found, using a metal detector, below one of the pieces of rubble.



Plate 13: Surface 910 looking east, 1m scale

- 4.6.3 The remains of another metalled surface (907) were exposed a short distance to the west (Fig 7). Most of the fine metalling that would probably have formed the capping of the surface had been removed, possibly during previous excavation, and the remaining fabric comprised a mixture of small and large cobbles (Plate 14). The western edge of this surface merged with another surface (911), which continued along the trench to the west (Fig 7).
- 4.6.4 Excavation between surfaces 907 and 910 revealed a linear feature (909). This is likely to have been a small drainage ditch, possibly associated with surface 910. The fill of this feature was indistinguishable from deposit 916, suggesting that the ditch was filled through the gradual accumulation of material following the end of the Roman occupation of the area.
- 4.6.5 Surface 911 was sealed by deposit 917, which comprised a well-preserved metalled surface of small- to medium-sized rounded rounded cobbles (Plate 15). These surfaces almost certainly represented the remains of Ryknield Street. A depression (913) in surface 911 is likely to have resulted from the subsidence of the surface into an earlier feature, although this was not tested during the evaluation.



Plate 14: East-facing view of road surface 907 with ditch 909 visible beyond, 2x 1m scale



Plate 15: East-facing view of surface 911 with feature 913 in the bottom left of the image

4.6.6 Excavation at the western end of the trench revealed another spread of stones (915), which comprised large sub-angular blocks of gritstone (Plate 16). This stone spread partially covered cobbled surface 920, which extended beyond the western edge of the excavated trench.



Plate 16: West-facing view of stone spread 915 with cobbled surface 920 beyond, 1m scale

#### 4.11 TRENCH 10

4.11.1 Trench 10 was placed to the east of Trench 9, and was aligned north/south across the projected line of the new river defences (Fig 4). Topsoil 1001 was removed mechanically to a depth of 0.2m and the underlying subsoil 1002 was excavated for a further 0.15m at the southern end of the trench. In the middle of the trench, wall 1007 was exposed immediately beneath the topsoil. This wall comprised roughly-squared, re-used sandstone blocks, and was a singleblock wide (Plate 17). This position of this wall coincided with the boundary of the recently removed bowling green, and also with the alignment of a field boundary visible on the surface as a slight depression. Immediately to the north of the wall was deposit 1008, a yellowish-orange clay, presumably representing up-cast from the wall construction that had formed a shallow bank. Wall 1007 was almost certainly of a post-medieval date. The ground to the north of wall 1007 had been raised with dumps of industrial and domestic waste (1012 and 1013). Dump 1013 separated stone spreads 1010 and 1011, which probably both represented a collapsed wall. Rubble from 1011 clearly overlay cobbled surface 1014, which comprised mostly angular stones (Plate 18). Surface 1014 continued for a little over 2m before terminating along an irregular line before continuing as surface 1016 some 1m further to the north. Surface 1016 abutted wall or kerb 1017 at its northern edge, with a stone channel gutter between the two (Plate 19).



Plate 17: West-facing view of wall 1007 and deposit 1009, 1m scale



Plate 18: South-facing view of surface 1014 below the collapsed material of 1011, 1m scale



Plate 19: South-facing view of kerb1017, the stone gutter and surface 1016, 1m scale

4.11.2 Removal of subsoil *1002* to the south of wall *1007* exposed another spread of collapsed wall material (*1005*) in the northern part of the trench (Fig 7). The distribution of the stone rubble suggested that this represented the corner of a stone-built structure (Plate 20).



Plate 20: Collapsed wall 1005 looking north-west, 1m scale

#### 4.12 TRENCH 11

- 4.12.1 Trench 11 was placed across the south-eastern corner of Darley Fields, a short distance to the east of Trench 10, and was aligned north-east/south-west (Fig 4). Topsoil 1101 was removed mechanically to an average depth of 0.2m. In the portion of the trench north of the field boundary exposed in Trench 10 which continued across Trench 11, the subsoil (1102) was cut by several pits of modern dumping, characterised as group 1103. In the south-western part of the trench, up to wall 1108, removal of subsoil 1102 revealed a buried soil horizon (1118) that sealed numerous features.
- 4.12.2 Ditch 1105 was 1.32m wide, 0.11m deep and was aligned north/south (Plate 21). It contained a single, homogeneous fill, which yielded fragments of Roman pottery. Situated a short distance to the north was linear feature 1107, set at a right angle to ditch 1105, which measured 0.53m wide and 0.07m deep (Fig 8). The single fill, 1106, was very similar to that in the other ditch and contained fragments of Roman pottery and animal bone.



Plate 21: North-east-facing view of ditches 1105 and 1107, 1m scale

4.12.3 A stone surface (1112) revealed at the northern end of the trench contained nineteenth-century brick and fragments of clay tobacco pipe. However, this surface sealed the upper fill of linear feature (1115), the fills of which contained fragments of Roman pottery and animal bone (Plate 22).



Plate 22: North-west-facing view of linear 1115 and surface 1112, 1m scale

#### 4.13 TRENCH 12

- 4.13.1 Trench 12 was placed a short distance to the north of Trench 9, and was aligned east/west across the projected course of Ryknield Street (Fig 4). Topsoil 1201 was removed mechanically to a depth of 0.15m. Feature group 1202 represented a series of nineteenth- or twentieth-century dumps, as revealed in the other excavated trenches. These pits were cut into deposits 1203, 1217, 1218 and 1219, which are all likely to have been of a broadly contemporary date and representing a buried soil horizon. These layers all contained numerous fragments of Romano-British pottery and animal bone. Deposit 1203, located at the western end of the trench, overlay localised red clay deposits 1205 and 1206. These two deposits overlay stone surface 1204, which extended for approximately 15m and comprised rounded river cobbles. This surface abutted structure 1207 at its eastern end.
- 4.13.2 Structure 1207 contained a large fragment of masonry with a c 200mm socket in its upper surface. It was seemingly associated with an adjacent structure (1210), which comprised two large millstones surrounded by some flagstones and an indurated deposit of red clay (Plate 23). The millstones did not appear to have been used, as the surfaces had no indication of any wear.
- 4.13.3 Deposit *1218*, further to the east, overlay wall *1212*, which contained several fragments of rebated masonry, one of which was possibly *in-situ*. The wall was aligned approximately north-east/south-west, as was wall *1214*, situated a few metres to the east. Between the two walls was a sandy clay deposit *1213*.
- 4.13.4 Deposit *1219* directly overlay the surface of road *1216*, which is likely to have represented the remains of Ryknield Street. This was partially kerbed on the western side, and extended beyond the eastern end of the trench. As was observed in Trench 9, much of the finer metalling seemed to have been removed previously.



Plate 23: North-east-facing view of structure 1210, 1m scale



Plate 24: South-east-facing view of wall 1212

#### 4.14 TRENCH 13

- 4.14.1 Trench 13 was aligned north/south, and was placed immediately to the east of Trench 12 (Fig 4). Topsoil 1301 was removed mechanically to a depth of 0.2m, and the underlying subsoil (1302) was excavated for a further 0.3m. This deposit sealed a layer of dark sandy silt, which was allocated six separate context numbers in order to differentiate spatially the finds recovered from the excavation (Fig 9). Context 1319 was allocated to that part of the deposit in the southern part of the trench, which sealed a narrow linear feature (1310). Deposit 1320 lay slightly to the north, with deposit 1321 occupying the central section of the trench, and deposits 1322, 1323 and 1324 further to the north. These deposits all represented the same depositional event.
- 4.14.2 Linear feature 1310 was aligned broadly east/west across the southern part of the trench. This was cut through a well-preserved metalled surface (1303), which seemingly continued beneath another metalled surface (1304), situated immediately to the north but at a level that was c 0.1m higher (Plate 25).



Plate 25: North-facing view of the southern end of Trench 13 showing linear feature 1310, surface 1303 and, just visible at the top of the image, surface 1304, 2x 1m scale

4.14.3 Deposit *1321* overlay pit *1312*, the fill of which contained fragments of Roman pottery. Pit *1312* had been cut into another metalled surface (*1305*), which overlay a spread of rubble (*1306*). This may have been intended as a solid foundation for the surface, or perhaps derived from a north-east/south-west-aligned wall that had either collapsed or had been demolished. Stone spread *1306* partially overlay metalled surfaces *1304* and *1305*.

4.14.4 Surface *1305* for the most part comprised rounded cobbles, but also incorporated five halves of large grindstones (Plate 26). The stones did not appear to have been used, as there was no visible indication of wear of their surfaces, suggesting that they may have been manufactured in the immediate vicinity.



Plate 26: Surface 1305 with the grindstone halves, rubble deposit 1306 is visible in the foreground, 1m scale

- 4.14.5 A large rubble spread (1307) was revealed beneath deposit 1324 to the north of surface 1305 (Fig 9). This surface seemed to represent the collapsed remains of several walls, although this could not be established firmly within the confines of the excavated trench. Another linear rubble spread (1308) was revealed further to the north, which also appeared to delineate the line of a former stone wall (Plate 27). Rubble spread 1308 was abutted by surface 1318, an orangey yellow sand layer that contained patches of rammed small stones, seemingly representing an interior floor. Surface 1318 was cut by two small pits (1314 and 1316), which contained fragments of Roman pottery.
- 4.14.6 Deposit *1322* at the northern end of the trench overlay deposit *1317*, a charcoal-rich area of burning. Several large fragments of Roman amphora had been trampled into this deposit.



Plate 27: North-west-facing view of rubble 1308, 1m scale

#### 4.15 TRENCH 14

- 4.15.1 Trench 14 was aligned north-east/south-west adjacent to the eastern boundary of Darley Fields (Fig 4). Topsoil 1401 was removed mechanically to a depth of 0.15m, and the underlying subsoil (1402) was excavated for a further 0.1m. Group number 1403 represents a series of dumps of material similar to that found in the other trenches, which covered this trench for much of its length, and was clearly of a nineteenth- of early twentieth-century date.
- 4.15.2 Subsoil 1402 sealed deposits 1410 and 1411, which both contained fragments of Roman pottery. Deposit 1410 sealed pit 1409, which was 1.9m wide and extended into the south-eastern section (Plate 28). The fill (1408) of pit 1409 was very similar to deposit 1411 except that it contained a higher concentration of charcoal, together with fragments of Roman pottery. Deposit 1411 sealed linear features 1405 and 1407 (Fig 9). Ditch 1405, aligned roughly north/south, was 0.95m wide and 0.14m deep, and was filled by deposit 1404, which contained fragments of Roman pottery. Ditch 1407 was perpendicular to 1405, and was 0.52m wide and 0.08m deep.



Plate 28: East-facing view of pit 1409, 1m scale

### 4.16 TRENCH 15

- 4.16.1 Trench 15 was aligned north/south, and was placed adjacent to the eastern boundary of Darley Fields (Fig 4). Topsoil *1500* was removed mechanically to a depth of 0.2m to reveal several modern dumps of domestic and industrial waste (*1501*). Deposit *1502*, a homogenous silty clay layer that was 0.25m thick, was also excavated to reveal deposit *1503*, a greyish-brown clayey silt, which contained fragments of Roman pottery, and may have represented material that accumulated following the end of the Roman period.
- 4.16.2 The earliest feature encountered in the trench was a small cobbled surface (1506), which comprised a single layer of rounded stones that had been compacted into the underlying natural clay geology (Plate 29). Surface 1506 was revealed at the northern end of the trench, and continued beyond the confines of the trench (Fig 9). The surface was cut by a pit (1505), which measured 1.55m wide and 0.21m deep. The fill of pit 1505 contained numerous fragment of Roman pottery, abundant charcoal, and an amorphous lump of iron that may have derived for secondary iron-working.
- 4.16.3 A north-east/south-west-aligned linear feature (1508) was excavated in the central part of the trench (Fig 9). This feature was 0.54m wide and 0.22m deep (Plate 303), with a form reminiscent of the smaller ditches excavated in trenches 11 and 14. The fill (1507) contained fragments of Roman pottery, and abundant small fragments of charcoal.



Plate 29: Surface 1506 cut by pit 1505, 1m scale



Plate 30: North-east-facing view of linear feature 1508, 0.5m scale

### 4.17 OVERVIEW OF SIGNIFICANCE AND IMPACT

- 4.17.1 *Significance:* the archaeological evaluation has demonstrated that the study area has considerable potential for the survival of buried archaeological remains although, excepting those that lie within the boundary of the Scheduled Monuments, it is not considered that any of these remains are of national importance that would necessitate preservation *in-situ*. However, in archaeological terms, the remains encountered during the evaluation are considered to be of regional significance, and merit further, more detailed investigation prior to any damage or destruction that necessitated by the proposed development.
- 4.17.2 *Impact:* the results obtained from the evaluation trenching have indicated that parts of Parker's Piece and Darley Fields are likely to have a greater archaeological potential that other parts (Fig 12). In particular, the area immediately to the south of the projected footprint of the Roman fort in Parker's Piece is likely to contain archaeological remains of significance, although the density of these remains is seemingly reduced considerably to the south (Fig 12).
- 4.17.3 In Darley Fields, the greatest density of significant archaeological remains appears to flank the line of the main Roman road (Ryknield Street) immediately to the north-east of the Roman fort. Buried remains seemingly pertaining to Roman field systems lie to the north, whilst the density of significant remains appears to be reduced to the west (Fig 12).
- 4.17.4 The development of new flood defences may necessitate considerable ground-moving works, which could have a substantial impact on the sub-surface archaeological resource. An appropriate scheme of further archaeological investigation in advance of development will therefore be required to mitigate the ultimate loss of the buried remains. The details of any further archaeological work required in advance of development should be devised in consultation with the Derbyshire County Council Archaeological Services and English Heritage.

### 5. MATERIAL ASSESSED

## 5.1 Introduction

- 5.1.1 The entire paper and material archive was examined to ascertain its potential for further study. The method of assessment used varied with the class of information examined, although in each case it was undertaken in accordance with guidance provided by English Heritage in *Management of Archaeological Projects*, 2nd edition (English Heritage 1991) and subsequently updated by MoRPHE (English Heritage 2006). All classes of finds were examined in full, with observations supplemented by the records generated during the course of the fieldwork and maintained within the project archive.
- 5.1.2 In all, some 3208 fragments of artefacts and ecofacts were recovered during the two phases of work. All were in fair to good condition, and many of the pottery fragments were of large size and unabraded, in addition, there were many infra-context refits. At this stage in the analysis no attempt has been made to search for cross-context refits. Similarly, at this stage in the analysis, none of the metalwork has been x-rayed, although it should be noted that the silver and copper alloy coins, and the copper alloy brooches, survived in sufficiently good condition to allow preliminary identification and dating.
- 5.1.3 All quantification is by fragment count, but in any subsequent period of analysis, pottery and other relevant material groups will also by quantified by weight, in order to conform with current standards. The broad division by material is presented below in Table 1, and an outline catalogue sorted by context, material, artefact category, and, where possible at this stage, by artefact type, is presented as *Appendix 2*.
- 5.1.4 As can be seen in Table 1, there was a wide range of material, predominantly ceramics, which represents c 44% of the total assemblage from the excavations, rising to c 72% if human and animal bone is omitted. The chronological range represented by the finds is wide, with a substantial Roman element, estimated at c 75% of the pottery, with only small amounts of either later medieval or eighteenth- to twenty-first-century material.
- 5.1.5 Other material groups are present in considerably smaller quantities (Table 1). All of the very fragmentary human bone originates from a single poorly-preserved inhumation (Skeleton 201). Most of the material appears well-stratified (but it must be noted that stratigraphic analysis is in its early stages) and will sustain some targeted analysis, having a potential to contribute significantly to dating the stratigraphic sequence.

Material group	Fragment count	Percentage of total assemblage	No contexts producing finds	Date range	
Bone (animal)	885	27.58	59	Not closely dateable	
Bone (human)	352	10.97	1	Not closely dateable	
Ceramic building material	306	9.53	54	Romano-British to recent	
Ceramic tobacco pipe	4	0.12	2	Nineteenth century	
Ceramic vessel	1423	44.35	92	Romano-British to recent	
Cu alloy	36	1.12	14	Romano-British to recent	
Glass (all)	57	1.77	18	Recent	
Industrial debris	66	2.05	23	Not closely dateable	
Iron	63	1.96	23	Not closely dateable	
Lead	7	0.21	6	Not closely dateable	
Silver	1	0.03	1	Third century	
Stone	8	0.24	5	Romano-British to recent	
Total	3208	99.93			

Table 1: Finds from the project (quantified by material); percentages given to 2 decimal places

- 5.1.6 The aim of the assessment was to evaluate all classes of data from the investigations, in order to formulate a project design for a programme of further analysis appropriate to the potential demonstrated by the site archive. A statement of the significance of the results from each element of the archive is given below.
- 5.1.7 The objectives of this assessment correspond to *Appendix 4* of *Management of Archaeological Projects*, 2nd edition (English Heritage 1991). They are: to assess the quantity, provenance and condition of all classes of material, including stratigraphical and artefactual; to comment on the range and variety of that material; and to assess the potential of the material to address questions raised in the course of the project

## 5.2 THE STRATIGRAPHIC DATA

5.2.1 The paper archive represents a percentage of the overall data gathered during the course of the evaluation trenching. The context record has allowed three broad phases of activity to be established for the whole area of the site spanning the Roman and post-medieval periods, although there is clearly considerable potential to identify to refine the phasing of the Roman period through the identification of sub-phases.

### 5.3 PHOTOGRAPHIC DATA

- 5.3.1 *Quantification:* in all, there are 316 images. The photographs cover each of the excavated trenches, and comprise general view and detailed shots in individual features.
- 5.3.2 **Assessment:** the images are an invaluable aid in all aspects of post-excavation analysis. They provide a general and detailed pictorial record of the site throughout all phases of its excavation and recording.
- 5.3.3 **Potential:** the images include archaeological features and finds, and record how the evaluation trenching was carried out. They will undoubtedly aid the stratigraphic analysis. The images could also be integrated with the site database to provide a visual element, which is helpful when dealing with a large corpus of information, and also have the ability to add valuable illustrative material to the final report and publication.

# 5.4 DIGITAL DATA

5.4.1 *Survey and Plan Data:* the digital data include all the records of survey undertaken using the EDM / Total Station and GPS, and the digital photographic archive. This information is a vital tool in the analysis of the site.

### 5.5 ROMAN POTTERY

- 5.5.1 Quantification: the Roman pottery comprises some 1150 fragments, the majority coarsewares, which preliminary spot-dating suggests focus on a later second- and third-century date. Earlier pottery fabrics appear, but in limited quantities. There is a globular bead-rimmed ?calcite-gritted vessel which could be of first-century date, and there are a few fragments of late first- or early second-century rusticated greyware, and possibly late first- to earlier secondcentury Parisian-type ware (Rigby 2001), suggesting an origin for settlement perhaps in the early part of the second century. Most of the Roman pottery, however, seems to indicate a slightly later *floruit*. There are a few fragments of late second- to third-century Black-burnished ware vessels and a large amount of Derbyshire ware, a distinctive locally-made and locally abundant fabrictype, typically dating to the mid-second, and predominantly third centuries. There is at least one slightly deformed rim sherd, perhaps a second, suggesting a very local origin. Tyers (1996, 191) has noted that it can be somewhat abundant on Derbyshire sites, and this appears to be the case here, with a rapid scan suggesting that Derbyshire ware makes up a significant proportion (c 30-40%) of the Roman pottery assemblage.
- 5.5.2 Finewares are relatively common, and include *c* 110 fragments of second-century samian, including plain forms (cup Dr 33, dish Dr 36, and mortarium Dr 45), and a small number of decorated vessels of bowl form Dr 37 (all probably central Gaulish products). The ratio of decorated to plain forms is low, perhaps suggesting a civilian settlement or only a loose military connection.

- 5.5.3 The forms present point to a mid-late second-century date for their use, although form Dr 45, produced from c AD 170, continued in production in East Gaul, until the middle of the third century (Webster 1996, 56). Nene Valley-type colour-coated wares, of later second to fourth-century date, are also present, with fragments of several rouletted and or indented beakers noted.
- 5.5.4 Mortaria are represented by only *c* 40 fragments, and although their fabric sources are not yet confirmed, they appear to be attributable to typically late second- to fourth-century producers, notably the Nene Valley and the Mancetter-Hartshill kilns. Amphorae are conspicuous by their absence, with only a few small fragments noted, and this might well bear some implication as to the nature of the settlement and the available networks of supply.
- 5.5.5 *Regional Significance to Pottery Studies:* the assemblage is significant on a regional level in terms of:
  - the potential data relating to trade and exchange patterns in the ceramic supply in the Flavian-Trajanic period;
  - the character of the site;
  - inter-site variation and the possibility of identifying functional zones within *Derventio*;
  - changes in the character and function of *Derventio* in the mid- to late second century;
  - how changes on the site are linked to the wider history of the Romans in Britain, in particular the military campaigns;
  - the character of the third-fourth-century activity at Little Chester.
- 5.5.6 **Potential:** further study of the pottery including identification of the fabrics and forms will contribute significantly to the dating of the features on the site. In particular, the combination of this work with detailed analyses of the stratigraphic relationships of the features is likely to improve the dating of the individual components of the structures/building(s) from the site. A combination of the dating evidence from the coarse wares and samian with this detailed stratigraphic analysis will permit more detailed phasing and may determine aspects of site history.

## 5.6 MEDIEVAL AND POST-MEDIEVAL POTTERY

5.6.1 *Quantification:* the assemblage of medieval pottery recovered from the evaluation trenching comprises some 50 sherds of green-glazed pottery in various fabrics. An assessment of the potential of this material for further study was undertaken by rapid scan and, where possible, spot dates were assigned to individual vessels and/or contexts. All the material was examined, with the intention of determining a range of factors that might influence its potential. These comprised: the range of fabrics present; the range of vessel forms present; the level of preservation; and the degree of fragmentation.

- 5.6.2 No formal attempt was made to subdivide the assemblage by fabric, although the potential, practicality, and validity of this exercise was assessed. Any such broad grouping of fabrics should be undertaken with reference to the collections of medieval pottery from previous excavations in Derby, and held in Derby Museum and Art Gallery.
- 5.6.3 Most of the medieval pottery probably dates from the fourteenth-fifteenth century, although it is quite likely that earlier (twelfth-thirteenth century) material could be recognised from further analysis.
- 5.6.4 In addition, a few fragments of kiln superstructure and some extremely overfired pottery, probably of post-medieval date, including fragments from a fused stack of dishes, which might imply some late pottery production in the surrounding area, but not necessarily on the site.
- 5.6.5 The regional resource assessment and research agenda for the medieval period in the *Archaeological Research Framework for the East Midlands* has identified several areas worthy of further analysis (Lewis 2006). The role of the market in the distribution of pottery in the post-Conquest era has been seen as considerable (Moorhouse 1981), and was an important way of elucidating the modes of distribution and spheres of exchange of rural and urban production centres (Lewis 2006).
- 5.6.6 **Potential:** The medieval pottery has little potential to provide a chronological framework for many of the excavation features, although it does have limited potential to provide an indication of the type of activity occurring on the site. Comparison with the other published pottery assemblages from the city could potentially enhance knowledge of the chronological development of the site.
- 5.6.7 Relatively few well-stratified assemblages are known from Derby, with exception of Full Street (Hall and Coppack 1972), Derby Magistrates' Court in nearby St Mary's Gate (Crooks *et al* 2003), and a recent excavation on Bold Lane (OA North 2013). All of these sites produced a wealth of ceramic evidence will provide important comparators for the site.
- 5.6.8 The waste fragments of post-medieval pottery has some potential to aid the identification of a pottery-manufacturing centre in the vicinity of the study area.
- 5.6.9 In conclusion, although not as copious or informative as the Roman material, the small group of medieval pottery has potential to contribute to the dating of the site, and further analysis would contribute to an understanding of patterns of trade in the area.

### 5.7 CERAMIC BUILDING MATERIAL

- 5.7.1 *Quantification:* there is a moderate amount of Roman ceramic building material, amongst which are keyed box flue tiles and *tegula* roof tiles, and in addition there are two fragments of *opus signinum*, a tile-reinforced concrete used, during the Roman period, to line and waterproof architectural features like baths. In addition, the assemblage of ceramic building material included one or two fragments of green-glazed roof tile.
- 5.7.2 **Potential:** the ceramic building material has limited potential to inform the dating or interpretation of the site, although it could conceivably contribute to a reconstruction of the appearance of the Roman buildings that occupied the site.

### 5.8 METALWORK

- 5.8.1 *Quantification:* most of the copper-alloy items recovered from the evaluation trenches are of Roman date, with four bow brooches. One of these, recovered from *1003* (Trench 10), is a bow-and fantail brooch of late third to fourth-century date (see for instance Mackreth 2011, pl 131 no 7694), but the other three are most likely to be of later first or second century date; one, from *808* (Trench 8), is a Colchester derivative of Mackreth (2011) type 4a, with examples from Derby dating to the late first to early second century, but elsewhere, for instance Alcester, they persist into the third century (*op cit*, 72). A second probable Colchester derivative brooch comes from *912* (Trench 9), and is of similar date.
- 5.8.2 A single copper alloy coin from *1004* (Trench 10) requires cleaning before its identification can be confirmed, but could be an issue of the short-lived Emperor Quintillus (AD 270), and a well-preserved silver denarius from *910* (Trench 9) can be identified as an issue of Julia Mamaea, mother of the last Severan emperor, Severus Alexander, and regent during his minority (AD 222-35). Other typically Roman copper alloy objects include a small, rather bent, ligula, and a small bell-shaped knob or handle.
- 5.8.3 Several post-medieval coins were also recovered from the trenches. Most of these were relatively late decimal issues of Elizabeth II, together with a penny of Edward VII.
- 5.8.4 *Potential:* the metalwork objects, where they were retrieved from stratified contexts, have the potential to provide comparatively close dating for these deposits.

### 5.9 IRONWORK

5.9.1 The ironwork has very little potential to contribute to any understanding of the stratigraphic succession or make any further contribution to the understanding of the site. Whilst no further work on the metalwork is recommended, a minimal record should be completed for each object.

### 5.10 INDUSTRIAL RESIDUES

- 5.10.1 *Quantification:* most of the industrial residues seem likely to be of a late date. Amongst the fragments examined are smithing buns, generated by secondary ironworking. Other industrial residues include fragments of galena and droplets of lead, which suggest primary and secondary processing of lead.
- 5.10.2 With the exception of the lead objects, the industrial residues derive largely from late nineteenth- or twentieth-century ironworking activity, and have very little potential to contribute to any understanding of the stratigraphic succession or make any further contribution to the understanding of the site. Whilst no further work on these industrial residues is recommended, a minimal record should be completed for each object.
- 5.10.3 In terms of the lead objects, the small assemblage does not have much potential to add to the dating of the site. There is, however, sufficient material to allow it to contribute to a furthered understanding of the industrial or craftworking processes that were carried out on site during the Roman period.

## **5.11** GLASS

- 5.11.1 There is a single fragment of typically Roman glass, but this has been partially melted and its original form cannot now be determined. The remainder of the glass assemblage comprised mould-blown vessel and bottle glass of later nineteenth- or twentieth-century date.
- 5.11.2 *Potential:* the glass material has no further potential to inform the dating or interpretation of the site. However, a minimal record should be completed for each object for inclusion in the project archive.

#### 5.12 ANIMAL BONE

- 5.12.1 *Quantification:* in total, 858 animal bone or teeth fragments were recorded by this assessment. This constitutes all of the hand-collected material. No bones from soil samples are currently available. The bone has been attributed to the late Roman period (second to third century). This assessment quantifies the material, assess its potential for further analysis, and makes recommendations for any further work.
- 5.12.2 The material was identified using the reference collection held by the author. All parts of the skeleton were identified where possible, including long bone shafts, skull fragments, all teeth and fairly complete vertebrae. Reference was also made to Halstead and Collins (1995), with distinctions between sheep and goat made using reference material and published work by Boessneck (1969), Kratochvil (1969), Payne (1985) and Prummel and Frisch (1986).
- 5.12.3 The methodology employed in the assessment included recording the number of fragments per species, the weight, the number of fragments within each preservation category, the number of specimens displaying tooth wear, fusion and metrical traits, and the number of specimens with butchery marks upon them.

- 5.12.4 The extent of mandibular tooth wear and the epiphyseal fusion of long bones can be used to estimate the age of death of the principal stock animals. Biometric data can be used to assess changes in the size of the stock animals and in some cases the ratio of male:female animals maintained by the husbandmen.
- 5.12.5 The preservation categories (very poor, poor, moderate, good and very good) provide a useful indicator to the general condition of the assemblage, based on the level of fragmentation and erosion of the bone.
- 5.12.6 Table 2 presents a complete species list and the number of individual specimens (NISP) of each species. In total, 293 bone and teeth fragments (34%) were identified to a species level or low order group (Table 2).
- 5.12.7 Bone and teeth of cattle were the most frequently occurring faunal remains, comprising 68% of the principal stock animals, followed by sheep/goat and pig. Where sheep could be separated from goat, they were identified as of sheep. Most of sheep/goat category is likely to be sheep, in-line with the national norm, although goat is likely to have been husbanded in small numbers (Maltby 1981, 159-161). In addition, a small number of dog, hare and domestic fowl remains were also identified.
- 5.12.8 Overall, the animal bone is in moderate to good state of preservation (Table 3). Much of the identifiable bone has been fragmented, but is in a robust state and has suffered little in the way of erosion to its surface.
- 5.12.9 *Potential:* the total number of identifiable fragments is too small to provide a reliable representation of the proportion of stock animals husbanded or consumed at the site, although an abundance of cattle bones followed by those of sheep frequently recorded at Roman sites in Britain (King 1984). The number of recorded data concerned with the mortality, size and butchery of the principal stock animals are small to be overly useful which is unsurprising in data obtained from trial trenches, although in some instances may provide some further comments. Some deposits produced high numbers of identifiable bones, such as abandonment layers 1217 and 1320, and maybe worthy of further comment in their own right as to the character of bone deposition within them. It should also be noted that the good condition of the remains from these trial holes suggest further excavations at the site have the potential to produce a larger well preserved collection of faunal remains. Such material may prove informative as to the husbandry of animals, treatment of carcasses, and consumption patterns within the extra-mural settlement of Little Chester Roman fort.
- 5.12.10It is recommended that the assemblage be fully recorded and integrated into the stratigraphic record of the site. A short report should be compiled for any further publication of the site, containing a brief discussion of the animals found; presenting any mortality, biometric or butchery data as appropriate; and a discussion of any significantly larger deposits of animal bone.

Species	Total		
Mammals bones			
Equus sp	3		
Cattle	191		
Pig	14		
Sheep/Goat	70		
Sheep	7		
Dog	7		
Hare	1		
Cattle/Red Deer	32		
Sheep/Goat/Roe Deer	5		
Cat Sized Mammal	1		
Medium Mammal	35		
Large Mammal	304		
Unidentified Mammal	187		
Bird bones			
Domestic Fowl	1		
Total NISP	858		
NISP identified to species of low order group	293		
Principal domestic stock animals (%)			
Cattle	67.7		
Pig	5.0		
Sheep/Goat + Sheep	27.3		

Table 2: Number of Individual Specimens (NISP) of Roman animal bone and teeth by species

	Very Poor	Poor	Moderate	Good	Very Good
Cattle	-	1.3	46.9	51.9	-
Pig	-	-	72.7	27.3	-
Sheep/Goat + Sheep	-	-	24.5	75.5	-
All Bone	9.5	10.9	53.3	26.3	-

Table 3: Condition of the bone presented as percentages (excluding loose teeth)

Species	Tooth Wear	Fusio n	Biomet ry	But che ry
Cattle	8	56	59	41
Pig	1	2	1	1
Sheep/Goat + Sheep	7	12	23	6

Table 4: Quantity of specimens of principal domestic stock animals from which tooth wear, epiphyseal fusion, biometric and butchery data maybe obtained

# 5.13 HUMAN BONE

5.13.1 The fragments of the human skeleton will require analysis, and if suitable, dating, as it was not accompanied by grave goods which might allow an estimate of its date.

#### 5.14 WORKED STONE

- 5.14.1 In total, eight fragments of worked stone were recovered from the evaluation trenches. By far the majority of the stone finds derive from querns of one kind or another, all of which are of Roman date, with only a single fragment of a modern stone object that was recovered from the topsoil in Darley Fields.
- 5.14.2 Stone building material includes a single carefully-dressed building block, its diamond-broached surfaces characteristic of Roman masonry. All of the fragments of querns recovered were relatively small, and may well suggest that the querns had been deliberately smashed up at the end of their useful lives. However, numerous complete and adjoining large fragments of querns or grindstones were revealed during the evaluation of Darley Fields, where they had been re-used in the make-up of metalled surfacing (Plates 23 and 26), but were recorded and left *in-situ* so as not to compromise the integrity of the archaeological deposits.
- 5.14.3 Many of the large dressed fragments of stone left *in-situ* had a tooled finish, demonstrating clearly that they had been worked, but displayed little or no indication of any wear. None of the stones, moreover, contained a central pinion hole, suggesting that they may have been broken during the final stages in production. The sheer number of these stones suggests that there may have been a production centre in the immediate vicinity, although the source of the stone, at this stage, remains uncertain.
- 5.14.4 *Potential:* the main interest in the assemblage of worked stone lies in the querns, both in identifying and dating the individual examples, and in a consideration of their deposition in the light of recent theories as to the systematic/ritual destruction and deposition of quern fragments (Mould 2011, 171). Sourcing the origin of the stone would also inform an understanding of trade patterns.

## 5.15 CHARRED AND WATERLOGGED PLANT REMAINS ASSESSMENT

- 5.15.1 *Quantification:* 27 environmental bulk samples were taken from a variety of contexts for the assessment of charred and waterlogged plant remains. A representative selection of the samples (25% of the total number of samples) was subjected to rapid assessment in order to assess the potential for the survival of plant remains across the site. It was hoped that the samples would provide information about the environment, economy, and diet, and also provide material suitable for radiocarbon dating. Of the bulk samples assessed, all were Roman in date.
- 5.15.2 *Methodology:* the samples were hand-floated and the flots collected on a 250 micron mesh and air-dried. The flots were scanned with a Wild M3Z stereomicroscope and the plant material and charcoal quantified and provisionally identified. Botanical nomenclature follows Stace (2010). The plant remains were scored on a scale of abundance of 1-4, where 1 is rare (up to five items) and 4 is abundant (>100 items). The components of the matrix, including charcoal fragments, were noted as present (+) or abundant (++).

- 5.15.3 *Summary results and interpretation:* several of the contexts, especially the fill (329) of Roman ditch 311 (Trench 3) contained charred cereal grains. Other charred plant remains included fruits and seeds of sedges with lenticular fruit (*Carex* lenticular). All the samples contained some charcoal, and several recorded common counts.
- 5.15.4 Waterlogged plant remains were preserved in several of the samples, and were particularly abundant in ditch fill 329. The variety of species represented included sambucus nigra (elder), stellaria media (common chickweed), polygonum aviculare (redshank), conium maculatum (hemlock), rumex acetosa (sorrel), urtica urens (annual nettle), urtica dioica (common nettle), and chenopodiaceae (goosefoot). The presence of redshank and common chickweed suggests that there were cultivated areas in the immediate vicinity, whilst nettles imply waste ground, and sorrel is consistent with a grassland environment. Samples taken from Trench 6 (608) contained ranunculus repens (creeping buttercup) and euphorbia heliscopia (Sun Spurge), which again may suggest cultivated areas.
- 5.15.5 *Potential:* this rapid assessment of the plant remains has demonstrated that there is a high potential for the survival of plant remains in some of the deposits from the site. These plant remains have the potential to provide information about the diet of the townsfolk, their local economy, and also information on the environment. In addition, there is also some material suitable for scientific dating, including the charred cereal grains recovered from the base of Roman ditch *311* (Trench 3). Analysis of these remains would allow for a partial reconstruction of the changing Roman environment and, significantly, would furnish some absolute dating evidence.

# 6. PUBLIC ENGAGEMENT

## 6.1 PUBLIC ENGAGEMENT

6.1.1 The project was well received by local residents and interest groups, who showed considerable interest in the archaeological works. The interest was extended to local schools, and several dedicated tours of the excavated trenches for local school students were facilitated by the Environment Agency (Plate 31).



Plate 31: School pupils visiting the excavation

6.1.2 The interpretation of the results obtained from the evaluation has been enhanced by liaison with members of the Derbyshire Archaeological Society, who have shared their invaluable local knowledge of the site and previous archaeological work carried out in Little Chester. A dedicated tour of the excavated trenches provided for society members was well attended (Plate 32).



Plate 32: Members of the Derbyshire Archaeological Society visiting the excavation

## 7. CURATION AND CONSERVATION

### 7.1 RECIPIENT MUSEUM

7.1.1 The Derby Museum and Art Gallery has been nominated as having the capacity to co-ordinate the deposition of the finds and the paper and electronic archive. Paper and digital copies of issued reports will be deposited with the museum. The material generated from the excavation has been allocated a unique archive accession number (DBYMU 2012-329).

### 7.2 CONSERVATION

7.2.1 Most of the assemblage is well-preserved and in good condition, and thus the conservation requirement is low. Only objects of copper alloy are likely to require cleaning, principally in order to facilitate identification; some of these objects should also be x-radiographed

## 7.3 STORAGE

- 7.3.1 Most of the assemblage is well-preserved and in good condition, and thus the conservation requirement is low. Only objects of copper alloy are likely to require cleaning, principally in order to facilitate identification; some of these objects should also be x-radiographed.
- 7.3.2 The complete project archive, which will include written records, plans, black and white, digital plans and photographs, artefacts, ecofacts and sieved residues, will be prepared following the guidelines set out in *Environmental standards for the permanent storage of excavated material from archaeological sites* (UKIC 1984, Conservation Guidelines 3) and *Guidelines for the preparation of excavation archives for long-term storage* (Walker 1990), prior to deposition.
- 7.3.3 The digital data will be stored temporarily on the server at OA North, which is backed up on a daily basis. For long-term storage of the digital data, CDs will be used, the content including the reports, plans, scanned images and digital photographs. Each CD will be fully indexed and accompanied by the relevant metadata for provenance. The digital record should ideally be duplicated as a paper record for long-term archiving, including comprehensive printouts of photographs and survey plots, labelled and summarised.
- 7.3.4 All dry and stable finds will be packed according to the museum's specifications, in either acid-free cardboard boxes, or in airtight plastic boxes for unstable material. Each box will have a list of its contents and will in general contain only one type of material, such as pottery or bone.

## 7.4 PACKAGING

7.4.1 The assemblage is currently well-packaged and will require no further packaging. Box lists derived from the site database have been compiled and will be updated when the identification of objects is complete. The paper records will be presented in either ring binders or in acid-free storage, fully indexed, and with the contents labelled.

### 7.5 DISCARD POLICY

7.5.1 A discard policy will be prepared, in consultation with the recipient museum. Material of no discernible long-term archaeological potential will be discarded, with the museum's agreement.

## 8. STATEMENT OF POTENTIAL

## 8.1 Introduction

- 8.1.1 The programme of evaluation trenching at Little Chester has provided a valuable opportunity to study an important locus of Roman activity in the East Midlands. The discovery of a complex of features connected to the Roman fort and associated settlement of *Derventio* has considerable potential to advance understanding of the development of this part of Derby between the late first and fourth centuries AD, as well as augmenting previous archaeological work in the area. Overall, the results of the evaluation are of immense significance, and can be regarded as being of regional importance.
- 8.1.2 The fieldwork was undertaken in accordance with the strategy set out in the original Written Scheme of Investigation (*Appendix 1*), in order to address the aims put forward in that document. Assessment of the stratigraphic and artefactual data generated by the fieldwork is primarily concerned with the potential of the data to address these fieldwork aims, and to formulate new questions and research aims that can be addressed during the analytical phase of the post-excavation programme (*Section 9* below).
- 8.1.3 The archaeological evaluation has demonstrated that the study area has considerable potential for the survival of buried archaeological remains although, with the exception of those areas designated as Scheduled Monuments, it is not considered that these remains are necessarily of national importance that would necessitate preservation *in-situ* However, in archaeological terms, the remains encountered during the evaluation are considered to be of regional significance, and merit further, more detailed investigation prior to any damage or destruction that may be necessitated by the development of the proposed flood defences.

## 8.2 PRINCIPAL POTENTIAL

- 8.2.1 The present section reviews the success of the fieldwork and post-excavation assessment in providing data to address the original research aims. Assessment of the primary stratigraphic records has established a fairly complex sequence of activity on the site during the Roman period. The sequence is summarised in *Section 4*, above. Likewise, assessment of the artefactual assemblages recovered from stratified deposits on the site has highlighted those elements that have the greatest potential to advance archaeological knowledge, and which require further detailed analysis leading to the production of a full and detailed archive report, and an appropriate level of academic publication.
- 8.2.2 **Roman period:** there can be little doubt that the data recovered from the evaluation trenching have considerable potential to address the fieldwork aims that relate to the Roman period. Further detailed analyses of the site records and many of the material remains recovered from the excavations have the potential to advance further an understanding of the chronology, morphology, character and extent of Roman occupation in Little Chester.

- 8.2.3 *Stratigraphy:* further examination of the stratigraphic sequence will not only shed more light on the nature and date of activity in the Roman settlement, and possibly the fort, but also it may be possible from the pottery to establish whether there was military participation in the settlement, or if it was entirely a civilian occupation.
- 8.2.4 Artefacts: the assemblage or Roman artefacts recovered from the evaluation trenching, though relatively small by national standards, represents an important addition to the corpus of Roman material from Derby, and indeed from the East Midlands generally. In terms of national and regional research priorities, it is the stratified assemblages of pottery, both samian ware and other types, that perhaps hold the greatest potential for further research. The precision with which samian ware and, to a lesser extent, other pottery types can be dated, and the ubiquity of pottery on most Romano-British sites, makes it one of the primary sources of dating evidence for the Roman period. Further work on the identification of individual forms and fabrics in the assemblage would certainly refine the dating of the occupational sequence, and would therefore make a significant contribution to the interpretation of the structural development of the site. Analysis of changes in the nature of the assemblage through time also has the potential to highlight changes in the status and/or function of specific parts of the site during the Roman period.
- 8.2.5 Further work on the proportions of samian from the South and Central Gaulish workshops, and on the varying proportions of other pottery types, is likely to shed new light upon changing patterns of trade and supply, both to the site at Little Chester and regionally. Comparison with the pottery assemblages from other sites in the region could also potentially provide information on military transport routes. Detailed analysis of spatial patterning across the site also has the potential to illuminate differences in the use of space within the settlement.
- 8.2.6 Further detailed analysis of the spatial and chronological distribution of the other categories of Roman artefacts recovered from the site (*eg* industrial residues (including the lead), worked stone, and animal bone) has clear potential to advance understanding of the development of the site during the Roman period, and may in some cases shed light on the types of activities that were occurring on certain parts of the site. In addition, there is some potential to address issues relating to trade practices. Detailed comparison of the assemblage with collections of material from other Roman sites in the region will also contribute to an understanding of how the East Midlands developed during the Roman period. Certain elements of the assemblage may also supplement the dating evidence obtained from other sources.

### 8.3 NATIONAL POTENTIAL

8.3.1 The evaluation trenching has provided an opportunity for the archaeological study of an important Roman site in Derbyshire. Extensive remains of the civilian settlement associated with a key Roman military station were uncovered. The remains of structures excavated in this settlement, and their associated assemblages of finds, clearly have important potential to contribute to knowledge in local, regional and national contexts.

### 8.4 NATIONAL RESEARCH PRIORITIES

8.4.1 In 1991, the English Heritage document, *Exploring Our Past*, included a strategy for dealing with the problems and opportunities which would be encountered during the following decade. Many of the ideas first raised in this document were developed further in a draft *Research Agenda* which outlined a series of research priorities (English Heritage 1997). The most recent English Heritage *Research Strategy* documents are *Discovering the Past, Shaping the Future* (2005), and *The National Heritage Protection Plan* (2011), although these are, in effect, strategies for English Heritage itself. The draft *Research Agenda* is no longer considered current, although the following research objectives remain pertinent, and are of direct relevance to this project.

## ♦ Processes of Change (PC):

- Briton into Roman: evidence for the existence of continuity or change in settlement and land-use, and social and economic organisation, between the Late Iron Age and Roman periods (c 300 BC-AD 200) (English Heritage 1997, 44);
- *Empire to kingdom:* evidence for the nature of change in Romano-British society in the third and fourth centuries, and changes in the hierarchy and role of settlements during this period (*c* AD 200–700) (*ibid*);
- Late Saxon to medieval period: evidence for the reorganisation of the cultivated landscape. Evidence for changes in settlement patterns and economic structures during this period (c AD 700–1300) (op cit, 44–5);

### ♦ Chronological priorities

- Late Bronze-Age and Iron-Age landscapes: evidence for settlement, field systems, and enclosures in the pre-Roman period (op cit, 48);
- *Military and civilian interaction*: evidence for the social and economic interaction between these elements of society during the Roman period (*op cit*, 49).
- Patterns of craftsmanship and industry: suggested ways in which understanding of this subject might be advanced include 'projects to examine aspects of craftsmanship and manufacture deduced from a study of the finished object' and 'exploration of ancient carpentry, timber technology, woodland management' (op cit, 54).

#### **♦** Themes

- Settlement hierarchies and interaction: evidence for the nature of settlement during the Iron Age and Roman period; the social and economic organisation of settlements and their relationships to each other, both temporal and spatial (op cit, 51);
- *Rural settlement*: evidence for the development of the rural landscape throughout history (*op cit*, 52);

- Relict field systems: evidence for the date and classification of relict field systems (op cit, 53);
- Patterns of craftsmanship and industry (including agriculture): evidence for past production in the form of artefact manufacture, industrial processing, and agriculture (op cit, 53);

## **♦** Landscapes

- Cognitive landscapes: evidence for the social factors influencing the patterns of landscape inhabitation (op cit, 55);
- Regional chronologies: how the data retrieved from the excavated sites can contribute to the refining of regional chronologies (op cit, 55).
- 8.4.2 **Roman period-specific research themes:** a period-specific national research agenda for the Roman period has been devised (James and Millett 2001). This document includes several priorities for future research that may be relevant to the current project:

## ♦ Analyses of finds assemblages

• Finds from rural sites should be widely published and whole-assemblage comparisons should be made, in an attempt to identify the nature of different site-types (Evans 2001, 34–5).

## ♦ Rural Society

- Classifications of physical structures should not dominate the study of the societies that created them. Social changes need to be explained, rather than assumed to be the result of the presumed inevitability of acculturation (Taylor 2001, 48–9);
- assumptions of wealth and poverty should not be based purely on the presence or absence of Roman symbols of status. Choices about the investment of wealth should be considered according to individual households or communities (*op cit*, 49);
- the spatial relationship between buildings and settlements and the organisation of space within them should be studied (*ibid*);

# ♦ Agriculture

• The role of agricultural production should be examined in the absence of assumptions that rural developments were the direct result of military and urban demand (op cit, 55).

### ♦ *Military and civilian interactions*

• The relationships between military and civilian sites should be explored by the comparison of entire finds assemblages from contrasting sites. Attempts should be made to identify military assemblage 'signatures' that can be used as informers of military presence at sites that appear to have been civilian in character (James 2001, 84–5);

- differences and similarities in the material expression of identity and social relations between soldiers and civilians, in domestic settings, should be explored (*op cit*, 85);
- differences and similarities between assemblages in military and civilian contexts should be considered in relation to local constraints, such as sources and routes of supply, as well as converging or disparate cultural traditions (*op cit*, 86);
- evidence for contacts and interaction, or for continuing divergence, between indigenous and military communities should be explored (*op cit*, 88);
- environmental evidence should be used to augment potentially small quantities of cultural material, in order to explore the visibility of the impact of the Roman military occupation on the development of local environments (*ibid*).
- 8.4.3 Roman pottery studies provide a major source of information for the Roman period in Britain, representing a key asset for advancing knowledge and addressing specific questions. The Study Group for Roman Pottery (SGRP) regards it as essential that work within this field is well focused upon agreed short- and long-term objectives. These include the analysis of Roman pottery from production sites and other Roman industries (Willis 2004). There is now much evidence indicating that the production of Roman pottery frequently took place together with, or nearby, other industrial manufacture, in apparent 'functional zones' (*eg* Holme-on-Spalding Moor, East Yorkshire, and Bardown in the Weald). Investigation of the associations between these industries would represent highly significant innovative research, simply because this is such an under-studied sphere.
- 8.4.4 These research questions are only a limited selection of the potential which the material archive affords us. It is generally rare that such a large area of a Romano-British settlement in the East Midlands is excavated as part of a rationalised and well thought-out archaeological investigation.

## 8.5 REGIONAL RESEARCH PRIORITIES

- 8.5.1 The publication of the *East Midlands Archaeological Research Framework* (EMARF; Cooper 2006) has provided a region-specific agenda that includes several research topics that are relevant to the study of the archaeological remains at Little Chester. As a detailed national research agenda for the Roman period has been compiled, however, there is significant overlap between many of the research topics discussed in the regional and national research agendas, and the repetition of previously noted themes will be avoided.
- 8.5.2 The following key research themes for the Roman period are outlined by EMARF:

## ♦ Chronology

- the chronological framework is not as strong as it could be for the Late Iron Age to Roman transition period and during the third to fourth centuries in the west and north-west of the region (Taylor 2006, 154);
- areas of debate surrounding the date of late or post-Roman inhumations remain unaddressed.

#### ♦ Urbanism

• the study of Roman forts and their *vici* as single related foci, in order to understand whether they were established as local centres in their own right during the period of military occupation, or subsequently. Was there any significant gap between military occupation and the establishment of a settlement? Was the history of the settlement closely tied to that of the military community and was it abandoned when they moved on? (*op cit*, 155).

### **♦** Communications

• 'there has been a tendency to assume that the major roads were built as part of the campaigns of conquest, but evidence to confirm this is still largely dependent on the apparent association of many major routes with military sites. There are good reasons to challenge this assumption and a clear need for continuing efforts to refine the chronology of road network construction' (op cit, 157).

### ♦ Artefact Production

- 'there is a pressing need to build on the present foundation and continue auditing the information we already have for the important iron industry in the region, which extends across several authority boundaries. Such a process could establish areas where significant blocks of productive landscape survive and provide an analytical context for the future study of the iron industry' (*op cit*, 158);
- the evidence for the various forms of metal extraction and working is fragmentary, although there is some evidence to suggest that parts of the region, or specific settlements within it, were significant centres for production. 'Perhaps the most important question concerns the significance of lead mining and smelting in Derbyshire' (*op cit*, 152);
- 'evidence for quarrying and the use of stone is limited...synthesis of the extent and scale of redistribution of these materials, especially in regard to programmes of construction in urban, villa and religious contexts, could prove extremely valuable in creating an improved understanding of patterns of trade' (*op cit*, 153).

## 9. UPDATED PROJECT DESIGN

### 9.1 AIMS AND OBJECTIVES OF THE PROGRAMME OF ANALYSIS

- 9.1.1 This section follows the guidance of English Heritage regarding the formulation of updated research aims (English Heritage 1991, 2–3). The original aims for the project remain valid, but can be updated with new aims and objectives derived from the statement of potential set out in *Section 8*.
- 9.1.2 The updated research aims will consider the following:
  - the development of the site during the Roman period, including evidence for changes, both spatial and chronological, in the layout of features and structures within the Roman settlement;
  - processes of change, particularly the transition from the Roman to post-Roman period;
  - the character of occupation in the Roman period, particularly in regard to standards of living and small-scale industry;
  - the place of the analysed and interpreted results of the archaeological investigation within the local and regional setting.
- 9.1.3 *Updated research aim 1:* what are the occupation sequences at the site?
  - *Objective 1*: what are the main periods of activity on the site, as shown by detailed stratigraphic analysis of the primary records?
  - *Objective 4*: what is the dating evidence for each of the main periods of activity?
- 9.1.4 *Updated research aim 2:* what can be learnt of the origins and development of Roman Little Chester?
  - Objective 1: what can the stratigraphy, artefactual and ecofactual assemblages tell us about the origins and development of occupation in Little Chester?
  - Objective 2: do the artefactual and ecofactual assemblages shed light on the nature of occupation and the everyday lives of the Roman occupants of the site? Is there evidence for craft or industrial practices in this area?
  - *Objective 3*: what does the evidence tell us about patterns of trade, supply and consumption within Roman Little Chester? What evidence is there for exploitation of local resources and the use of traded commodities?
  - *Objective 4*: can detailed analysis of stratified groups of Roman pottery assist with the establishment of a refined phasing for the site?

- 9.1.5 *Updated research aim 3*: what can the site tell us about the transition from the Roman to post-Roman period?
  - Objective 1: is there any evidence for continuity (or discontinuity) in the layout of the site or in the character and range of occupation from the late Roman to early post-Roman periods?
  - *Objective 2*: do the artefactual and ecofactual assemblages recovered from the site shed light on the nature of occupation at this time?

## 10. METHOD STATEMENT

### 10.1 PROGRAMME STRUCTURE

- 10.1.1 The post-excavation programme, designed to fulfil the research aims outlined in *Section 9*, will be divided into the following stages:
  - full cataloguing of any data representatively assessed;
  - analysis;
  - synthesis;
  - preparation of draft text and illustrative material;
  - publication;
  - archive deposition.

### 10.2 MANAGEMENT, MONITORING AND REVIEW

- 10.2.1 *Task 1:* management and monitoring tasks have been built into the project. These tasks will include project monitoring, advice and co-ordination, problem solving, and conducting meetings with project staff and all interested external parties.
- 10.2.2 Reviews of the project will include both the specialists and the OA North staff who are undertaking the analysis, and will provide an opportunity for all involved to present and receive information, to discuss the research aims, and permit an exchange of ideas. All specialists will be consulted following editing, and prior to publication of their reports. In addition, there will be regular project review meetings throughout the preparation of the report.

## 10.3 STRATIGRAPHY: ANALYSIS AND SYNTHESIS

- 10.3.1 *Task 2:* the stratigraphic analysis will consider the remains uncovered by the archaeological evaluation, as well as the results of other recent archaeological investigations in the area, including the recent monitoring of the ground investigation works. The stratigraphic data will need to be studied in greater detail in order to refine the provisional phasing. Existing matrices will require assimilation into one overall matrix, showing the amended periods and any identified sub-phasing.
- 10.3.2 Once the data from all the areas have been analysed, and a stratigraphic narrative completed, it will be possible to prepare phase plans. These plans are a prerequisite for specialist analysis of the relevant artefact assemblages. Analysis and synthesis of the results of specialist analysis of some classes of finds, and especially the pottery, together with scientific dating, may, however, contribute to the refinement of the site phasing.

### 10.4 DIGITAL DATA IN THE ANALYSIS PHASE

- 10.4.1 *Task 3:* at the start of the fieldwork, a basic Microsoft *Access* database was set up to record finds and archaeological contexts, along with a CAD environment, in which all plans and elevations could be placed to produce an up-to-date composite view of the site.
- 10.4.2 *Digital photographs:* links to digital photographs will be embedded within the database where appropriate.
- 10.4.3 *CAD drawings:* the majority of the fieldwork plans have been digitised. However, in order that a detailed analytical text of the stratigraphic information can be produced, phase drawings, sections and other relevant line illustrations, as required, will be drafted. The draft text and phase drawings will form the basis both of the summary information to be supplied to specialists and of the stratigraphic section of the final published report. It is also proposed that this digital data should be combined with digitised plans of previous excavations at Little Chester in order to assist in the identification of phases of activity.

### 10.5 PROCESSING AND TRANSPORT OF ARTEFACT ASSEMBLAGES

10.5.1 *Task 4:* at an early stage in the analytical programme, arrangements will be made to transport all relevant assemblages to the appropriate external specialist to facilitate analysis and reporting of the material. Conversely, on the completion of this work, material will need to be received from the specialist, sorted and checked against database records.

## 10.6 ROMAN POTTERY (SAMIAN, MORTARIA, AMPHORA AND COARSEWARES)

- 10.6.1 *Task 5:* all the Roman pottery recovered from the site will be classified by fabric and quantified by weight and sherd count, detailed catalogues produced by means of the production of a database, and illustrated form and fabric series will be prepared for publication. Comparative material will be studied and a full bibliography will be compiled. Material for illustration will be selected and catalogued. Further study of the pottery, with detailed identification of the fabrics and forms, will be crucial to refining the dating of the Roman occupational sequence, whilst analysis of the distribution of pottery types may disclose patterns of use across the site. Analysis of context groups will also allow changes in supply through time to be mapped, facilitating discussion of the significance of trade in material originating from outside the region, as well as regional distribution. Detailed comparison with other sites in the region will elucidate these aspects of the site and add significantly to our understanding of the precise character of the Roman settlement at Little Chester.
- 10.6.2 The assemblage of samian ware requires further work, mostly on moulded bowls that may be attributable to specific potters and therefore may be closely dated.

- 10.6.3 Although the coarse pottery, mortaria and amphora have been grouped into broad ware groups, the fabrics will require further detailed analysis to distinguish pottery from local kilns as well as imports. Provisional identification of the mortaria fabrics will require confirmation and uncertain amphorae identifications will also need to be checked. Such fabric studies, including thin sectioning, if appropriate, will clarify the trading links maintained by the inhabitants of Roman Little Chester and add to our understanding of ceramic supply and exchange in the wider region and beyond.
- 10.6.4 The pottery from stratified Roman contexts should be fully quantified by fabric and form, and by sherd count, weight and equivalent vessel estimate (EVE), and then entered onto the database. The data should include such general information as vessel class, burning, repair in antiquity and sherd joins. Roman pottery from post-Roman contexts, together with unstratified material, should be quantified to basic archive level, in accordance with the Study Group for Roman Pottery's guidelines (Darling 2004; Willis 2004), that is by sherd count, sherd weight and fabric and form. All the major ceramic forms from the sequence of stratified Roman contexts should be drawn, catalogued and published by context. Only small numbers of vessels are likely to require drawing from the residual material.

### 10.7 OTHER ROMAN AND POST-ROMAN FINDS

- 10.7.1 *Task 6:* identifiable, stratified metalwork and other finds will be grouped according to a series of functional categories within which they will be analysed. Items for illustration will be selected and a catalogue produced, relating objects to their stratigraphic context. Catalogues will include descriptions and basic comparanda, though exceptional objects will be accorded full academic discussion. A full bibliography will be compiled. Following this further investigative work, the database record of the assemblage will be checked and updated.
- 10.7.2 Discussion will be based around the significance of the assemblage as a whole to the interpretation of the site, and its implications locally and regionally. Assemblages will be compared to those from other sites in the region.

### 10.8 PALAEOENVIRONMENTAL ANALYSIS

- 10.8.1 *Task 7:* further detailed analysis will be undertaken on the plant remains in the bulk samples recovered from the site. The remaining environmental samples should also be processed for the rapid assessment of plant remains. The processing will follow the methodology given in *Section 4.17.2*.
- 10.8.2 The charcoal fragments preserved in all the environmental bulk samples will also be assessed rapidly. If suitable material for charcoal analysis is identified, a selection of samples will then be chosen for analysis.

### 10.9 RADIOCARBON DATING

10.9.1 *Task 8:* plant remains suitable for radiocarbon dating have been identified in some of the bulk samples that have been assessed to date. It is recommended that at least six samples are submitted for radiocarbon dating.

#### 10.10 INTEGRATION OF DATASETS AND SYNTHESIS

10.10.1*Task 9:* the information gathered from the analysis of the finds will be reviewed and integrated into the stratigraphic narrative. This will allow reinterpretation of the site using a thematic approach.

#### 10.11 ILLUSTRATIONS

- 10.11.1*Task 10:* during each part of the analytical programme, a selection will be made of appropriate material for illustration. This will include general plans and sections, phase plans, and artefacts. Illustrations will be produced by experienced illustrators, using standard conventions.
- 10.11.2Artefact drawings: selected artefacts will be drawn in pencil at a scale of 1:1 or as appropriate to the object. These will either be inked up on a stable, archive-quality medium (permatrace) or digitised to create a finished drawing in an electronic format. In some cases, finds may also be photographed for publication. During preparation of the report text, photographs suitable for inclusion in the report will be selected from the excavation archive. Additional photographs and illustrations of significant finds may be required.

#### 10.12 PRODUCTION OF TEXT AND PUBLICATION

10.12.1*Task 11:* following the completion of the analysis of the stratigraphic and artefactual evidence, an archive report will be produced. The results of the programme of archaeological works will also be submitted for publication as an article in the *Derbyshire Archaeological Journal*.

#### 10.13 ARCHIVE DEPOSITION

- 10.13.1*Task 12:* OA North undertakes to liaise throughout the project with the receiving museum to meet its deposition policies. On completion of the analysis, a discard policy will be implemented.
- 10.13.2On submission of the completed text for publication, the archive will be updated as necessary and the receiving museum will be contacted to obtain the latest information on its deposition arrangements. Material in files and boxes will be checked, and indices and box lists will be compiled and lodged with the finds.
- 10.13.3The digital archive will be checked and indexed, and hard copies made of the data, if required by the recipient museum. The digital data will be accompanied by metadata, which will explain origin and accuracy.

## 11. PRESENTATION OF RESULTS

#### 11.1 Introduction

11.1.1 Following the analysis and interpretation of the data, the results should be placed in the public domain. Given the importance of the material, it is anticipated that dissemination will consist of a full archive report, accompanied by an illustrated paper offered for formal publication in an appropriate academic journal.

### 11.2 PROPOSALS

- 11.2.1 *Archive/Client Report:* it is proposed that an illustrated archive report is produced, formatted for limited distribution in paper copy to local libraries, the Record Office, and the HER. This will include a detailed stratigraphic narrative, and reports on the finds.
- 11.2.2 The provisional contents of this report will include:

## Summary and Acknowledgements

#### 1 Introduction

Site location

Circumstances of project

## 2 Archaeological and Historical Background

Background to the site in the context of Little Chester and the Roman Midlands

## 3 Results of the Archaeological Excavations

Outline of the archaeological works

# 4 The finds

Reports on the finds by category, with a brief comment on the significance of the overall assemblage

## 5 General Discussion

Interpretation of the site, describing the results of the archaeological excavations and what they show about the conditions and changes through space and time within the study area

## **Bibliography**

11.2.3 *Academic Publication:* the results drawn from the archive report will be offered to the *Derbyshire Archaeological Journal* for publication. The primary aims of the publication will be to summarise the results of the evaluation, and also the main classes of Roman and medieval, and to place these results within their regional setting.

- 11.2.4 The provisional structure of this publication will largely mirror that of the archive report (*Section 10.2.2*), but it will contain an overview of the artefactual and environmental evidence from the site, as opposed to the detailed specialist reports.
- 11.2.5 This publication is likely to comprise no more than 15,000 words of text, including bibliography, and the narrative will be supported by an appropriate number of line drawings, including artefactual illustrations and interpretative phase drawings, and plates.

## 12. OTHER MATTERS

### 12.1 HEALTH AND SAFETY

- 12.1.1 All OA North post-excavation work will be carried out under relevant Health and Safety Legislation, including the Health and Safety at Work Act (1974). A copy of the Oxford Archaeology *Health and Safety Policy* can be supplied on request. The nature of the work means that the requirements of the following legislation are particularly relevant:
  - Workplace (Health, Safety and Welfare) Regulations (1992): offices and finds processing areas;
  - Manual Handling Operations Regulations (1992): transport of bulk finds and samples;
  - Health and Safety (Display Screen Equipment) Regulations (1992): use of computers for word-processing and database work;
  - COSSH (1998): finds conservation and analysis.

#### 12.2 Insurance

12.2.1 The insurance in respect of claims for personal injury to, or the death of, any person under a contract of service with the unit and arising out of the course of such person's employment shall comply with the employers' liability (Compulsory Insurance) Act 1969 and any statutory orders made thereunder. OA North has professional indemnity to a value of £2,000,000, employer's liability cover to a value of £10,000,000 and public liability to a value of £15,000,000. Written details of insurance cover can be provided if required.

## 12.3 PROJECT MONITORING

12.3.1 Any proposed changes to the project design will be discussed with the client and relevant bodies.

#### **BIBLIOGRAPHY**

#### SECONDARY SOURCES

Armstrong, P, and Armstrong, SJ, 1987, The Clay Roof Tile, in Armstrong, P and Ayers, B, *Excavations in High Street and Blackfriargate*, Hull Old Town Report Series No 5, 234-40

Armstrong, P, 1991, The Clay Roof Tile, in Armstrong, P, Tomlinson, D, and Evans, DH, *Excavations at Lurk Lane*, 1979-82, Sheffield, 201-7

Barrett, D, 2000a An Archaeological Resource Assessment of the Later Bronze and Iron Ages (The First Millennium BC) in Derbyshire. East Midlands Archaeological Research

Framework: http://www.le.ac.uk/archaeology/research/projects/eastmidsfw/pdfs/16der1stmill.pdf

Barrett, D, 2000b *An Archaeological Resource Assessment of Anglo-Saxon Derbyshire*. East Midlands Archaeological Research Framework: www.le.ac.uk/archaeology/research/projects/eastmidsfw/pdfs/26deras.pdf

Barrett, D, 2000c *An Archaeological Resource Assessment of Medieval Derbyshire*, East Midlands Archaeological Research Framework: www.le.ac.uk/ar/research/projects/eastmidsfw/pdfs/31dermed.pdf

Beswick, P, and Fowkes, D, 2002 Excavations on the South-Eastern Defences and Extramural Settlement of Little Chester, Derby, 1971–2, *Derbyshire Archaeological Journal*, **122**, 1–328

Boesneck, J, 1969 Osteological Differences between Sheep (*Ovis aries Linne*) and Goat (*Capra hircus Linne*), in D Brothwell and E Higgs (eds), *Science and Archaeology*, **2**, London, 331-58

Brassington, M, 1967 Roman material recovered from Little Chester, Derby, *Derbyshire Archaeological Journal*, **87**, 39-69

Brassington, M, 1971 A Trajanic kiln-complex near Little Chester, Derby, *Antiquaries Journal*, **51**, 36-69

Brassington, M, 1981 The Roman Roads of Derby, *Derbyshire Archaeological Journal*, **101**, 88-92

Brassington, M, 1982a Exploratory Excavations at Little Chester, Derby, *Derbyshire Archaeological Journal*, **102**, 74-83

Brassington, M, 1982b The Excavation of the Hypocaust on Parker's Piece, Little Chester, Derby, 1924-6, *Derbyshire Archaeological Journal*, **102**, 84-6

Brassington, M, 1993 Little Chester, Derby: The 1926 Excavations, *Derbyshire Archaeological Journal*, **113**, 21-44

Brassington, M, 1996 The Roman fort at Little Chester, Derby: The East Wall and Rampart, 1967-8, *Derbyshire Archaeological Journal*, **116**, 77-92

Cooper, N (ed), 2006 The Archaeology of the East Midlands: An Archaeological Resource Assessment and Research Agenda, Leicester Archaeol Mono, 13, Leicester

Crooks, K, Porter, S, Morriss, R, and Boucher, A, 2003 *Derby Magistrates' Court, St Mary's Gate, Derby: Excavation and Building Recording*, unpubl rep

Ellis, P, 1989 Roman Chesterfield. Excavations by Terry Courtney 1974-78, *Derbyshire Archaeological Journal*, **109**, 51-130

English Heritage, 1991 Management of Archaeological Projects, 2<sup>nd</sup> edn, London

English Heritage, 1997 Archaeology Division Research Agenda (draft), unpubl doc

English Heritage, 2005 Discovering the Past, Shaping the Future, London

English Heritage, 2006 Management of Research Projects in the Historic Environment (MoRPHE), London

English Heritage, 2011 The National Heritage Protection Plan, London

Hall, RA, and Coppack, G, 1972 Excavations at Full Street, Derby, *Derbyshire Archaeol J*, **92**, 29-78

James, S, and Millett, M (eds), 2001 Britions and Romans: Advancing an Archaeological Agenda, CBA Res Rep, 125, York

Kay, SO, 1961 Some Pottery Fragments from the Roman camp at Pentrich, *Derbyshire Archaeological Journal*, **81**, 139-41

Kratochvil, Z, 1969 Species Criteria on the Distal Section of the Tibia in Ovis Ammon F. Aries and Capra Aegarus F. Hircus L. in Acta Veterinaria (Brno), 389, 483-490

Lewis, C, 2006 An Archaeological Resource Assessment and Research Agenda for the Medieval Period in the East Midlands, in Cooper 2006, 185-216

Mackreth, DF, 2011 Brooches in Late Iron Age and Roman Britain (2 vols), Oxford

Mello, JM, 1876 Hand-book to the Geology of Derbyshire, London

Moorhouse, S, 1981 The medieval pottery industry and its markets, in D W Crossley (ed), *Medieval industry*, CBA Res Rep, **40**, London, 96-125

Mould, Q, 2011 Domestic Life, in L Allason Jones (ed), *Artefacts in Roman Britain:* their Purpose and Use, Cambridge, 153-79

Myers, A, 2000 *An Archaeological Resource Assessment of Roman Derbyshire*: East Midlands Archaeological Research Framework, www.le.ac.uk/ar/research/projects/eastmidsfw/pdfs/21derrom.pdf

OA North, 2013 Former Prince's Supermarket, Bold Lane, Derby: Post-excavation Assessment, unpubl rep

Prummel, W, and Frisch, H-J, 1986 A Guide for the Distinction of Species, Sex and Body Side in Bones of Sheep and Goat, *J Archaeol Sci*, **13**, 567-77

Rigby, V, 2001 Relief-decorated pottery, in PC Buckland, KF Hartley, and V Rigby, The Roman Pottery Kilns at Rossington Bridge. Excavations 1956-61, *Journal of Roman Pottery Studies*, **9**, 55-76

Sparey-Green, C, 2002 Excavations on the South-eastern Defences and Extramural Settlement of Little Chester, Derby 1971-2, *Derbyshire Archaeological Journal*, **122** 

Stukeley, W, 1724 Itinerarium Curiosum, London

Taylor, J, 2006 The Roman Period, in N Cooper 2006, 137-60

Todd, M, 1967 The Roman Site at Little Chester, Derby: Excavations in 1966, *Derbyshire Archaeological Journal*, **87**, 70-85

Tyers, P, 1996 Roman Pottery in Britain, London

Walker, K, 1990 Guidelines for the Preparation of Archaeological Archives for Long Term Storage, UKIC Archaeology Section, London

Webster, G, 1961 An Excavation on the Roman Site at Little Chester, Derby, *Derbyshire Archaeological Journal*, **81**, 85-110

Webster, P, 1996 Roman Samian Pottery in Britain, CBA Practical Handbook in Archaeology, 13, York

#### APPENDIX 1: WRITTEN SCHEME OF INVESTIGATION

Oxford Archaeology North

**April 2013** 

# PARKER'S PIECE AND DARLEY PLAYING FIELDS, LITTLE CHESTER, DERBY



Aerial view of Parker's Piece and Darley Playing Fields in Little Chester

## ARCHAEOLOGICAL EVALUATION WRITTEN SCHEME OF INVESTIGATION

Version 1.2

#### **Proposals**

The following Written Scheme of Investigation is offered in response to a request from Mr E Wilson, of the Environment Agency, for an archaeological evaluation of land adjacent to the River Derwent in Little Chester, Derby, in advance of the proposed construction of new flood defences.

#### 1. INTRODUCTION

#### 1.1 CONTRACT BACKGROUND

- 1.2.4 The Environment Agency, in partnership with Derby City Council, is planning to develop new flood defences in Derby, which will involve the construction of new embankments along the River Derwent as it flows through Little Chester. Situated a short distance to the north of Derby city centre, Little Chester is the site of a Roman fort, whilst Romano-British, Saxon and medieval deposits have also been discovered in the area. The new flood defences will be located at Darley Playing Fields (NGR SK 3549 3778) and Parker's Piece (SK 3524 3739), situated between the sites of the Roman fort and a Roman bath house.
- 1.2.5 The Roman fort at Little Chester was founded in the AD 70s, and continued into the second century. An associated civilian settlement also developed at Little Chester, the remains of which were identified by archaeological excavation in the 1960s and 1970s. These excavations also investigated elements of the fort's interior, and provided evidence for a granary, a *mansio* and a colonnaded building (Plate 1).



Plate 1: Remains of a Roman hypocaust excavated on Parker's Piece

1.2.6 In order to understand and manage the archaeological risks associated with the proposed scheme, the Environment Agency has undertaken to commission an archaeological evaluation of potential flood defence alignments. The evaluation is intended to establish whether any buried archaeological remains survive within the area of the proposed scheme and, if present, determine their depth, date, preservation, and significance.

- 1.2.7 In March 2013, Oxford Archaeology North (OA North) was invited by Ed Wilson, of the Environment Agency, to submit a costed proposal to fulfil the requirements of an evaluation of the site in line with a Statement of Requirements (Environment Agency 2013). This allows for the excavation of 16 trenches across Parker's Piece and Darley Playing Fields.
- 1.2.8 This document has been prepared in accordance with a guideline Statement of Requirements, devised by Ed Wilson, the Environment Agency Archaeologist, and with reference to the guidelines provided by English Heritage's *Management of Research Projects in the Historic Environment* (2006).

#### 1.2 OXFORD ARCHAEOLOGY

- 1.2.1 Oxford Archaeology has over 30 years of experience in professional archaeology, and can provide a professional and cost effective service. We are the largest employer of archaeologists in the country (we currently have more than 200 members of staff) and can thus deploy considerable resources with extensive experience to deal with any archaeological obligations you or your clients may have. We have offices in Lancaster, Oxford and Cambridge, trading as Oxford Archaeology North (OA North), Oxford Archaeology South (OA South), and Oxford Archaeology East (OA East) respectively, enabling us to provide a truly nationwide service. OA is an Institute of Archaeologists' Registered Organisation (No 17). All work on the project will be undertaken in accordance with relevant professional standards, including:
  - If A's Code of Conduct, (2012); Code of Approved Practice for the Regulation of Contractual Arrangements in Field Archaeology, (2008); Standard and Guidance for Archaeological Evaluations, (2008); Standard and Guidance for Archaeological Watching Briefs, (2008);
  - English Heritage's Management of Research Projects in the Historic Environment, 2006;
  - The European Association of Archaeologists Principles of Conduct for Archaeologists Involved in Contract Archaeological Work (1998).

#### 1.3 ARCHIVE DEPOSITION

1.3.1 The results of the archaeological investigation will form the basis of a full archive to professional standards, in accordance with current English Heritage guidelines (Management of Research Projects in the Historic Environment, 2006) and the Guidelines for the Preparation of Excavation Archives for Long Term Storage (UKIC 1990). The project archive represents the collation and indexing of all the data and material gathered during the course of the project. The deposition of a properly ordered and indexed project archive in an appropriate repository is considered an essential and integral element of all archaeological projects by the IfA in that organisation's code of conduct.

- 1.3.2 OA conforms to best practice in the preparation of project archives for long-term storage. It is intended that the archive and the excavated material be deposited with the Derby Museum and Art Gallery on The Strand, Derby; the project has been allocated a unique archive accession number (DBYMU 2012-329). The Derby and Derbyshire Development Control Archaeologist shall be notified via e-mail once the project archive has been deposited with the receiving museum.
- 1.3.3 The material and paper archive generated from the archaeological investigation will be transferred in accordance with the guidelines provided by *Procedures for the Transfer of Archaeological Archives* (2003). A further copy of the archive can be made available for deposition in the National Archaeological Record. In addition, the Arts and Humanities Data Service (AHDS) online database project *Online Access to index of Archaeological Investigations* (OASIS) will be completed as part of the archiving phase of the project.

#### 2. AIMS AND OBJECTIVES

- 2.1.1 The main aim of the investigation will be to determine the presence, character, date, extent, depth and significance of any buried archaeological remains on the site. Additional objectives include:
  - to inform a decision as to whether further archaeological investigation will be required in advance of development ground works;
  - to deposit a complete and integrated project archive with The Derby Museum and Art Gallery.

#### 3 METHOD STATEMENT

#### 3.1 SITE SET-UP

- 3.1.1 The programme of evaluation trenching will comprise the excavation of six trenches across Parker's Piece, and nine trenches across Darley Playing Fields. All trenches will measure 30 x 1.8m, and will be excavated to the surface of significant archaeological remains. In addition, a targeted auger sample or small test pit will be taken from the railway embankbank to the rear of the pavilion on Parker's Piece to establish the depth of the railway embankment material and the depth at which further Roman remains may be expected to survive. Prior to the commencement of any excavation, the position of the trenches will be surveyed accurately, and marked on the ground. Each trench will then be scanned for buried services suing a cable-avoidance tool prior to excavation.
- 3.1.2 The trenches and a small compound for welfare facilities and tool storage will be enclosed by double-clipped Herras-type fencing. The welfare facilities will provide washing and mess facilities for the field staff, together with a toilet, and will have electricity and hot and cold water.

#### 3.2 EVALUATION

- 3.2.1 *General Methodology:* excavation of the topsoil/turf will be undertaken carefully by a tracked excavator of appropriate power (*c* 5 tonne) fitted with a toothless ditching bucket. The turf will be stacked carefully on the side of each trench ready for replacement on completion of the work. The work will be supervised closely by a suitably experienced archaeologist. Thereafter, all deposits will be cleaned manually to define their extent, nature, form and, where possible, date. Spoil will be stored on plastic sheeting adjacent to the trench, and will be backfilled upon completion of the archaeological works.
- 3.2.2 All excavation will proceed in a stratigraphical manner. Pits and postholes will, in general terms, be subject to a 50% by volume controlled stratigraphic excavation, thereby providing a full vertical section for examination and recording. Linear cut features, such as ditches and gullies, will be subject to a maximum of 20% by volume controlled stratigraphic excavation, with the excavation concentrating on any terminals and intersections with other features which would provide important stratigraphic information. Should it prove necessary to remove the remainder of the feature to expose underlying features and/or deposits, it will be excavated quickly.
- 3.2.3 Extensive linear deposits or homogeneous spreads of material will be sample excavated by hand to a maximum of 50% by volume. If features/deposits are revealed which need to be removed and which are suitable for machine excavation, such as large-scale post-medieval dump deposits, then they would be sample excavated to confirm their homogeneity before being removed by machine. Any such use of a mechanical excavator will be agreed in advance with the Environment Agency Archaeologist and in consultation with the Derbyshire Development Control Archaeologist.

- 3.2.4 All information identified in the course of the site works will be recorded stratigraphically, using a system, adapted from that used by the Centre for Archaeology of English Heritage (CfA), with sufficient pictorial record (plans, sections and both black and white and digital colour photographs) to identify and illustrate individual features.
- 3.3.1 *Context Recording:* the features will be recorded using *pro-forma* sheets which are in accordance with those used by CfA. Similar object record and photographic record *pro-formas* will be used. All written recording of survey data, contexts, photographs, artefacts and ecofacts will be cross referencable from *pro-forma* record sheets using sequential numbering. The contextual details will be incorporated into a Harris matrix, which is normally generated using specially designed ArchEd matrix generation software.
- 3.3.2 **Photography:** a full and detailed photographic record of individual contexts will be maintained and similarly general views from standard view points of the overall site at all stages of the excavation will be generated. Photography will be undertaken using 35mm cameras on archivable black and white print film, and all frames will include a visible, graduated metric scale. Extensive use of digital photography will also be undertaken throughout the course of the fieldwork. Records will be maintained on special photographic *pro-forma* sheets.
- 3.3.3 *Planning:* archaeological planning will be undertaken using a combination of manually-drafted drawings and instrument survey, and the data will be digitally incorporated into a CAD system. All information will be tied in to Ordnance Datum. The precise location of each excavation trench, and the outline of all archaeological features encountered, will be surveyed by EDM tacheometry using a total station linked to a pen computer data logger. This process will generate scaled plans within AutoCAD software, which will then be subject to manual survey enhancement. The drawings will be generated at an accuracy appropriate for 1:20 scale, but can be output at any scale.
- 3.3.4 All excavated sections across individual features will be drawn using manual techniques, and for the most part will be generated manually at a scale of 1:10. Pending the type of shoring to be used by the main contractor, the sections of the trenches will similarly be manually drafted, although a total station has proved to be a cost effective tool for drawing very long sections.

#### 3.6 FINDS

3.6.1 Finds recovery and sampling programmes will be in accordance with best practice (current IfA guidelines) and subject to expert advice. OA has close contact with Ancient Monuments Laboratory staff at the Universities of Durham and, in addition, employs in-house artefact and palaeoecology specialists, with considerable expertise in the investigation, excavation, and finds management of sites of all periods and types, who are readily available for consultation. Finds storage during fieldwork and any site archive preparation will follow professional guidelines (UKIC). Emergency access to conservation facilities is maintained by OA North with the Department of Archaeology, the University of Durham.

- 3.6.2 Artefacts and ecofacts will be collected and handled as per specification. All material will be collected and identified by stratigraphic unit. Hand collection by stratigraphic unit will be the principal method of collection. Objects deemed to be of potential significance to the understanding, interpretation and dating of individual features, or of the site as a whole, will be recorded as individual items, and their location plotted in 3-D.
- 3.6.4 Finds will be processed and administered at regular intervals (on a daily basis) and removed from the site. All finds will be treated in accordance with OA standard practice, which is cognisant of IfA and UKIC Guidelines. In general this will mean that (where appropriate or safe to do so) finds are washed, dried, marked, bagged and packed in stable conditions; no attempt at conservation will be made unless special circumstances require prompt action. In such case guidance will be sought from OA North's consultant conservator, Karen Barker.
- 3.6.5 All waterlogged finds will be treated as appropriate. In the case of large deposits of waterlogged environmental material (*eg* unmodified wood), advice will be sought with the OA North consultant with regard to an appropriate sampling strategy.
- 3.6.6 Any gold and silver artefacts recovered during the course of the excavation will be removed to a safe place and reported to the local Coroner according to the procedures relating to the Treasure Act, 1996.

#### 3.7 ENVIRONMENTAL SAMPLING

- 3.7.1 A programme of palaeo-environmental sampling will be carried out during the excavation in accordance with the guidelines provided by English Heritage (2002). The sampling programme will proceed under the guidance of the in-house palaeo-environmental expertise (Elizabeth Huckerby). Samples will be collected for technological, pedological and chronological analysis as appropriate. Particular attention will be paid to the recovery of environmental evidence of pre-Roman and Roman date.
- 3.7.2 The contexts will be sampled as appropriate, subject to palaeo-environmental survival, and an assessment of the samples will be undertaken by Elizabeth Huckerby as part of the assessment stage of the *MAP2* programme. In the event of substantial cultivation horizons being encountered, particularly those constituting a 'dark earth', monolith, in addition to bulk, samples will be taken, which will be assessed for pollen and plant macrofossils.
- 3.7.3 Bulk (30 litres) samples will be taken from all sealed pit fills, and particularly from any discrete fills within single pits, which may provide evidence for a change in function. Attention will also be paid to the identification of insects, and a sampling strategy shall be devised accordingly. It is proposed that the floatation of suitable samples be undertaken off site following completion of the fieldwork. OA North has full access to the laboratory facilities of the Institute of Environmental and Biological Sciences at Lancaster University, where assessment would be undertaken.

3.7.4 Bone recovered from stratified deposits will be subject to assessment, and analysis will be limited to material that can provide metrical, ageing or sex information. Attention will be paid to the collection of small animal bones from stratified contexts, and to the retrieval of fish bones and molluscs from pits.

#### 3.8 BURIALS

3.8.1 Human remains are not expected to be present, but if they are found they will, if possible, be left *in-situ*, covered and protected. The remains will then be subject to a formal appraisal by an appropriate specialist, which will inform the Development Control Archaeologist as to whether the remains merit further study. If removal is necessary, then the relevant Department of Cultural Affairs permission will be sought, and the removal of such remains will be carried out with due care and sensitivity, as required by current legislation.

#### 3.9 MONITORING

3.9.1 During the course of the fieldwork, it is anticipated the Environment Agency Archaeologist and the Derbyshire Development Control Archaeologist will undertake monitoring visits. No backfilling of trenches will be carried out without the approval of the Environment Agency Archaeologist.

#### 3.10 POST-EXCAVATION

- 3.10.1 Post-excavation work will comprise the following:
  - checking of drawn and written records during and on completion of fieldwork;
  - production of a stratigraphic matrix of the archaeological deposits and features present on the site, if appropriate;
  - cataloguing of photographic material, which will be mounted appropriately
  - cleaning, bagging and labelling of finds according to the individual deposits from which they were recovered. Any finds requiring specialist treatment and conservation will be sent to an appropriate Conservation Laboratory. Finds will be identified and dated by appropriate specialists;
  - assessment of all artefacts, biological samples and soils recovered from the site, providing recommendations for further analysis;
  - assessment of any technological residues recovered will be undertaken, providing recommendations for further analysis.

#### 3.11 Interim Report Production

3.11.1 In the first instance, an interim report will be produced for both of the areas subject to evaluation trenching. Upon completion of the entire programme of fieldwork, a brief post-excavation assessment report will be produced in accordance with current IfA and English Heritage guidelines.

#### 3.12 POST-EXCAVATION ASSESSMENT REPORT

- 3.12.1 A draft copy of a written synthetic report will be submitted for comment to the Environment Agency Archaeologist by 2nd August. The post-excavation assessment report will present a review of the archaeological evidence recovered from the evaluation, specialist assessments, and recommendations for further analysis and, where appropriate, publication. The report will include:
  - a title page detailing site address, NGR, author/originating body, client's name and address;
  - full content's listing;
  - a non-technical summary of the findings of the fieldwork;
  - a description of the archaeological background;
  - a detailed account of the historical development of the site, accompanied with map regression analysis;
  - a description of the topography and geology of the study area;
  - a description of the methodologies used during the fieldwork;
  - a description of the findings of the fieldwork;
  - detailed plans of the excavated trenches, showing the archaeological features exposed;
  - an overall phased plan with sections of the excavated archaeological features;
  - interpretation of the archaeological features exposed and their context within the surrounding landscape;
  - specialist assessment reports on the artefactual/ecofactual/industrial remains from the site, which will include recommendations for the retention or discard of finds and samples;
  - appropriate photographs of specific archaeological features;
  - a consideration of the importance of the archaeological remains present on the site in local, regional and national terms, and the potential impact of development on the remains;
  - an archive statement providing a summary of the archive contents, details of the receiving museum and the archive accession number, and a proposed deposition date.

3.12.2 Once the report has been finalised, a bound copy will be forwarded to the Development Control Archaeologist for inclusion in the Derbyshire Historic Environment Record; a digital copy in PDF format will also be forwarded on CD. Hard copies of the report will also be made available to the Environment Agency, and the local archaeological society, as required.

#### 3.13 OTHER MATTERS

- 3.13.1 The client is asked to provide OA North with information relating to the position of live services on the site. OA North will use a cable detecting tool in advance of any excavation.
- 3.13.2 Normal OA North working hours are between 9.00 am and 5.00 pm, Monday to Friday, though adjustments to hours may be made to maximise daylight working time in winter and to meet travel requirements. It is not normal practice for OA North staff to be asked to work weekends or bank holidays and should the client require such time to be worked during the course of a project a contract variation to cover additional costs will be necessary.

#### 3.14 HEALTH AND SAFETY

- 3.14.1 Full regard will be given to all constraints during the course of the project. OA North provides a Health and Safety Statement for all projects and maintains a Safety Policy. All site procedures are in accordance with the guidance set out in the Health and Safety Manual compiled by the Standing Conference of Archaeological Unit Managers.
- 3.14.2 OA North undertakes to safeguard, so far as is reasonably practicable, the health, safety and welfare of its staff and of others who may be affected by our work. OA North will also take all reasonable steps to ensure the health and safety of all persons not in their employment, such as volunteers, students, visitors, and members of the public (this includes trespassers). OA North will ensure, as far as is reasonably practicable, that no one suffers injury because of dangers arising from the state of the premises, or things done, or omitted to be done, on the premises.
- 3.14.3 OA North is fully familiar with and will comply with all current and relevant legislation, including, but not limited to:
  - The Health and Safety at Work Act (1974);
  - Management of Health and Safety at Work Regulations (1999);
  - Manual Handling Operations Regulations 1992 (as amended in 2002);
  - The Construction (Design and Management) Regulations (2007);
  - The Control of Asbestos Regulations (2006);
  - Confined Spaces Regulations (1997);
  - Construction (Health, Safety and Welfare) Regulations (1996);
  - The Health and Safety (First-Aid) Regulations (1981);
  - Lifting Operations and Lifting Equipment Regulations (1998).

#### 4 RESOURCES AND PROGRAMMING

#### 4.1 STAFF PROPOSALS

- 4.1.1 The project team will be led by a Senior Project Manager (SPM), **Ian Miller BA, FSA**. Ian has more than 25 years continuous experience of professional archaeology, and has been responsible for the project management of numerous evaluations and excavations of Roman-period remains. Ian was also responsible for project managing the programme of evaluation trenching carried out most recently on Bold Lane in Derby.
- 4.1.2 Ian will provide strategic project management, financial and resource management, and will co-ordinate the provision of specialist input, liaising externally with sub-contractors and internally with OA staff and managers. He will be responsible for all aspects of staff and resource logistics, ensuring the smooth running of the project programme. He will liase with the client and the Development Control Archaeologist with regard to progress, and will maintain relationships with other contractors.

Ian can be contacted on 07717 458395.

4.1.2 Day to day running of the fieldwork will be undertaken by **Andrew Frudd** (OA North Project Officer). Andrew has over 10 years experience of commercial archaeology. He has directed numerous programmes of archaeological evaluation and excavation in both urban and rural contexts throughout Britain.

Andrew can be contacted on 07919 912896.

- 4.1.3 **Christine Howard-Davis BA, MIFA** (OA North Finds Manager) would undertake the necessary finds management. In addition, she has many years' experience of finds analysis, and is a recognised expert in the analysis of Roman and metalwork and glasswork.
- 4.1.4 **Environmental management** will be undertaken by **Elizabeth Huckerby BA, MSc** (OA North Project Officer), who will also provide specialist input on pollen analysis/charred and waterlogged plant remains. Elizabeth has extensive knowledge of the palaeo-ecology of the North West, and has contributed to all of the English Heritage funded volumes of the Wetlands of the North West. Elizabeth will advise on site sampling procedures and co-ordinate the processing of samples and organise internal and external specialist input as required.
- 4.1.5 It is not possible to provide details of specific technicians that will be involved with the fieldwork at this stage, but all shall be suitably qualified archaeologists with proven relevant experience. It is anticipated that up the ten technicians will be required during the course of the fieldwork.

#### 4.2 PROGRAMMING

- 4.2.1 The evaluation will be carried out in two stages. The first stage will comprise the excavation of seven trenches across Parker's Piece (Figure 1). The excavation of these trenches will commence on 8<sup>th</sup> April 2013, and will be completed by 19<sup>th</sup> April. A short interim report will be produced by 17<sup>th</sup> May 2013.
- 4.2.2 The second stage will commence on 20<sup>th</sup> May 2013, and will comprise the excavation of nine trenches across Darley Playing Fields. The trenches will be backfilled by 8<sup>th</sup> June 2013. A short interim report will be produced by 5<sup>th</sup> July 2013.
- 4.2.3 A final draft assessment report will be submitted by 2<sup>nd</sup> August 2013.

### APPENDIX 2: SUMMARY FINDS CATALOGUE

Context	OR number	Material	Category	Туре	Count
Trench 1					
101	1082	Ceramic	building material		3
101	1081	Ceramic	vessel		3
101	1121	Iron	hook		1
102	1077	Bone	animal		38
103	1078	Ceramic	vessel		2
Trench 2					
201	1143	Bone	human		16
201	1142	Bone	human		17
201	1137	Bone	human		28
201	1141	Bone	human		29
201	1139	Bone	human		60
201	1135	Bone	human		29
201	1145	Bone	human		60
201	1144	Bone	human		47
201	1136	Bone	human		2
201	1138	Bone	human		30
201	1142	Bone	human		34
201	1047	Ceramic	building material		2
201	1046	Ceramic	building material		1
201	1048	Ceramic	vessel		3
201	1140	Ceramic	vessel		1
201	1043	Cu alloy	bullet		2
201	1085	Cu alloy	door knob		9
201	1090	Cu alloy	object		4
201	1072	Iron	hook		5

Context	OR number	Material	Category	Туре	Count
201	1089	Iron	object		2
202	1069	Bone	animal		1
202	1066	Ceramic	vessel		5
202	1070	Cu alloy	object		1
202	1067	Glass	vessel		7
202	1068	Ind debris			1
202	1065	Iron	tool		1
202	1064	Iron	object		1
203	1055	Ceramic	vessel		6
203	1056	Glass	vessel		1
204	1049	Bone	animal		1
204	1052	Ceramic	building material		6
204	1051	Ceramic	vessel		2
204	2120	Ceramic	vessel		2
204	1050	Glass	vessel		6
204	2121	Ind debris			2
208	1095	Bone	animal		15
210	1061	Bone	animal		3
210	1062	Ceramic	building material		4
210	1063	Ceramic	vessel		16
210	2196	Ceramic	vessel	samian	2
210	1060	Iron	object		2
211	1092	Cu alloy	knob		1
213	1091	Bone	animal		60
213	1059	Ceramic	vessel		8
213	1071	Ceramic	vessel		17
213	1087	Iron	nail		5
215	1057	Ceramic	building material		1

Context	OR number	Material	Category	Type	Count
215	1058	Ceramic	vessel		1
284	1146	Ind debris			1
Trench 3					
301	1116	Bone	animal		3
301	1120	Ceramic	building material		13
301	1119	Ceramic	vessel		23
301	1040	Cu alloy	strip, coin		4
301	1042	Cu alloy	object		1
301	1118	Glass			2
301	1117	Ind debris			3
301	1041	Ind debris			1
302	1076	Bone	animal		39
302	1131	Ceramic	building material		15
302	1114	Ceramic	building material		4
302	1075	Ceramic	vessel		25
302	1098	Ceramic	vessel		2
302	1073	Cu alloy	sheet		1
302	1115	Ind debris			4
302	1074	Ind debris			4
302	1099	Ind debris			2
302	1100	Iron	object		1
303	1129	Ceramic	building material		10
303	1053	Ceramic	vessel		17
303	1054	Glass	vessel		8
303	1130	Iron	object		2
304	1018	Bone	animal		18
304	1103	Bone	animal		6
304	1011	Bone	animal		4

Context	OR number	Material	Category	Туре	Count
304	1105	Ceramic	building material		3
304	1037	Ceramic	building material		2
304	1019	Ceramic	building material		2
304	1104	Ceramic	vessel		3
304	1012	Ceramic	vessel		4
304	1021	Ceramic	vessel		14
304	1036	Ceramic	vessel		8
304	2199	Ceramic	vessel	samian	1
304	1038	Ind debris			2
304	1020	Ind debris			1
304	1016	Iron	object		2
304	1017	Lead	object		1
304	1039	Stone	object		1
305	1005	Bone	animal		17
305	1004	Ceramic	building material		3
305	1006	Ceramic	vessel		4
307	1013	Bone	animal		5
307	1014	Ceramic	vessel		1
307	2197	Ceramic	vessel	samian	2
309	1096	Bone	animal		4
309	1097	Ceramic	vessel		8
312	1125	Bone	animal		2
312	1008	Bone	animal		14
312	1123	Ceramic	building material		6
312	1009	Ceramic	building material		7
312	1007	Ceramic	vessel		8
312	1124	Ceramic	vessel		1
317	1094	Bone	animal		4

Context	OR number	Material	Category	Туре	Count
317	1101	Ceramic	building material		2
317	1102	Ceramic	vessel		3
319	1079	Ceramic	building material		1
321	1113	Bone	animal		16
321	1112	Ceramic	building material		8
321	1111	Ceramic	vessel		12
321	2198	Ceramic	vessel	samian	1
324	1107	Ceramic	vessel		5
326	1126	Bone	animal		7
326	1128	Ceramic	building material		5
326	1127	Ceramic	vessel		21
327	1110	Bone	animal		6
327	1109	Ceramic	building material		3
327	1108	Ceramic	vessel		4
328	1086	Ceramic	vessel		2
329	1044	Bone	animal		1
329	1049	Ceramic	vessel	samian	3
Trench 4		1	1	1	
401	1030	Ceramic	building material		16
401	1027	Ceramic	vessel		4
401	1028	Cu alloy	Coin, object		4
401	1029	Lead	plaque		1
402	1025	Bone	animal		4
402	1026	Ceramic	building material		13
402	1022	Ceramic	vessel		9
402	1023	Glass			2
402	1024	Ind debris			1

Context	OR number	Material	Category	Туре	Count
Trench 5			<u>'</u>		
501	1032	Ceramic	building material		4
501	1031	Ceramic	vessel		3
501	1084	Cu alloy	object		2
501	1083	Iron	object		4
502	1033	Ceramic	vessel		4
503	1035	Bone	animal		4
503	1034	Ceramic	building material		24
503	1010	Ceramic	building material		13
503	1088	Iron	object		4
504	1044	Ceramic	building material		2
504	1093	Iron	object		2
505	1106	Ceramic	building material		3
Trench 6					
601	1001	Ceramic	building material		3
601	1000	Ceramic	vessel		3
601	1002	Iron	object		1
601	1080	Lead	toy soldier		1
603	1134	Bone	animal		5
603	1132	Ceramic	building material		4
603	1003	Ceramic	building material		14
603	1133	Ceramic	vessel		4
606	1015	Ceramic	vessel		1
Trench 7					
701	2222	Ceramic	building material		3
701	2223	Ceramic	vessel		3
701	2236	Ind debris			3
704	2241	Bone	animal		1

Context	OR number	Material	Category	Туре	Count
704	2239	Ceramic	building material		1
704	2244	Ceramic	vessel		11
704	2248	Ceramic	vessel		2
704	2240	Ceramic	vessel		1
704	2249	Glass	vessel		6
704	2238	Glass	vessel		2
704	2245	Glass	vessel		2
704	2246	Ind debris			6
704	2247	Ind debris			3
704	2237	Ind debris			3
706	2235	Bone	animal		1
706	2234	Ceramic	vessel		6
708	2242	Bone	animal		1
708	2243	Ceramic	building material		9
Trench 8					
801	2050	Bone	animal		3
801	2051	Ceramic	vessel		8
801	2203	Ceramic	vessel	samian	1
802	2159	Ceramic	vessel		9
802	2158	Glass	vessel		4
804	2149	Ceramic	building material		1
804	2146	Ceramic	vessel		15
804	2147	Glass	vessel		2
804	2148	Ind debris			1
806	2142	Ceramic	vessel		1
806	2141	Ind debris			3
807	0	Ceramic	vessel		1
807	0	Lead	drip		1

Context	OR number	Material	Category	Туре	Count
808	2039	Bone	animal		22
808	2040	Ceramic	vessel		22
808	0	Cu alloy	brooch		1
808	0	Stone	quern		1
809	2144	Ceramic	vessel		1
818	2031	Bone	animal		2
818	2029	Ceramic	building material		1
818	2030	Ceramic	vessel		2
Trench 9					
902	2019	Bone	animal		1
902	2018	Ceramic	building material		2
902	2017	Ceramic	vessel		2
902	2207	Ceramic	vessel	samian	3
903	2194	Ceramic	vessel		18
903	2193	Ceramic	vessel		4
903	2227	Ceramic	vessel		4
903	2195	Glass			2
903	2229	Glass	vessel		1
903	2228	Ind debris			1
903	2230	Ind debris			2
905	2232	Bone	animal		1
905	2231	Ceramic	vessel		2
905	2233	Ind debris			3
908	2036	Bone	animal		8
908	2038	Ceramic	vessel		2
908	2209	Ceramic	vessel	samian	5
908	2037	Glass	vessel		1
910	0	Silver	coin		1

Context	OR number	Material	Category	Туре	Count
912	2032	Bone	animal		23
912	2041	Bone	animal		4
912	2034	Ceramic	building material		3
912	2040	Ceramic	building material		1
912	2033	Ceramic	vessel		7
912	2208	Ceramic	vessel	samian	2
912	2041	Ceramic	vessel	samian	2
912	0	Cu alloy	brooch		1
912	2035	Iron	object		2
915	0	Cu alloy	brooch		1
916	2024	Bone	animal		17
916	2025	Ceramic	vessel		19
917	2027	Bone	animal		5
917	2026	Ceramic	building material		1
917	2028	Iron	object		1
919	0	Lead	sheet		1
Trench 10	0				1
1002	2037	Bone	animal		7
1002	2058	Ceramic	building material		3
1002	2059	Ceramic	vessel		16
1003	2065	Bone	animal		3
1003	2066	Ceramic	building material		2
1003	2067	Ceramic	vessel		13
1003	1003	Ceramic	vessel	samian	1
1003	0	Cu alloy	brooch		1
1004	2060	Bone	animal		10
1004	2061	Ceramic	building material		3
1004	2061	Ceramic	vessel		29

Context	OR number	Material	Category	Туре	Count
1004	2200	Ceramic	vessel	samian	6
1004	0	Cu alloy	coin		1
1004	2091	Ind debris			2
1004	0	Ind debris	galena		1
1006	2046	Ceramic	vessel	samian	1
1009	2064	Bone	animal		4
1009	2063	Ceramic	building material		2
1009	2062	Ceramic	vessel		11
1009	2217	Ceramic	vessel	mortarium	1
1009	2216	Ceramic	vessel	samian	1
1019	2051	Bone	animal		13
1019	2163	Bone	animal		8
1019	2052	Ceramic	building material		5
1019	2164	Ceramic	building material		3
1019	2162	Ceramic	vessel		36
1019	2053	Ceramic	vessel		66
1019	2213	Ceramic	vessel	mortarium	8
1019	2160	Ceramic	vessel	mortarium	4
1019	2214	Ceramic	vessel	samian	12
1019	2161	Ceramic	vessel	samian	4
1019	0	Lead	drip		1
1019	0	Lead	drip		1
1019	2165	Stone	object		1
1019	0	Stone	quern		1
Trench 11	1	'			
1101	2134	Ceramic	building material		3
1101	2133	Ceramic	vessel		12
1101	2135	Glass	vessel		1

Context	OR number	Material	Category	Туре	Count
1103	2204	Ceramic	vessel		8
1103	2265	Glass	vessel		3
1103	2266	Ind debris			2
1105	2136	Ceramic	vessel		3
1106	2070	Ceramic	vessel		16
1109	2124	Ceramic	building material		2
1109	2122	Ceramic	tobacco pipe		2
1109	2123	Ceramic	vessel		1
1109	2125	Ceramic	vessel	mortarium	1
1111	2132	Ceramic	building material		5
1111	2133	Ceramic	vessel		2
1112	2268	Bone	animal		1
1112	2267	Ceramic	building material		6
1112	2269	Ceramic	vessel		1
1112	2270	Glass	vessel		1
1113	2085	Ceramic	building material		1
1113	2086	Ceramic	vessel	mortarium	1
1113	2215	Ceramic	vessel	samian	1
1114	2139	Bone	animal		15
1114	2140	Ceramic	vessel		3
1117	2138	Ceramic	vessel		12
1117	2137	Ceramic	vessel	samian	1
Trench 12	2	'			
1203	2253	Bone	animal		20
1203	2097	Bone	animal		15
1203	2089	Bone	animal		11
1203	2095	Ceramic	building material		1
1203	2092	Ceramic	building material		1

Context	OR number	Material	Category	Туре	Count
1203	2088	Ceramic	vessel		7
1203	2096	Ceramic	vessel		7
1203	2252	Ceramic	vessel		40
1203	2252	Ceramic	vessel	mortarium	5
1203	2250	Ceramic	vessel	samian	6
1203	0	Cu alloy	ligula		1
1203	2254	Ind debris			1
1203	2252	Iron	object		2
1203	2090	Iron	object		1
1206	2108	Ceramic	vessel		18
1208	2115	Ceramic	vessel	samian	3
1208	2114	Ind debris			1
1209	2108	Ceramic	vessel		8
1209	2107	Glass			1
1213	2255	Bone	animal		164
1213	2109	Bone	animal		1
1213	2110	Ceramic	vessel		10
1217	2080	Bone	animal		1
1217	2076	Bone	animal		2
1217	2100	Bone	animal		9
1217	2099	Ceramic	building material		5
1217	2075	Ceramic	building material		5
1217	2079	Ceramic	building material		18
1217	2098	Ceramic	vessel		24
1217	2077	Ceramic	vessel		206
1217	2220	Ceramic	vessel	mortarium	4
1217	2211	Ceramic	vessel	mortarium	2
1217	2212	Ceramic	vessel	samian	9

Context	OR number	Material	Category	Туре	Count
1217	2117	Ceramic	vessel	samian	1
1217	2118	Ind debris			2
1217	2078	Iron	object		1
1217	2119	Iron	object		6
1218	2082	Bone	animal		12
1218	2081	Ceramic	building material		2
1218	2098	Ceramic	vessel		7
1218	2084	Ceramic	vessel		40
1218	2221	Ceramic	vessel	mortarium	1
1218	2116	Ceramic	vessel	samian	2
1218	2094	Ind debris			3
1218	2083	Iron	object		4
1219	2113	Bone	animal		1
1219	2112	Ceramic	vessel		13
1219	2111	Ceramic	vessel	samian	1
1220	2106	Ceramic	vessel		1
Trench 1	3				
1302	2174	Bone	animal		13
1302	2173	Ceramic	vessel		13
1302	2171	Ceramic	vessel	mortarium	1
1302	2172	Ceramic	vessel	samian	3
1311	2104	Bone	animal		6
1311	2105	Iron	object		1
1313	2103	Ceramic	vessel		8
1313	2047	Ceramic	vessel	samian	2
1317	2193	Bone	animal		34
1317	2156	Bone	animal		10
1317	2187	Ceramic	building material		2

Context	OR number	Material	Category	Type	Count
1317	2157	Ceramic	building material		1
1317	2155	Ceramic	vessel		28
1317	2186	Ceramic	vessel		23
1317	2184	Ceramic	vessel	samian	2
1317	2154	Ceramic	vessel	samian	3
1317	2189	Ind debris			3
1317	2188	Iron	object		1
1319	2072	Bone	animal		28
1319	2071	Ceramic	building material		1
1319	2073	Ceramic	vessel		14
1319	2204	Ceramic	vessel	mortarium	8
1319	2205	Ceramic	vessel	samian	4
1319	2074	Iron	object		3
1320	2256	Bone	animal		64
1320	2262	Bone	animal		17
1320	2178	Ceramic	building material		5
1320	2177	Ceramic	vessel		10
1320	2259	Ceramic	vessel		30
1320	2175	Ceramic	vessel	mortarium	1
1320	2260	Ceramic	vessel	mortarium	1
1320	2258	Ceramic	vessel	samian	3
1320	2261	Iron	object		2
1320	2179	Iron	object		2
1320	2180	Stone	slate		1
1320	2257	Stone	whetstone		2
1321	2054	Bone	animal		17
1321	2263	Bone	animal		6
1321	2055	Ceramic	building material		2

Context	OR number	Material	Category	Туре	Count
1321	2182	Ceramic	vessel		17
1321	2056	Ceramic	vessel		5
1321	2202	Ceramic	vessel	mortarium	1
1321	2201	Ceramic	vessel	samian	1
1321	2181	Iron	object		2
1322	2192	Bone	animal		1
1322	2190	Ind debris			2
1322	2191	Iron	object		2
1324	2168	Bone	animal		6
1324	2169	Ceramic	building material		4
1324	2170	Ceramic	vessel		23
1324	2166	Ceramic	vessel	samian	5
1324	2143	Cu alloy	object		1
1324	2167	Stone	whetstone		1
1325	2101	Bone	animal		5
1325	2102	Ceramic	vessel		5
Trench 1	4				
1403	2151	Ceramic	building material		1
1403	2150	Ceramic	tobacco pipe		2
1403	2152	Ceramic	vessel		5
1403	2153	Glass	vessel		4
1404	2185	Ceramic	vessel	samian	1
1408	2068	Bone	animal		5
1408	2069	Ceramic	vessel		13
1408	2218	Ceramic	vessel	samian	4
1410	2049	Ceramic	building material		1
1410	2048	Ceramic	vessel		1

Context	OR number	Material	Category	Туре	Count		
Trench 15	Trench 15						
1502	2224	Ceramic	vessel		2		
1502	2225	Glass	vessel		1		
1503	2022	Bone	animal		3		
1503	2023	Ceramic	building material		2		
1503	2206	Ceramic	vessel	samian	2		
1504	2043	Bone	animal		6		
1504	2042	Ceramic	vessel		19		
1504	2210	Ceramic	vessel	samian	3		
1504	2045	Ind debris			1		
1505	2044	Ceramic	building material		1		
1505	2021	Ceramic	vessel		31		
1506	2145	Ceramic	vessel		2		
1506	2020	Ceramic	vessel		8		
1506	2226	Ind debris			1		
1508	2131	Bone	animal		1		
1508	2130	Ceramic	vessel		11		
1508	2128	Ceramic	vessel	samian	1		
1509	2126	Ceramic	vessel		1		
1509	2127	Ceramic	vessel	samian	1		

#### **ILLUSTRATIONS**

1	٦	~-			
н	11	21	ш	QΙ	76

Figure 1	۱٠	Site	location
Libric .	١.	SHE	iocation

Figure 2: Location of the evaluation trenches

Figure 3: Location of the evaluation trenches across Parker's Piece

Figure 4: Location of the evaluation trenches across Darley Fields

Figure 5: Plans of Trenches 2 and 3 on Parker's Piece

Figure 6: Plans of Trenches 7 and 8 on Darley Fields

Figure 7: Plans of Trenches 9 and 10 on Darley Fields

Figure 8: Plans of Trenches 11 and 12 on Darley Fields

Figure 9: Plans of Trenches 13-15 on Darley Fields

Figure 10: Selected sections of excavated features

Figure 11: Sections of Trench 8

Figure 12: Areas of archaeological potential

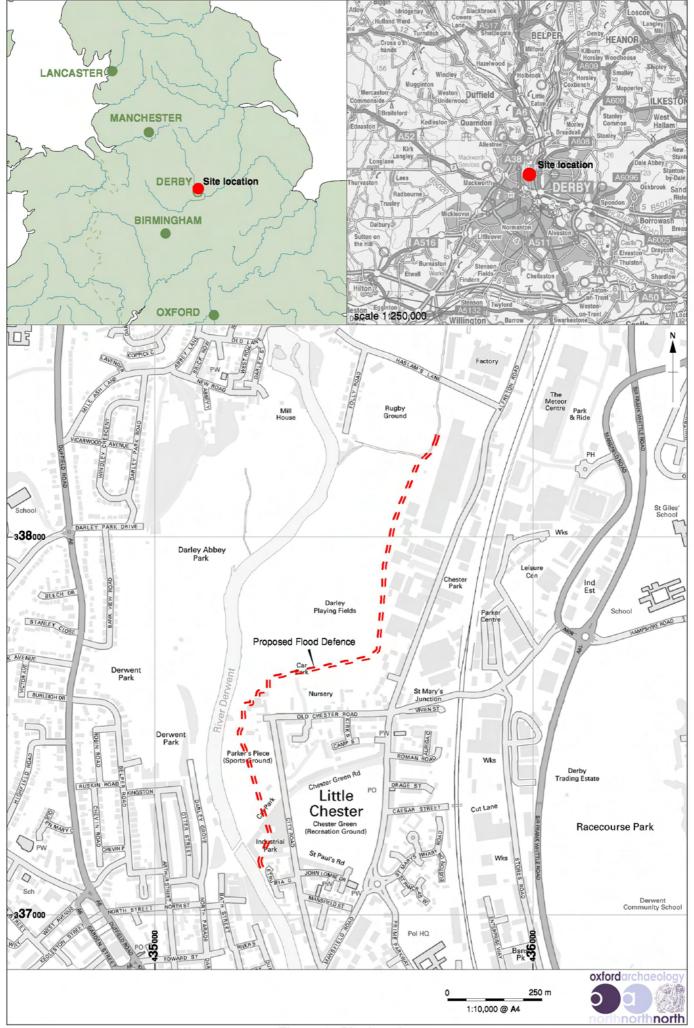


Figure 1: Site location

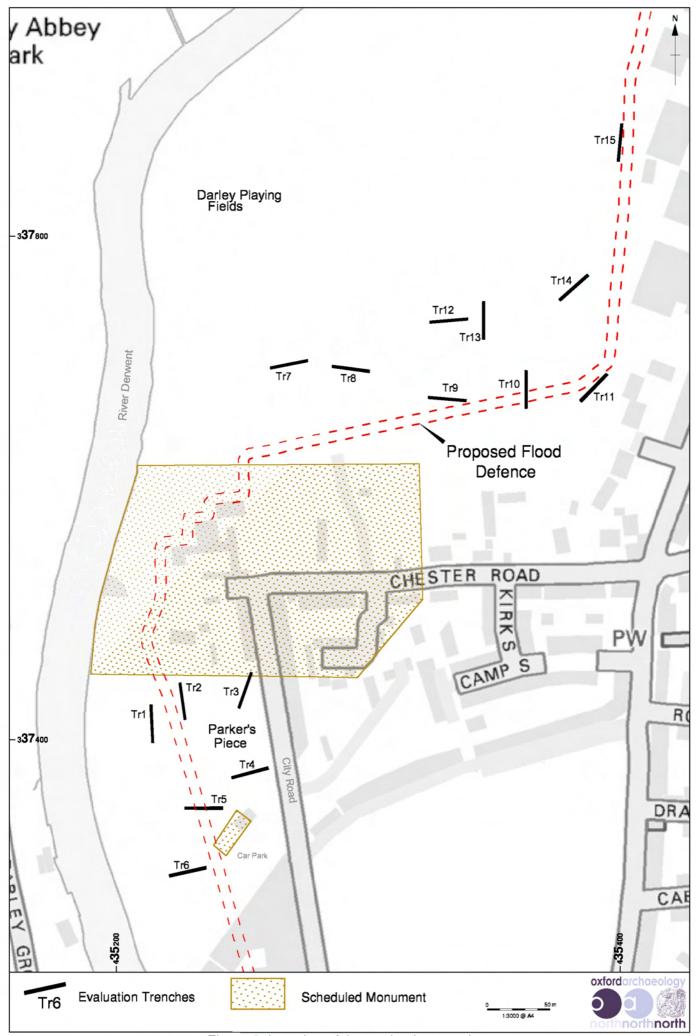


Figure 2: Location of the evaluation trenches

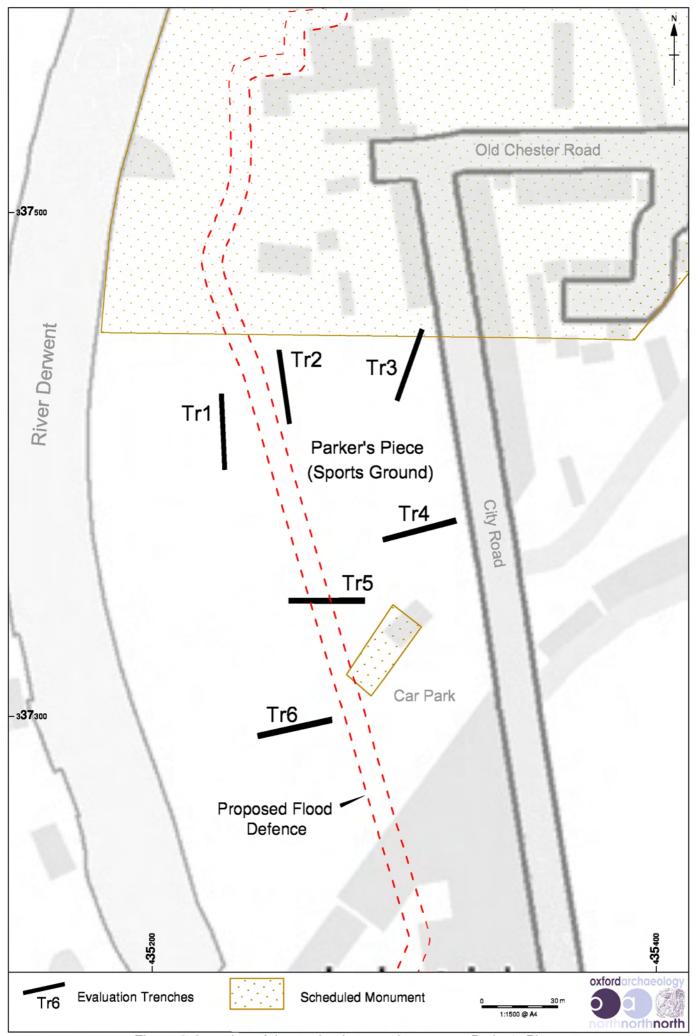


Figure 3: Location of the evaluation trenches across Parker's Piece

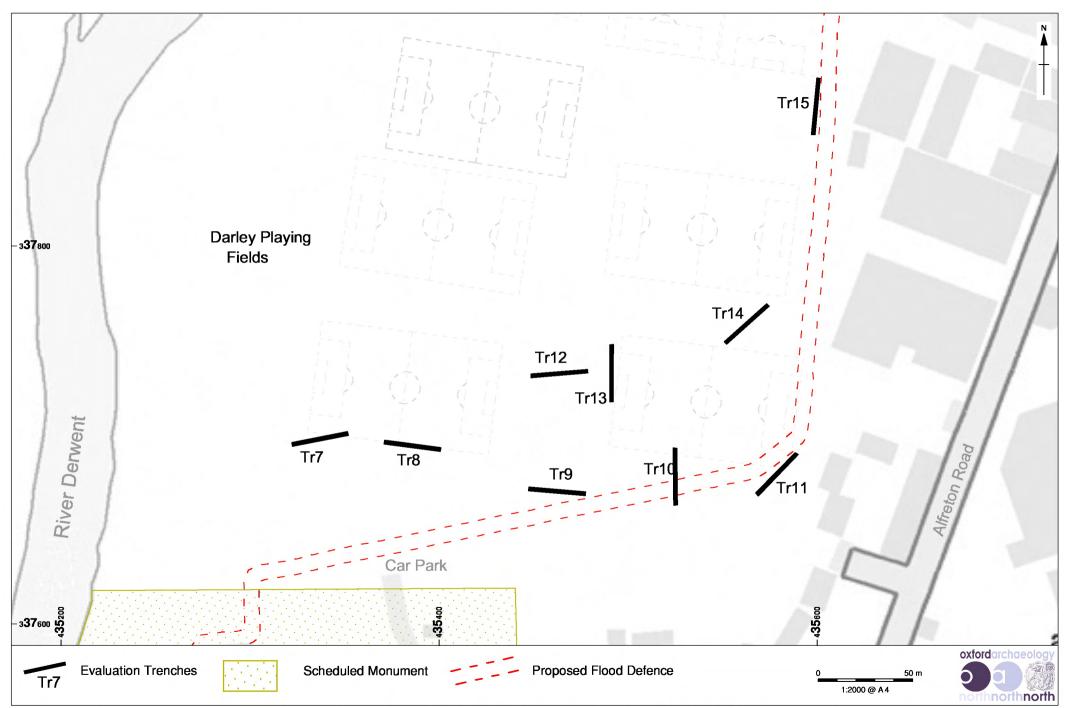


Figure 4: Location of the evaluation trenches across Darley Fields

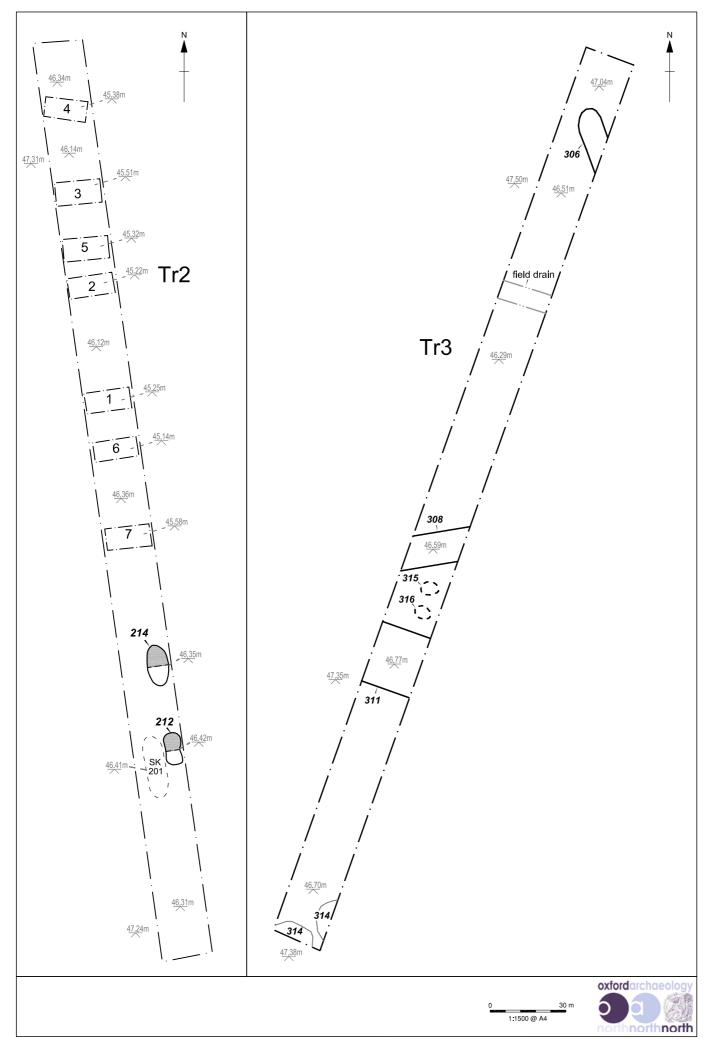


Figure 5: Plans of trenches 2 and 3 on Parker's Piece

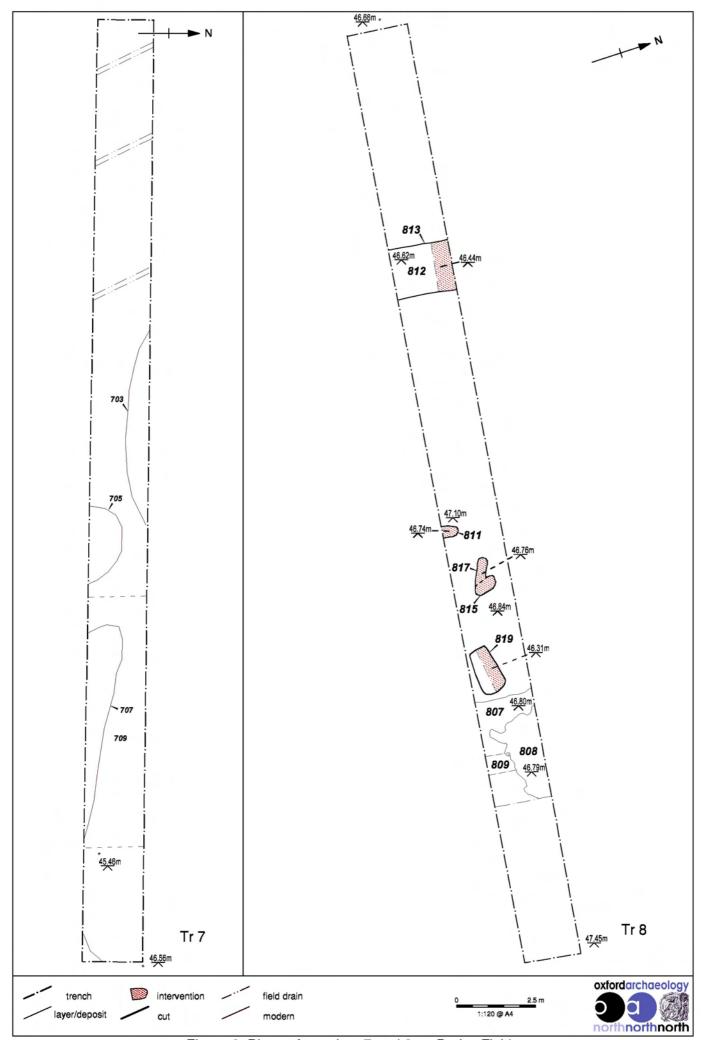


Figure 6: Plans of trenches 7 and 8 on Darley Fields

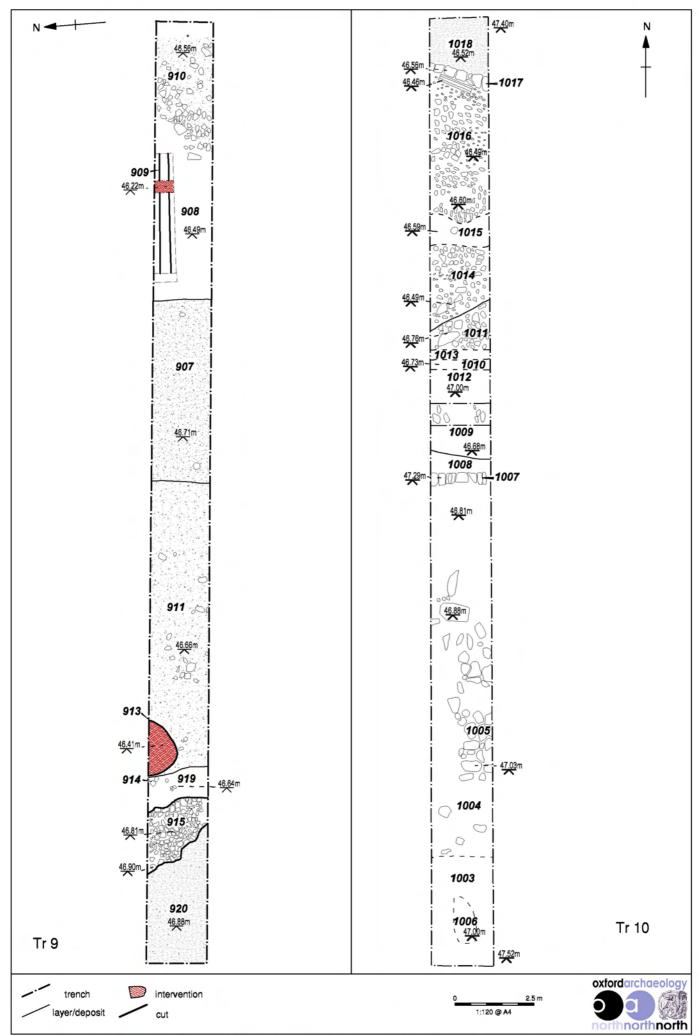


Figure 7: Plans of trenches 9 and 10 on Darley Fields

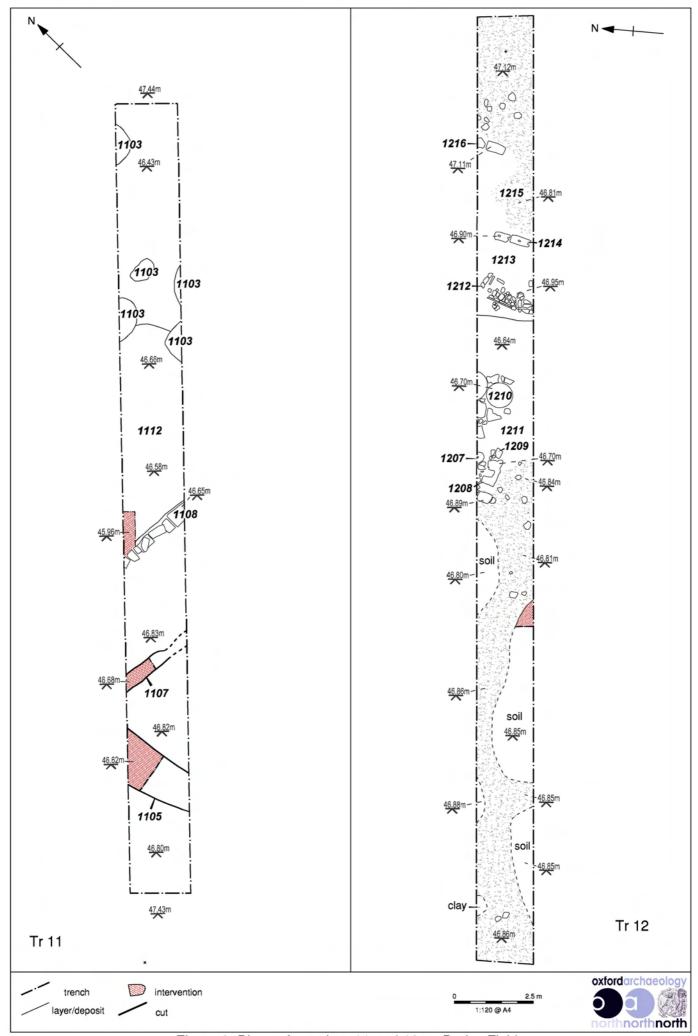


Figure 8: Plans of trenches 11 and 12 on Darley Fields

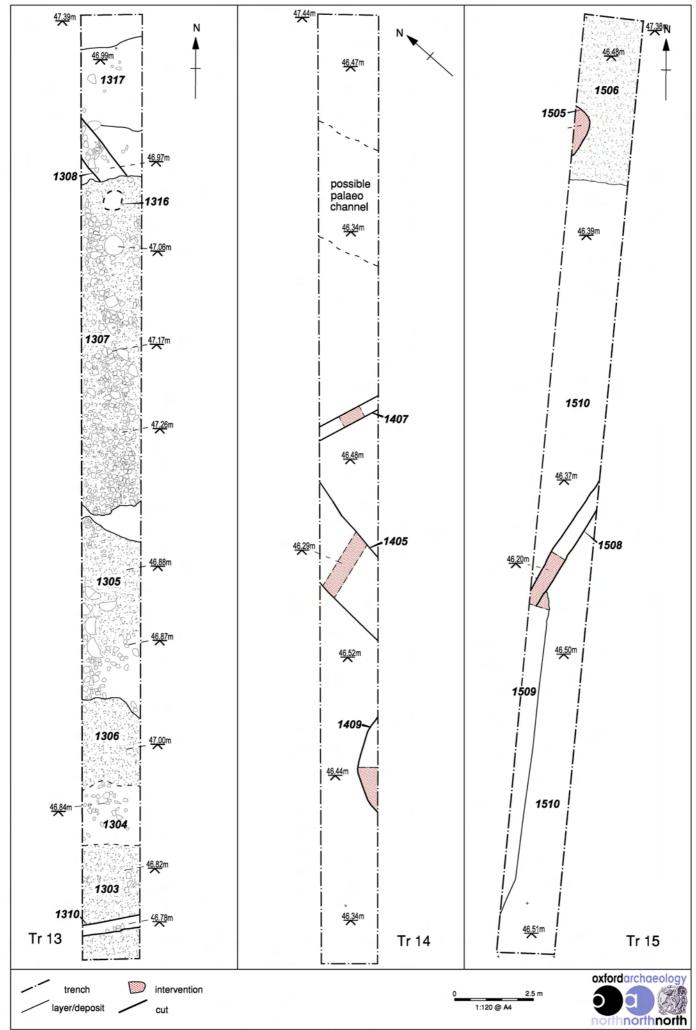


Figure 9: Plans of trenches 13 -15 on Darley Fields

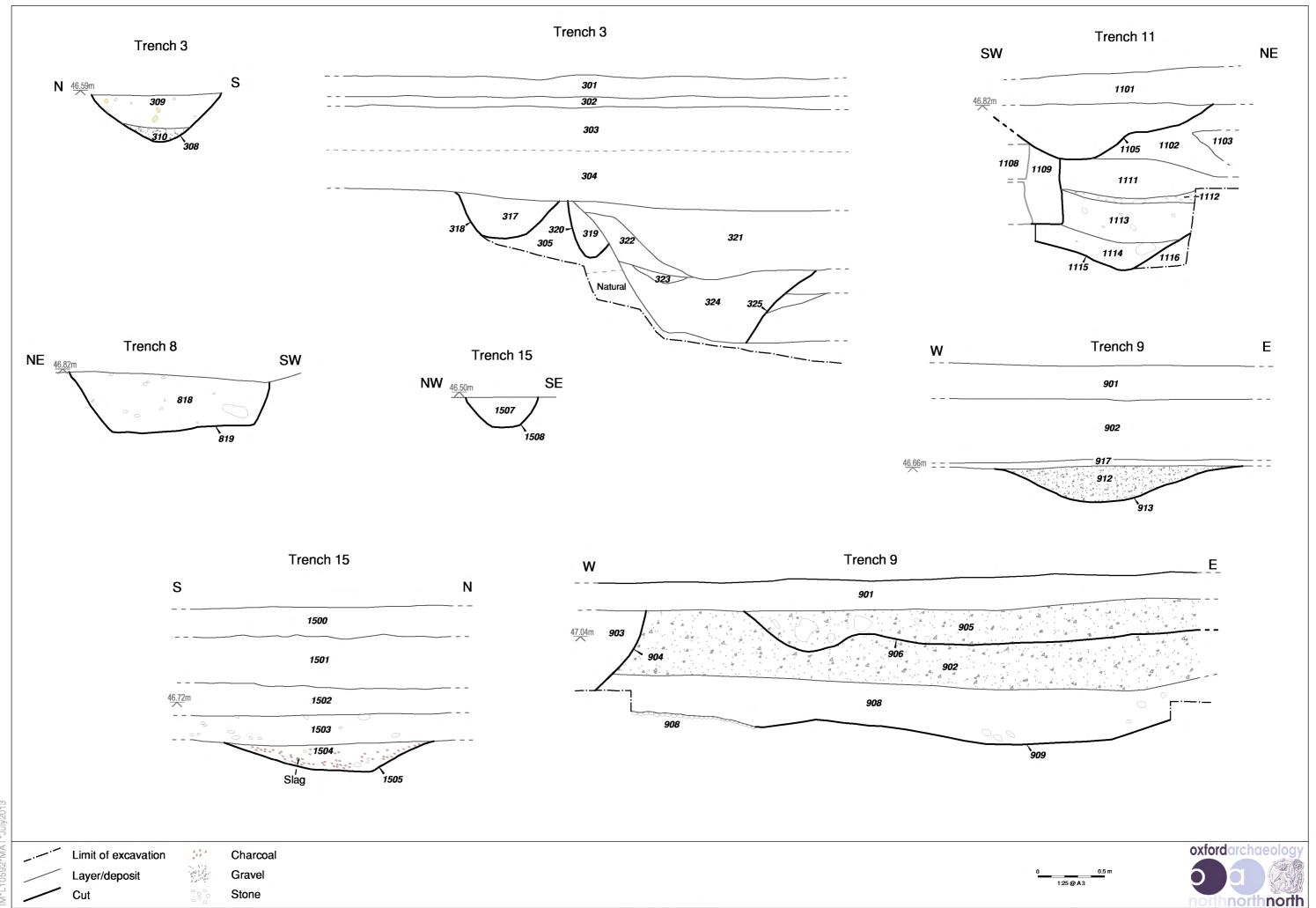


Figure 10: Sections

Figure 11: Sections of trench 8

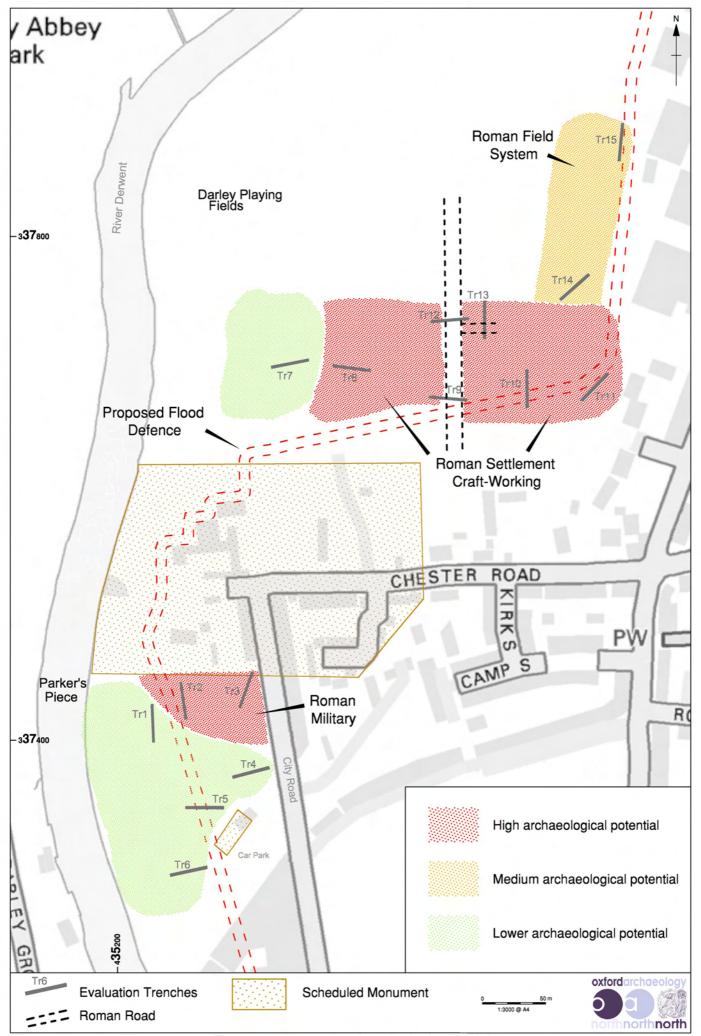


Figure 12: Areas of archaeological potential