



Archaeological Watching Brief at Grange Park Loughborough, Leicestershire February-April 2016

Report No. 16/116

Authors: Claire Finn and James Fairclough

Illustrators: Claire Finn and Olly Dindol



Archaeological Watching Brief at Grange Park Loughborough, Leicestershire February-April 2016

Accession Number: X.A33.2016

Report No. 16/116

Quality control and sign off:

Issue No.	Date approved:	Checked by:	Verified by:	Approved by:	Reason for Issue:
1	29.06.2016	Pat Chapman	Mo Muldowney	Andy Chapman	Draft for client review

Authors: Claire Finn and James Fairclough

Illustrators: Claire Finn and Olly Dindol

© MOLA Northampton 2016

MOLA
Bolton House
Wootton Hall Park
Northampton
NN4 8BN
01604 809800
www.mola.org.uk
ayates@mola.org.uk

STAFF

Project Manager: Adam Yates BA MCIfA

Text: Claire Finn BA MA PhD
James Fairclough BA MA PCIfA

Fieldwork: James Fairclough
Tim Sharman BA

Illustrations: Olly Dindol BSc
Claire Finn

Flint: Yvonne Wolfram-Murray BSc PhD

Pottery: Rob Perrin BA, MLitt, PGCE, MCIfA, FSA

Furnace/kiln debris: Andy Chapman BSc MCIfA FSA

Ceramic building materials: Pat Chapman BA CMS ACIfA

Animal bone: Adam Reid BSc MSc

Plant macrofossils: Val Fryer BA MCIfA

OASIS REPORT FORM

PROJECT DETAILS		Oasis No. molanort1-256097	
Project title	Archaeological Watching Brief at Grange Park, Loughborough, Leicestershire, February-April 2016.		
Short description	MOLA Northampton was commissioned by CgMs Consulting Ltd to undertake a targeted archaeological watching brief on land at Grange Park, Loughborough. The watching brief recorded a small area of possible Roman occupation, comprising a ring ditch and posthole and associated pits, with dispersed field boundary ditches. Recovered pottery gave a date of late 2nd and 4th centuries AD. Medieval ridge and furrow, and two post-medieval field boundary ditches, were also identified.		
Project type	Watching Brief		
Previous work	Evaluation (Coward 2002a)		
Current land use	Agricultural		
Future work	Unknown		
Monument type and period	Ring ditch, Roman ditches and pits		
Significant finds	Pottery, CBM, worked stone and animal bone		
PROJECT LOCATION			
County	Leicestershire		
Site address	Grange Park, Loughborough		
Post code	LE11 2GY		
OS co-ordinates	NGR SK 538 170		
Area (sq m/ha)	c.1ha		
Height aOD	c.63m aOD		
PROJECT CREATORS			
Organisation	MOLA Northampton		
Project brief originator	Charnwood Borough Council		
Project Design originator	CgMS Consulting		
Director/Supervisor	James Fairclough and Tim Sharman, MOLA		
Project Managers	Mo Muldowney, MOLA		
Sponsor or funding body	William Davis		
PROJECT DATE			
Start date	15th February 2016		
End date	26th April 2016		
ARCHIVES	Location	Contents	
Physical	MOLA Northampton store X.A33.2016	Pottery, CBM, worked stone, flint, kiln debris, animal bone, film negatives	
Paper		Site records	
Digital		Photographs, GPS data	
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report (MOLA report)		
Title	Archaeological Watching Brief at Grange Park, Loughborough, Leicestershire, February-April 2016		
Serial title & volume	MOLA Northampton report, 16/116		
Author(s)	Claire Finn and Jim Fairclough		
Page numbers	25		
Date	29 June 2016		

Contents

1	INTRODUCTION	
2	LOCATION, TOPOGRAPHY AND GEOLOGY	
3	HISTORICAL AND ARCHAEOLOGICAL BACKGROUND	
4	AIMS AND OBJECTIVES	
5	METHODOLOGY	
6	THE EXCAVATED EVIDENCE	
6.1	General stratigraphy	
6.2	Roman ring ditch and pits - Area A	
6.3	Roman ditch - Area B	
6.4	Post-medieval agricultural activity	
7	FINDS	
7.1	Worked flint	by Yvonne Wolfram-Murray
7.2	Roman pottery	by Tora Hylton
7.3	Furnace or kiln debris	by Andy Chapman
7.4	Ceramic stone	by Pat Chapman
7.5	Stone	by Pat Chapman
7.6	Animal bone	by Adam Reid
7.7	Plant macrofossils	by Val Fryer
8	CONCLUSION	
	BIBLIOGRAPHY	
	APPENDIX: CONTEXT INVENTORY	
	Tables	
	Table 1: Pottery quantities per feature	
	Table 2: Pottery fabrics	
	Table 3: Roman ceramic tile	

Figures

Front cover: Site overview, looking north

Fig 1: Site location

Fig 2: Plan of the stripped area

Fig 3: Overview of Area A, north road, looking east

Fig 4: Plan of Area A

Fig 5: Sections of the ring ditch

Fig 6: Ditch [135], Section 10

Fig 7: Pit group [138] and [147], Sections 11 and 12

Fig 8: Ditch [124], Section 6

Fig 9: Ditch [120], Section 5

Fig 10: Pit [118], Section 4

Fig 11: Ditches [111] and [113], Section 2

Fig 12: Overview of Area B, looking north-west

Fig 13: Ditch [105], looking north-west

Fig 14: Plan of Area B

Fig 15: Boundary ditch [107], looking north

Back cover: Overview of ring ditch, looking north

Archaeological Watching Brief at Grange Park

Loughborough, Leicestershire

February-April 2016

Abstract

MOLA Northampton was commissioned by CgMs Consulting to undertake a targeted archaeological watching brief on land at Grange Park, Loughborough. The watching brief recorded a small area of possible Roman occupation, comprising a ring ditch and posthole and associated pits, with dispersed field boundary ditches. Recovered pottery gave a date of late 2nd and 4th centuries AD. Medieval ridge and furrow, and two post-medieval field boundary ditches, were also identified.

1 INTRODUCTION

MOLA Northampton was commissioned by CgMs Consulting, on behalf of their clients William Davis, to undertake a targeted archaeological watching brief on land at Grange Park, Loughborough, during groundworks associated with a programme of residential development (Planning Ref. P/00/2078/2). The archaeological works were required under Condition 18 of the outline planning permission, under advice from the Leicestershire Planning Archaeologist and in accordance with the National Planning Policy Framework (DCLG 2012).

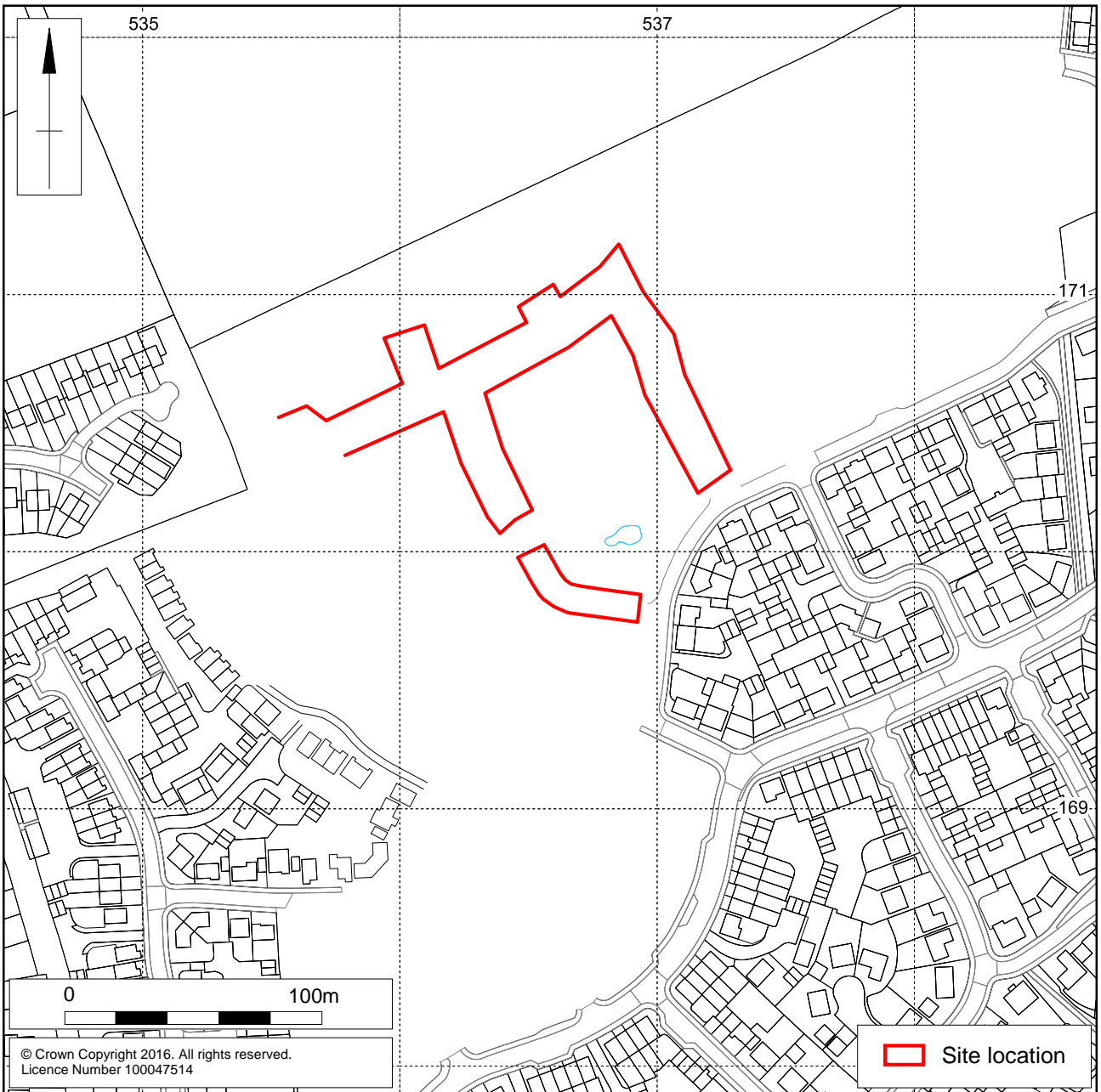
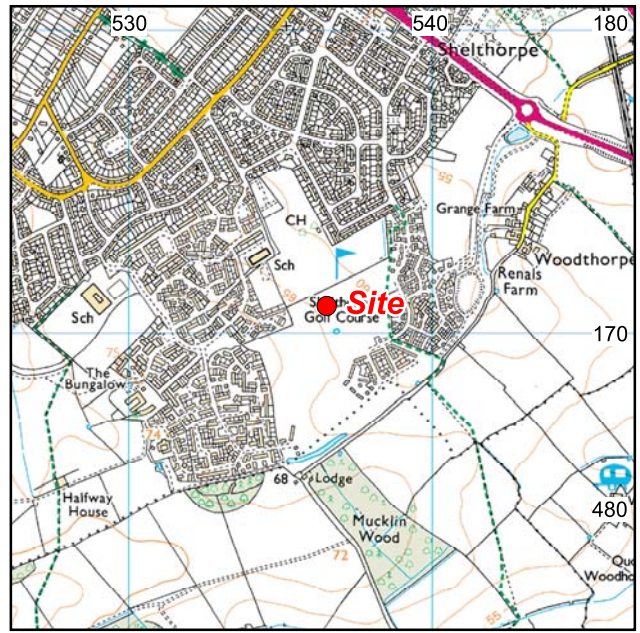
The targeted watching brief was positioned to determine the presence and extent of archaeological remains originally located by an evaluation carried out by University of Leicester Archaeology Service (Coward 2002a). All works were carried out in accordance with a specification prepared by CgMs Consulting (Gajos 2011), and under best practice guidelines laid out by the ClfA's *Code of Practice* (ClfA 2014a) and *Standard and Guidance: Archaeological Watching Brief* (ClfA 2014b), as well as with *Management of Research projects in the Historic Environment (MoRPHE)* (HE 2015) and with regional advice given in *Guidelines and Procedures for Archaeological Work in Leicestershire and Rutland* (LCC 2000).

2 LOCATION, TOPOGRAPHY AND GEOLOGY

The site of the permitted development is located on the southern edge of Loughborough, in Leicestershire (site centred on NGR SK 538 170; Fig 1). The overall development site comprises c.48ha in size. Approximately 1ha was designated for the watching brief.

The site is situated on a north-east-facing slope, falling from a height of c.67m above Ordnance Datum (aOD) in the west of the site, to c.60m aOD to the north.

The British Geological Survey records the underlying bedrock as Tarporley Siltstone Group with a mix of superficial deposits. The majority of the targeted area comprised superficial deposits of Thrussington Member diamiction, with a band of mid-Pleistocene sand and gravel to the north and east, and this was confirmed during the work (BGS 2016).



Scale 1:2,500

Site location Fig 1

3 HISTORICAL AND ARCHAEOLOGICAL BACKGROUND

A Desk-Based Assessment (DBA) of the area was undertaken in 1995 (Countryside Planning and Management 1995 *cit.* Gajos 2011). The DBA noted no known archaeology within the development area, however, it was concluded that the absence of recorded evidence on the site may reflect a limited level of past archaeological investigation.

A geophysical survey of the development site was undertaken in 2002. This was also inconclusive, showing little evidence of archaeological anomalies (Whittingham 2002 *cit.* Gajos 2011). The geophysical survey was followed by a trial trench evaluation undertaken in 2002 by ULAS (Coward 2002a). Twelve trial trenches were excavated across the development area. The majority of the evaluation trenches proved to be blank. Archaeological evidence, in the form of ten sherds of Roman pottery was recovered from the area of trenches 6 and 7. The nature of the activity producing the material remained unclear; no clear features associated with this scatter were located, and it was considered to be the possible remains of a manuring scatter from an occupation site in the vicinity. The excavation observed that the general stratigraphy of the site comprised thin topsoil, without a subsoil, lying directly over the natural, which would provide poor protection for archaeological sites, and therefore any features present were likely to be heavily truncated.

Few archaeological features or findspots are recorded from within a 1km radius of the site (Historic England's PastScape resource). A Neolithic polished flint axe was found prior to 1897 at the Beacon Road clay-pits, around 1km to the north of the site. Approximately 900m to the north of the site, at the former Tucker and Son's brickyard, an alleged barrow was observed in 1888; now thought to be an Iron Age occupation site. Material recovered from the site included Iron Age pottery, querns and animal bone.

Heritage Gateway records a number of Roman-era finds in the vicinity of the development site, including a site excavated around 650m south-west of the site, which comprised a single sherd of Roman Black Burnished ware pottery and the base of an undated hearth (Coward 2002b). A Roman copper-alloy knife handle (Historic Environment Record number MLE7750) and a Sestertius Roman coin (HER number MLE9556) were found 600m-1km to the north-east of the site. Further possible 1st-2nd-century AD Roman coins were reputedly found 850m south-west of the site (HER number MLE9427).

A small quantity of medieval remains are known from the area, including the location of a 13th-century manorial complex, medieval moated site and post-medieval fish ponds situated c.675m south-west of the site. Earthworks of a ridge and furrow field system were recorded around 400m to the north-east of the site from aerial photographs.

Approximately 600m to the south-west, trial trench evaluation undertaken by ULAS in advance of development identified a single post-medieval pit (Derrick 2002).

Three listed buildings are to be found within a 1km radius of the site. These comprise 18th-century Park Grange, Hazel Road, Loughborough (Grade II Listed), 17th-century Reynalls, 80 Woodthorpe, Loughborough (Grade II Listed) and 17th-century Halfway House, Hazel Road, Loughborough, (Grade II Listed).

4 AIMS AND OBJECTIVES

The main aim of the investigation was to determine if archaeological remains were present within the application area.

The specific objectives of the project were as follows:

- To determine the location, extent, nature and date of any archaeological deposits that may be present at the proposed development site;
- To determine the integrity and state of preservation of any archaeological features or deposits that may be present at the development site;
- To assess the significance of any remains present.

The information provided by the watching brief will assist in determining the nature, function and character of the archaeological site in its cultural and environmental setting.

5 METHODOLOGY

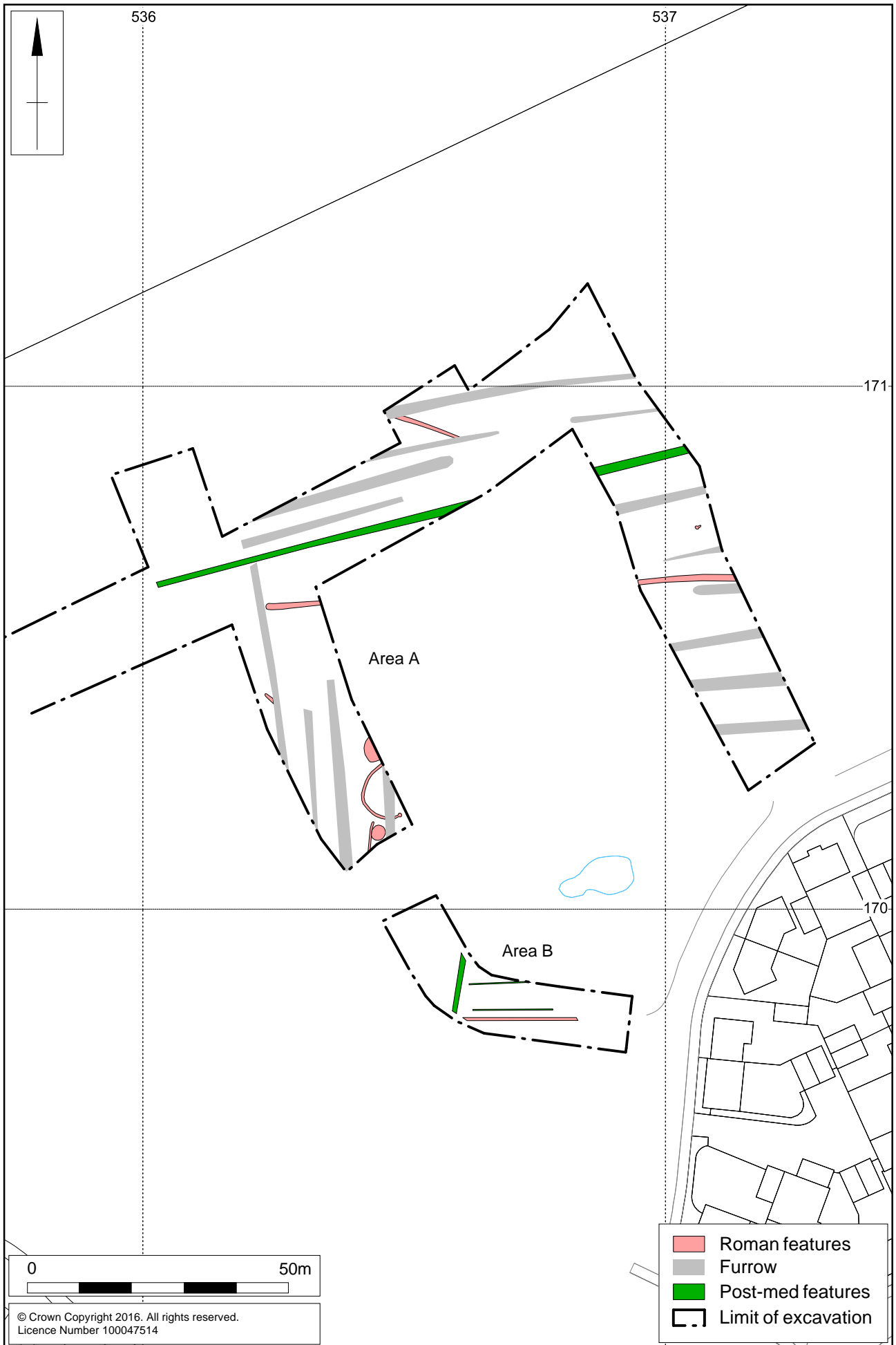
The groundworks comprised the removal of existing overburden within the marked out roadway area, down to natural deposits or the level of archaeological deposits, whichever came first. The excavation of overburden was undertaken using a mechanical excavator fitted with a toothless bucket, under continuous archaeological observation. The area of observation was excavated in two events, Area A and Area B (Fig 2).

Archaeological deposits and artefacts encountered during the course of excavation were fully recorded, following standard MOLA procedures (MOLA 2014). All contexts were described on pro-forma sheets including a detailed description, stratigraphic relationships, interpretation and a checklist of associated finds. A monochrome photographic record was maintained supplemented by high resolution digital photography. Overall shots of each area were taken together with detailed shots of individual features and feature groups where appropriate.

6 THE EXCAVATED EVIDENCE

6.1 General stratigraphy

The underlying geology was consistent across the site. The underlying natural comprised compact orange-brown-red sandy clay with occasional lenses of grey clay (103). Overlying this was a 0.10m thick layer of subsoil comprising firm mid grey-brown sandy clay loam with occasional small rounded pebbles (102). The overlying topsoil comprised friable dark grey-brown sandy loam with occasional rounded flint, to a depth of 0.20- 0.30m thick (101).



Scale 1:1000

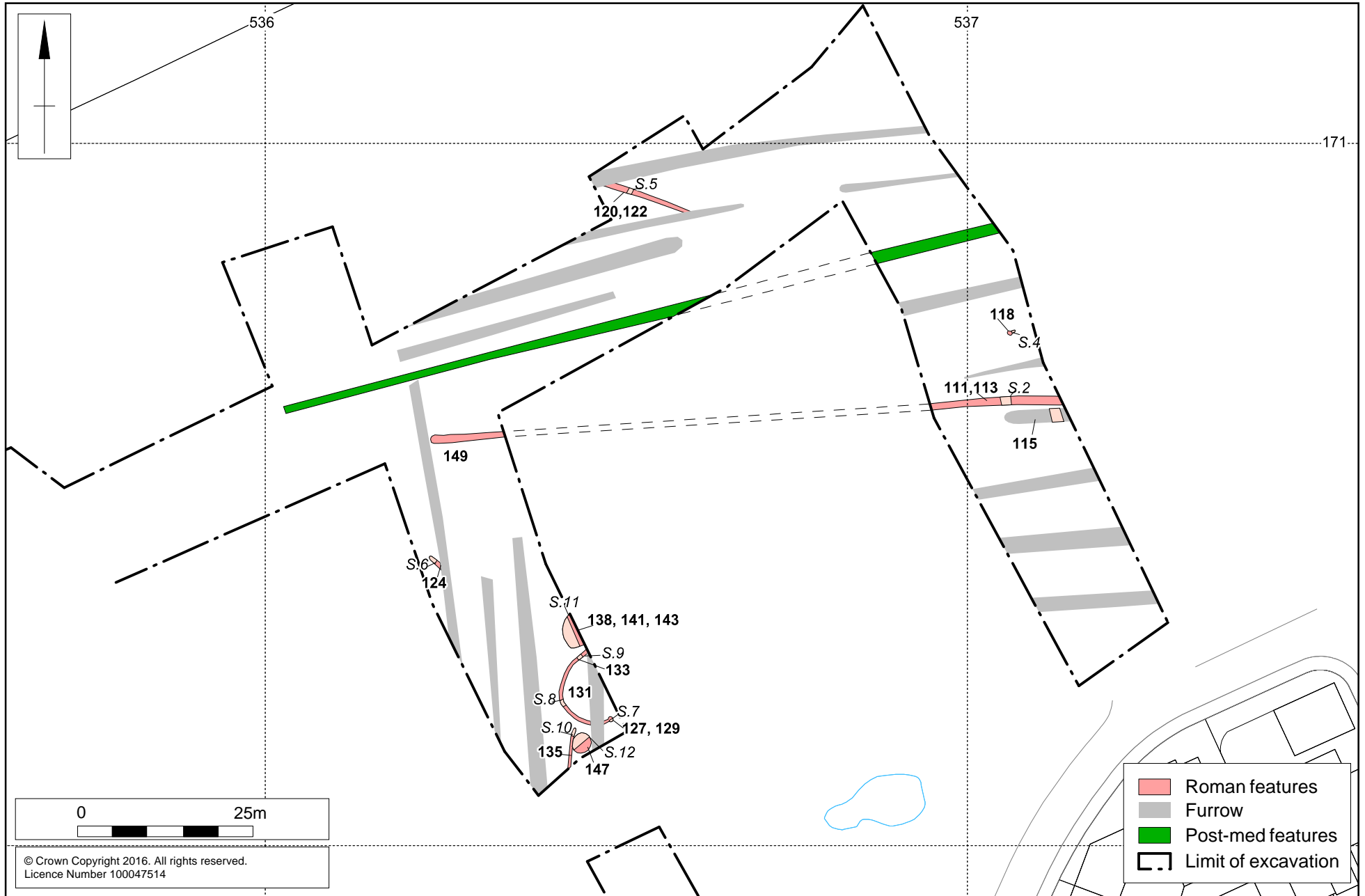
Plan of stripped areas Fig 2

6.2 Roman ring ditch and pits - Area A

The stripped area comprised a c.0.49ha U-shaped area of proposed roadways (Fig 3). The western roadway contained a possible occupation site comprising a ring ditch with an associated posthole, pits and ditches, some of which were dated to the Roman period and some were undated. The northern and eastern roadway areas produced additional outlying ditches and pits.



Overview of Area A, north road, looking east Fig 3



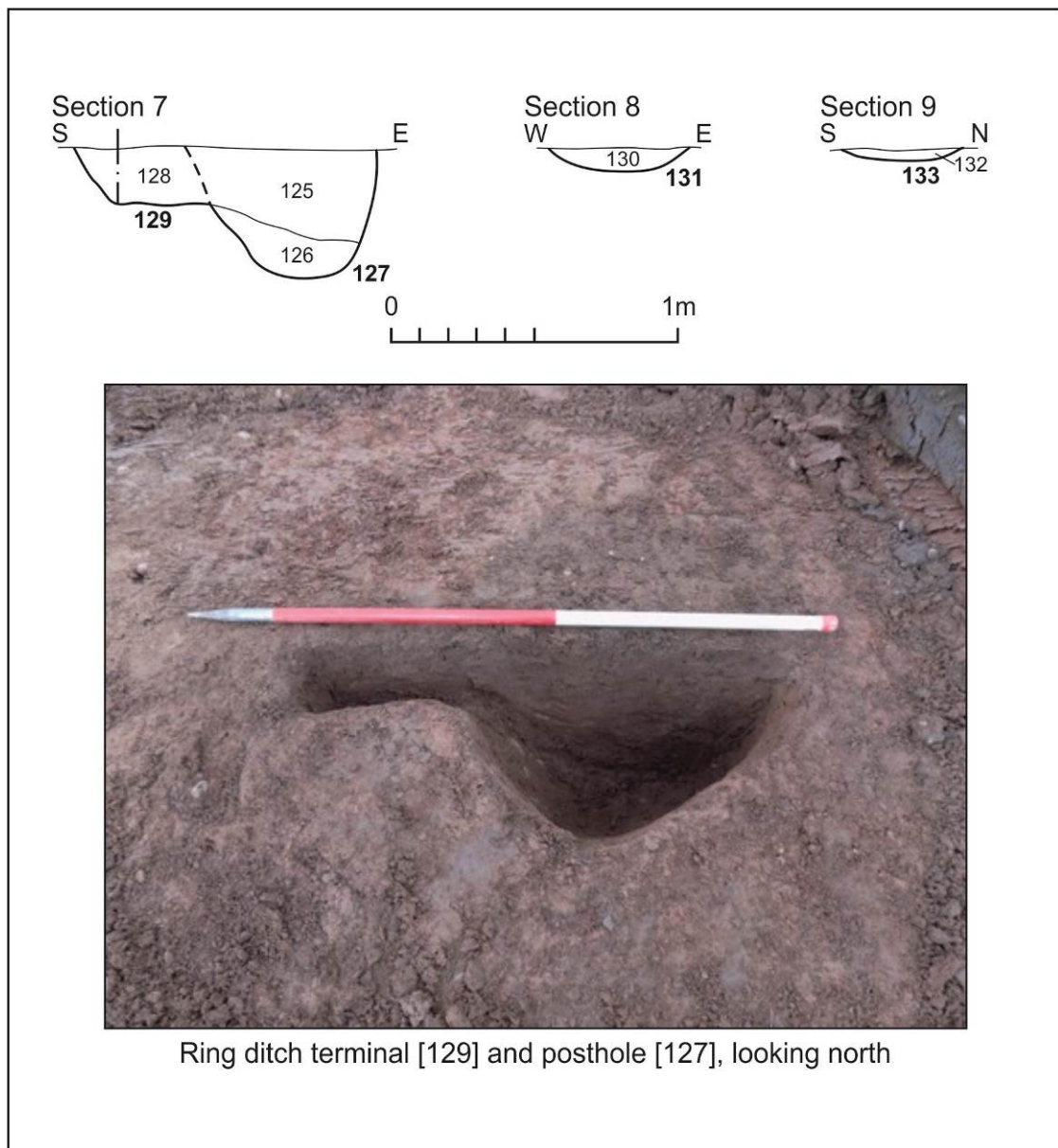
Scale 1:750

Plan of Area A Fig 4

East Road Area

Ring ditch [129, 131, 133]

The ring ditch had an internal diameter of 10m, and only partially lay within the excavation area. The ditch had a shallow profile with a flat base, 0.30-50m wide and 0.04-0.21m deep. The fill (130) contained five undiagnostic sherds of Roman pottery (Fig 5, S. 7-8). The ring ditch was open to the south-eastern side, and the visible terminal was cut by a posthole [127] (Fig 5, S.7). The posthole had a U-shaped profile and flat base, with a diameter of 0.66m and a depth of 0.44m. It did not contain any dating material but the similarity of its fill to the other ring ditch features suggests they may have been backfilled contemporaneously.



Scale 1:25

Sections of the ring ditch Fig 5

Pit group [138] [141] and [143]

Immediately to the north of the ring ditch were three intercutting pits. The earliest pit, [143], was sub-circular with a diameter of 0.60m and a depth of 0.66m, straight-sided with a concave base (Fig 7, S.11). The fill (142) was redeposited natural, mid orange-brown clay sand, and contained no finds.

This pit was cut on its south-east side by pit [141]. This was sub-circular, with a U-shaped profile and a flat base, 1.9m in diameter and 0.65m deep (Fig 7, S.11). The primary fill (140) comprised brown-grey clay sand eroded from the earlier pit fill (142). This fill was overlain by an organic-rich fill of dark blue-grey clay silt, which did not contain any finds (139).

The latest pit in the group was [138], which cut pit [141] to the south-east. The pit was circular, with a wide U-shaped profile and a flat base, 2.89m in diameter and 0.45m deep (Fig 7, S.11). The primary fill comprised redeposited eroded natural (137). Overlying this was a fill of grey-brown silty clay, containing fourteen Roman pottery sherds, animal bone, ceramic building materials, and a large stone which may possibly be structural (136).

Pit [147]

To the south of the ring ditch was a large pit, 3.1m in diameter and 0.65m deep, circular with an asymmetrical profile and a concave base (Fig 7, S.12). The lower two silty-clay fills contained 55 sherds of Roman pottery, animal bone and ceramic building materials (146, 145). The upper fill comprised yellow-brown silty clay with occasional charcoal. Joining sherds of pottery from fill (136) of pit [138] and fill (146) of pit [147] suggest that these features were filled at the same time.

Ditch [135]

A short section of ditch [135] terminated on the south side of the ring ditch (Fig 6, S.10). It was aligned north-east by south-west, and had an asymmetrical profile, 0.40m wide and 0.15m deep. The fill (134) contained four Roman pottery sherds (134).

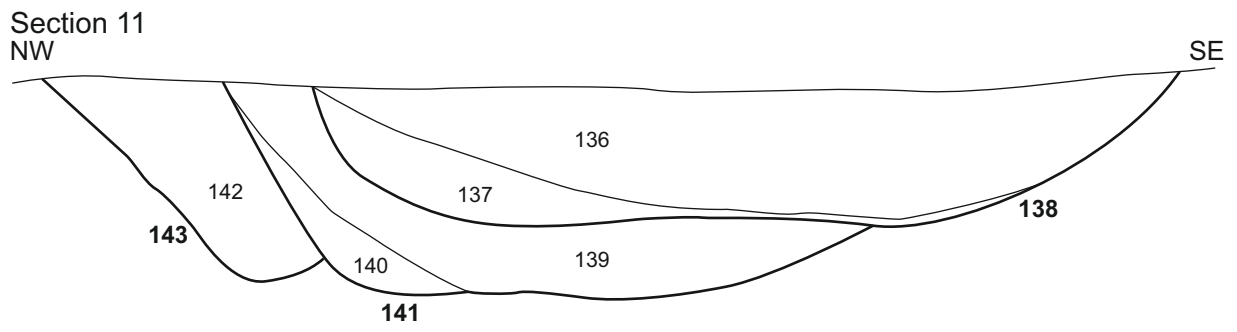


Scale 1:25

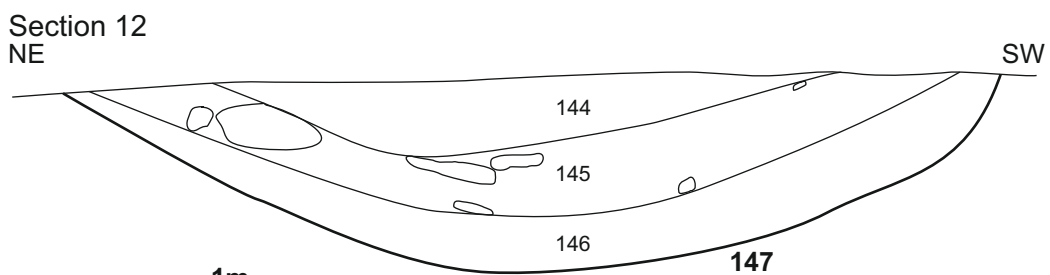
Ditch [135], Section 10 Fig 6



Pit group [138], looking east



Pit [147], looking south

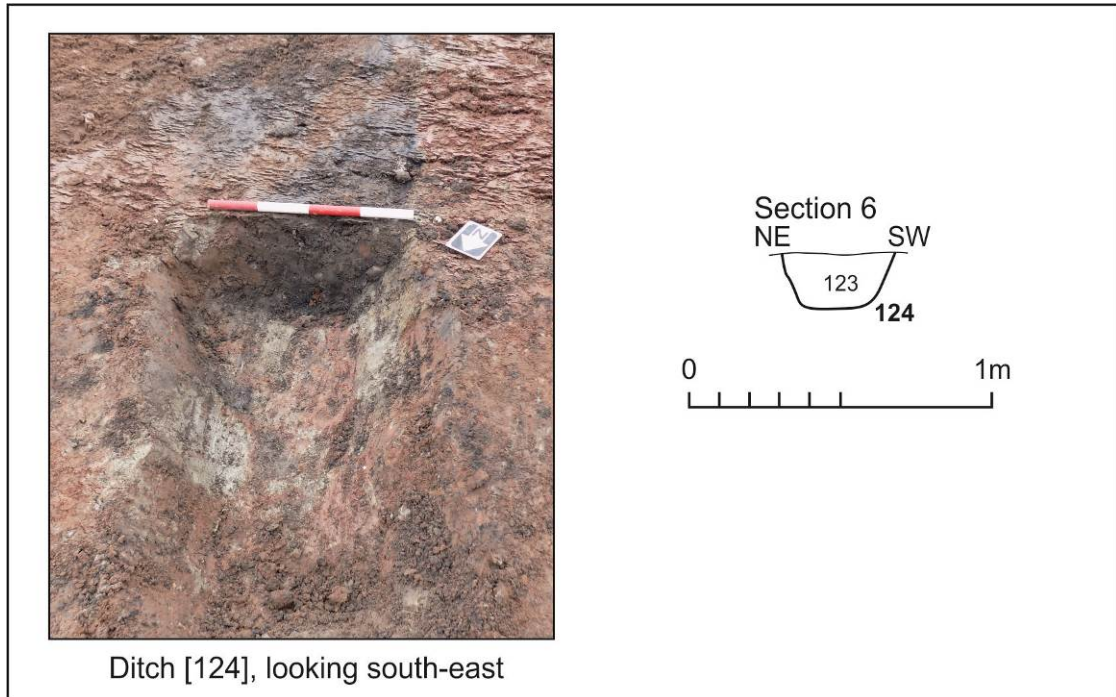


Scale 1:25

Pit group [138] and [147], Sections 11 and 12 Fig 7

Ditch terminal [124]

A ditch terminal, or possible pit, located to the north of the ring ditch group was truncated by a post-medieval furrow (Fig 8, S.6). It was aligned north-west by south-east, with a U-shaped profile and a flat base, 0.38m wide and 0.18m deep [124]. The silty-clay fill did not contain any finds (123).



Scale 1:25

Ditch [124], Section 6 Fig 8

Ditch terminal [149]

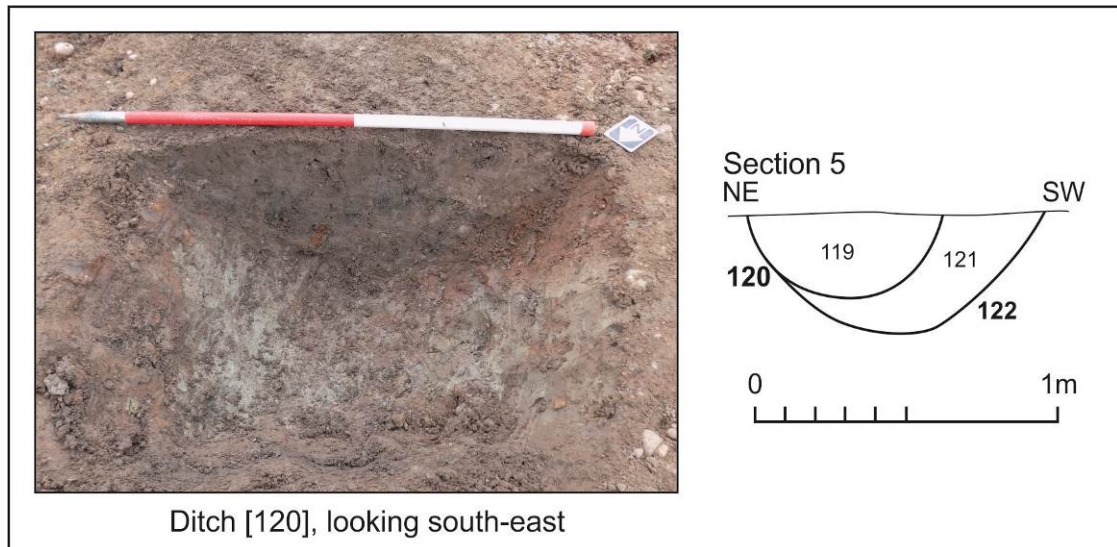
To the north was another section of linear ditch, ending in a rounded terminal. This lay on alignment with ditch [113] in the eastern roadway and was probably a continuation of that feature. It was not excavated.

North Road Area

Ditch [120] and Pit [122]

A ditch was found on the northern edge of the north road area. It was aligned north-west by south-east, with a U-shaped profile, 0.65m wide and 0.28m deep [120] (Fig 9, S.5). The silty clay fill was mixed with occasional charcoal and small stones, 29 Roman pottery sherds and ceramic building materials (119).

Immediately to the south of the ditch was a pit [122]. The pit was sub-circular, 0.35m wide by 0.04m deep, with a U-shaped profile and base, truncated by ditch [120] (Fig 9, S.5). The fill comprised mid grey-brown silty clay, with no finds (117).



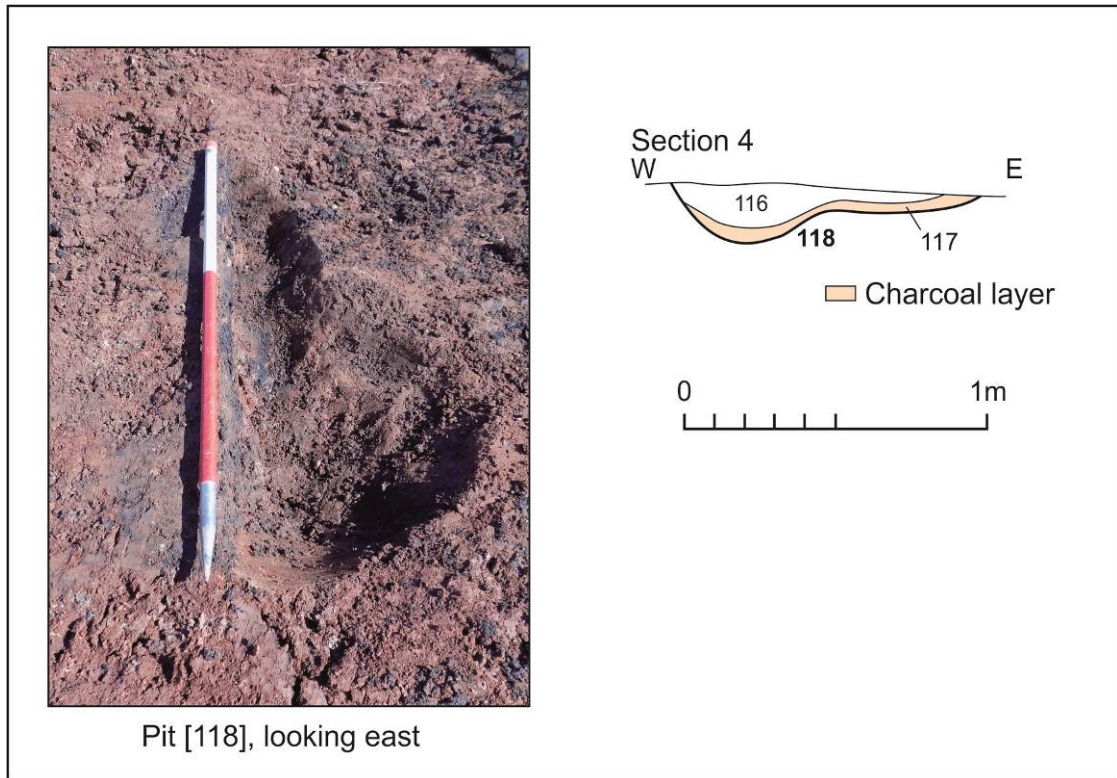
Scale 1:25

Ditch [120], Section 5 Fig 9

East Road Area

Pit [118]

At the north of the east road was a pit [118], sub-circular, 1.14m wide by 0.07-0.19m deep, with a symmetric profile and base (Fig 10, S.4). The primary fill comprised dark blue-black charcoal-rich clay to a depth of 0.05m, possibly a dump of burnt material from a fire, although there was no evidence of *in situ* burning (117). The fills did not contain any finds.



Pit [118], looking east

Scale 1:25

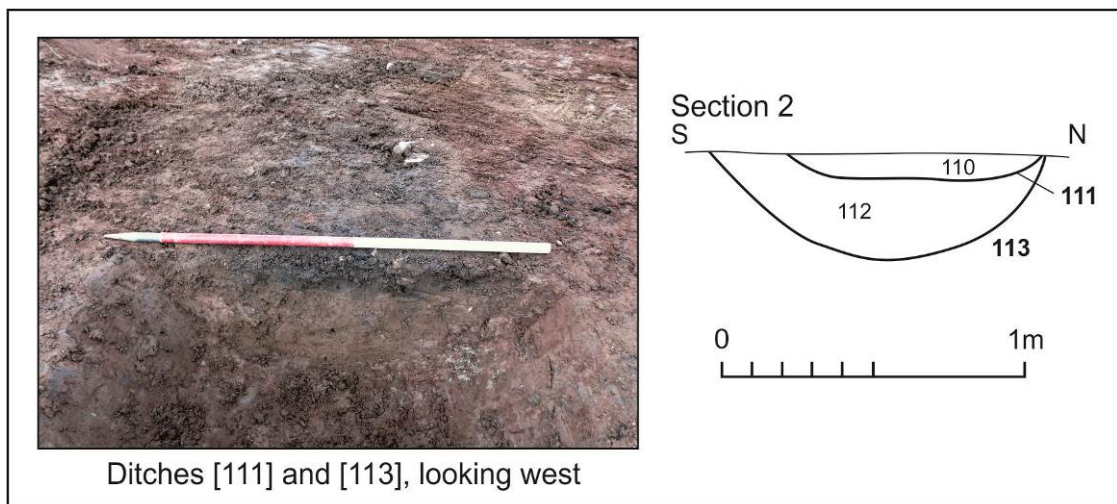
Pit [118], Section 4 Fig 10

Ditches [111] and [113]

To the south of pit [118], the area of the east road was crossed by a ditch aligned east-west, with a U-shaped profile, 1.10m wide and 0.34m deep [113]. The light orange-brown clay fill did not contain any finds (112).

The ditch was recut by ditch [111] which was on the same alignment and terminated within the stripped area. The recut had shallow gently sloping profile and a flat base, 0.84m wide and 0.08m deep (Fig 11, S.2). The fill comprised dark brown-grey silty clay with occasional charcoal.

This ditch probably continued across the unexcavated area between the roadways, and was observed as a ditch terminal to the west on the western road [149].



Ditches [111] and [113], looking west

Scale 1:25

Ditches [111] and [113], Section 2 Fig 11

6.3 Roman ditch - Area B

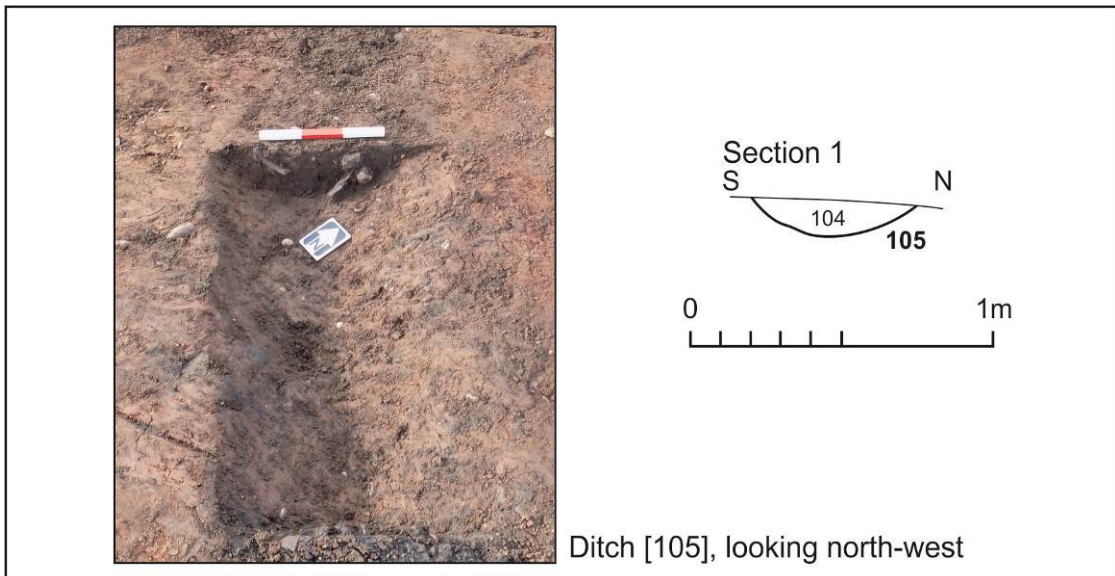
Area B was a c.0.057ha area, comprising an area of the proposed roadway situated on the southern half of the site, aligned north-west by south-east, adjacent to the former construction haul road (Figs 12 and 14).



Overview of Area B, looking north-west Fig 12

Ditch [105]

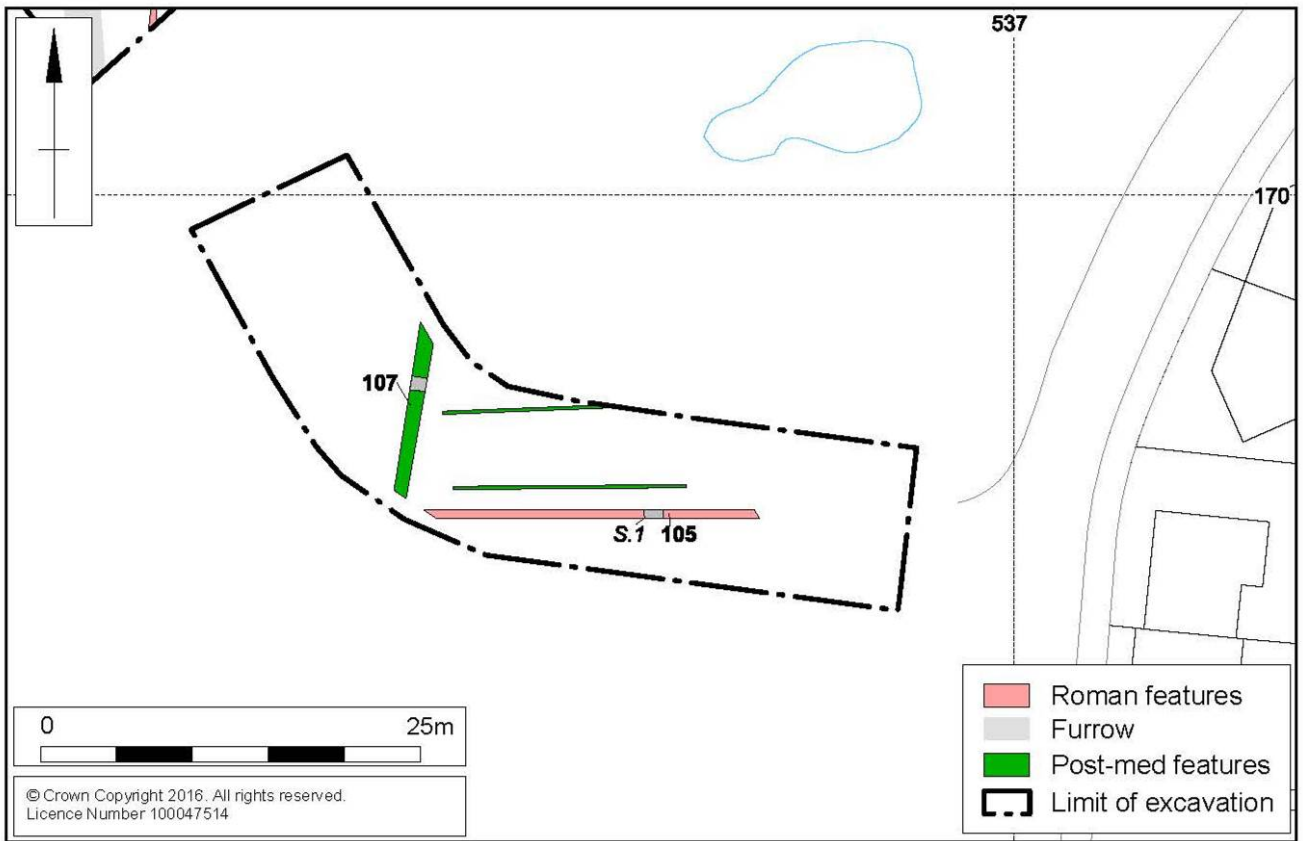
This linear ditch was aligned east-west, 0.55m wide by 0.12m deep, with a shallow U-shaped profile (Fig 13, S.1). The grey-brown silty clay loam fill (104) contained a worked flint scraper, metalworking slag, and large quantities of Roman pottery, totalling 112 sherds.



Ditch [105], looking north-west

Scale 1:25

Ditch [105], looking north-west Fig 13



Scale 1:500

Plan of Area B Fig 14

6.4 Post-medieval agricultural activity

A number of post-medieval features were also identified within the development area. These included a ditch, several drains and cultivation ridge and furrows.

Ditch [107]

A linear ditch [107] was situated in Area B, aligned north-south, 0.8m wide and 0.5m deep, with a U-shaped profile with a break of slope (Fig 15). The dark grey-brown clay loam fill (106) contained some small pebbles, mixed rooting and early 20th-century bottle glass. The ditch probably represents the route of a post-medieval boundary ditch or hedgeline, aligned parallel to the furrows in this area.



Boundary ditch [107], looking north Fig 15

Ridge and furrow

Remnant furrows from cultivation, probably dating to the post-medieval period, were identified across both areas of the development site. Two different alignments of furrows were identified; aligned east-west in the north-and east road of Area A, and aligned north to south on the west road of Area A and Area B. The furrows were generally situated between c.6-7m apart. Two furrows were examined in the east of the site, [115] and [109]. Furrow [115] was aligned east-west and had a shallow profile with a flat base, 1.09m wide and 0.10m deep. The fill comprised light brown-orange clay with moderate coal and occasional small stones, and contained a sherd of 2nd-century AD samian ware pottery (114). Furrow [109] was 1.5m wide, and had an identical fill (108), also containing pottery.

7 FINDS

7.1 Worked flint by Yvonne Wolfram-Murray

One thumbnail scraper was recovered as residual find from a Roman ditch [105]. The condition of the artefact was good; the post-depositional edge consisted of occasional small nicks to the edge and one small crushed area. The raw material is mid grey-brown vitreous flint. The raw material was likely to have comprised local gravel deposits.

The implement was manufactured on a flake 26mm long and 24mm wide. The abrupt retouch was on the dorsal surface from the striking platform to nearly back round to the other side of the striking platform. The thumbnail scraper is typical of the late Neolithic/early Bronze Age.

7.2 Roman pottery by Rob Perrin

An assemblage of 224 sherds, weighing over 4.8 kg, and with an estimated vessel equivalent (EVE) based on rims, of five, was recovered from nine contexts in seven features; there was also one unstratified context. The features comprise a ring ditch, two linear ditches, two pits, a furrow and a ditch terminus. Table 1 gives the amount of pottery per feature.

Table 1: Pottery quantities per feature

Feature	Sherds	Weight (g)	Rim EVE
104 / 105 / ditch	112	2760	2.74
114 / 115 / furrow	1	15	-
119 / 120 / ditch	29	410	0.42
130 / 131 and 132 / 133 / ring ditch	5	31	-
134 / 135 / terminal	4	25	0.04
136 / 138 / pit	14	322	0.45
146 / 147 / pit	55	1266	1.38
U/S	4	34	-
Total	224	4863	5.03

Fabrics, forms and sources

All the pottery, bar some sherds of shell-gritted ware and imported samian ware, is of reduced sand-tempered grey ware (Table 2). The fabric is coarse-textured and the only variations relate to coarseness, with some sherds having a very coarse fabric and others a less coarse fabric. The colour of the pottery varies from grey to grey-brown to brown-grey, with a few sherds being brown in colour. The core and core-edge colours sometimes vary from the surface colour.

A rim count identified 33 vessels comprising 20 jars, five bowls, one possible dish, three jar/bowls, one beaker, one jar/beaker, a probable East Gaulish (TRI SA) Drag. 31 dish and a Central Gaulish (LEZ SA2) Drag. 33 cup. One of the jars is in shell-gritted ware and has an undercut rim. The other jars and the jars or bowls have a variety of rims including lid-seated and plain upright. Four of the bowls have flanged rims, with the flange somewhat down the vessel wall, and the other bowl has a bead rim. Both the beaker and the jar or beaker are indented types, with the former having a plain upright rim. The possible dish also has a plain rim. The only decoration is girth or neck grooves or cordons of some of the jars, and the bead-rimmed bowl is burnished internally. Two of the jars or bowls have warped rims.

Table 2: Pottery fabrics

Fabric	NoSh	Wgt (g)	Rim EVE
Grey coarse	197	4547	4.32
Grey, very coarse	8	74	0.14
Grey	5	163	0.37
Shell	12	60	0.18
LEZ SA2	1	4	.02
TRI SA	1	15	
Total	224	4863	5.03

There are no known Roman pottery kilns in the Loughborough area, with the nearest located at Ravenstone some 15km to the south-west. The production here included grey ware jars and bowls (Lucas 1981). Most of the grey ware forms have affinities with vessels made in the kilns in and to the north of Derby, collectively known as the Derbyshire industry (e.g. Dool 1986). Of particular interest in this respect are the lid-seated jars which are close in form to the well-known Derbyshire jars (Gillam 1939). The Derbyshire products are, however, much harder fired. The two vessels with warped rims from ditch [105] are intriguing, however, in that they are clearly 'seconds' and may suggest that there was pottery production in the vicinity; the similarity in the fabric of the bulk of the assemblage may be additional evidence for this.

Date

The samian ware is of 2nd-century date with the Drag. 31 dish likely to date to the second half of the 2nd century. The indented beaker is probably of 3rd-century date and the jar or beaker 2nd- to 3rd-century date. The flanged bowls are most common in the 4th century and lid-seated jars were made in the Derbyshire ware industry from the 2nd to 4th centuries, but were distributed most widely in the 3rd and 4th centuries. The forms of the other jars and bowls occur in the 2nd and 3rd centuries.

Assemblage characteristics

The pottery is in good condition and has a high average sherd weight, especially in the features in the south-west and south, which contained a large proportion of the total pottery; this suggests that the main focus of activity from which the pottery derived was located close to this area. Joining sherds from fill (136) of pit [138] and fill (146) of pit [147] suggest that these features were filled at the same time. The pottery in the ring-ditch is too low in quantity and undiagnostic to allow any interpretation. The character of the pottery as a whole appears more than basic utilitarian or agricultural, and the imported samian ware, one piece from furrow [115] and the other from pit [138], may suggest some occupation of possible higher status.

Potential

The assemblage is of local significance and any pottery production, if proven by future investigations, would be of regional importance. No additional work is required on the pottery though it should be incorporated with the results of any further fieldwork on the site.

7.3 Furnace or kiln debris by Andy Chapman

From the fill (104) of a Roman ditch [105], there are a total of six irregular lumps of fired debris, weighing 360g. One piece comprises only light grey fired clay and would be consistent with the clay lining of something reaching the temperature of an iron smelting furnace. A further three pieces are partially fired darker grey clay, but also have a surface with a harsh texture caused by protruding mineral inclusions. There are also two irregular lumps that have the harsh surface texture all over. These pieces have been exposed to an even higher temperature and have just started to vitrify.

An ordinary heath or oven would not reach such temperatures, so it seems more likely that this debris has come from either an iron smelting furnace, the hottest part of a pottery kiln or an accidental fire of major proportions.

7.4 Ceramic tile by Pat Chapman

This assemblage of 14 tile sherds, weighing 2535g, comprises three roof tile sherds, five floor/brick sherds, two body sherds and four fragments (Table 3). The majority, eleven sherds, come from pits [138] and [147].

Table 3: Roman ceramic tile

Fill / cut / type	No	Weight (g)	Description
104 / 105 / ditch	1	100	Floor tile, 36mm thick
119 / 120 / ditch	2	430	Floor tile, 35mm thick, Fragment with flat grey surface
136 / 138 / pit	4	675	<i>Imbrex</i> 16mm thick, c 80mm high x 120mm wide 2 floor tiles, min 40mm and 30mm thick Fragment with flat grey surface
145 / 147 / pit	1	50	Fragment
146 / 147 / pit	6	1280	<i>Tegula</i> <i>Imbrex</i> 18mm thick Floor/brick, 42mm thick 2 body sherds; 1 fragment
Totals	14	2535	-

The tiles are made from sandy orange to orange-brown very slightly soft clay with occasional tiny gravel or rare larger inclusions up to 9mm. One body sherd is made with very hard red-brown clay with black surfaces and more frequent inclusions. Except for one body sherd, the tiles are well made with uniformly mixed clay. Two fragments have a grey-brown surface.

The flat *tegula* roof tile sherd from pit [147] has a dumpy flange that stops before the end of the tile in order to slot under the cutaway of another *tegula*. Both curved *imbrex* roof tiles are 16mm thick and enough survives of the sherd from pit [138] to indicate an internal height of c.80mm and a base width of c 120mm.

There are two sizes of floor tiles. The two sherds from ditches [105] and [120] are 35-36mm thick, while the sherd from pit [147] is 42mm thick. Two sherds, both from pit [138], are a minimum of 30mm and 40mm thick. These could come from paving tiles or could be brick fragments.

The sherds are small, indicating that this is not primary demolition, and it is unusual to have more *imbrex* than *tegula* surviving. The assemblage is small, but the elements and concentrations in two pits suggest that buildings were in the near vicinity.

7.5 Stone by Pat Chapman

Two chunks of fine-grained granite come from fill (137) of pit [138].

One piece is 220mm long with a slight curve and vertical sides, widening from 30mm thick at one end to 60mm thick at the other and 72mm high. The top and bottom are pinkish-grey, smooth but slightly uneven. The inner side and one end is blackened, the outer side is greyish, both sides are uneven.

The other piece is triangular in section, 105x105x130mm by 110mm high. One side is fairly smooth, the other two sides and 'base' are rougher and the 'top' is very angular and uneven, as though some stone has been broken off. The colour is variable, pinkish, dark purple, grey-green.

There is a rough shape to each stone, possibly as reused remnants of larger blocks of building stone or fortuitously having a usable shape for some unknown purpose.

7.6 Animal bone by Adam Reid

A total of six animal bone fragments were recovered by hand collection from two contexts. A fragment of horse radius and five small indeterminate fragments were recovered from the upper fill of pit [138], in addition to a single fragment of cattle humerus from the fill of pit [147]. Both of the identifiable fragments were moderately well preserved although they both exhibited signs of weathering. No butchery marks were identified.

7.7 Plant macrofossils by Val Fryer

The samples are currently in process and this report will be added in due course.

8 DISCUSSION

In the previous evaluation undertaken in 2002 by ULAS, two trenches were excavated (6 and 7) in the area of the watching brief (Coward 2002a). Modern disturbance was identified in both trenches. Trench 7, aligned east-west, was excavated in the south of Area A. It produced evidence of a possible 19th-century ditch, now thought to be a post-medieval furrow. The evaluation report also noted the position of several early modern field boundaries which seem likely to have been positioned along the earlier furrows. A scatter of Roman material culture was recovered from the area of the trenches, but no pre-modern features were identified.

The current works at Grange Park produced evidence for a small area of possible Roman occupation and dispersed field features in the area of two of previously excavated trenches. The pottery recovered from the site gave dates between the late 2nd and 4th centuries AD. Several of the features remain undated, but their proximity to other features of Roman date suggests that they are likely to be contemporaneous.

The key feature excavated on the site comprised a ring ditch and posthole edged to the north and south by two large pits of the same date, containing Roman pottery, animal bone, and ceramic tile. A number of smaller pits and a ditch in the same area did not contain any finds. The pottery, which was of good quality and condition and included imported samian ware, may suggest some occupation of possible higher status than a basic utilitarian or agricultural settlement. The small but varied assemblage of ceramic building materials, and possible structural stones, recovered from pits and ditches may suggest that Roman buildings in the vicinity. Additionally, pieces of fired clay debris from a ditch on the southern edge of the site suggest the proximity of a possible iron smelting furnace. The presence of other dispersed Roman activity in the area is recognised in the Historic Environment record, including finds of coins and a knife handle, and a nearby possible Roman site around 650m south-west, which included a hearth (Coward 2002b).

Ditches to the south and north of the ring ditch may indicate boundaries or field systems of similar Romano-British date. Ditches [105] to the south and [111/113] to the north both lie parallel, on an east-west alignment, although ditch terminal [124] and ditch [122] lie on a different south-east by north-west alignment, perhaps suggesting several phases of boundaries, although this is not certain.

Post-medieval ridge and furrow was identified in Area A, with a north-east by south-west alignment in the north and east of the site, and north-south alignment in the western area. No ridge and furrow was observed in Area B to the south. Two post-medieval field boundary ditches were identified, along with two small post-medieval drainage ditches.

The features to the south were noticeably shallow, with ditch [105], for example, situated only 0.25m below ground surface. This may suggest that the southern half of the site has been previously reduced, which, when compared with post-medieval furrow and boundary truncation, is likely to preclude the survival of further features on the site.

BIBLIOGRAPHY

- BGS 2016 British Geological Survey, <http://www.bgs.ac.uk/geoindex/home.html>, 28th June 2016
- CIfA 2014a *Code of Conduct*, Chartered Institute for Archaeologists
- CIfA 2014b *Standard and Guidance for Archaeological Watching Brief*, Chartered Institute for Archaeologists
- Coward, J, 2002a *An Archaeological Evaluation at Grange Park, Loughborough, Leicestershire*, University of Leicester Archaeological Services report, **2002/165**
- Coward, J, 2002b *Archaeological Evaluation of Land South of Loughborough, Adjacent to Park Grange*, University of Leicester Archaeological Services report
- DCLG 2012 *National Planning Policy Framework*, Department of Communities and Local
- Government Derrick, M, 2002 *An archaeological evaluation of land off Laburnum Way at Park Grange, Loughborough, Leicestershire*, University of Leicester Archaeological Services report, **2002/093**
- Dool, J, 1986 The coarse pottery: stratified groups, in J Dool, Derby Racecourse: Excavations on the Roman Industrial Settlement, 1974, *Derbyshire Archaeological Journal*, **105**, 155-221
- Gajos, P, 2011 *A Specification for an Archaeological Watching Brief: Grange Park, Loughborough, Leicestershire*, CgMs Consulting
- Gillam, J P, 1939 Romano-British Derbyshire Ware, *Antiquaries Journal* **19**, 429-37
- HE 2015 *Management of Research projects in the Historic Environment (MoRPHE)*, Historic England
- Leigh, D J, 2005 *An archaeological watching brief on land at Grange Park, Loughborough, Leicestershire*, Northamptonshire Archaeology report, **05/026**
- LCC 2000 *Guidelines and Procedures for Archaeological Work in Leicestershire and Rutland*, Leicestershire County Council
- Lucas, J, 1981 A Romano-British Settlement at Ravenstone, Leicestershire (SK 402 117), in P Liddle, Archaeology in Leicestershire and Rutland 1981, *Transactions of the Leicestershire Archaeological and Historical Society*, **56**, 97-115
- MOLA 2014 *Archaeological Fieldwork Manual*, MOLA Northampton
- PastScape resource, Historic England, <https://pastscape.org.uk>, 28th June 2016

APPENDIX: CONTEXT INVENTORY

Context	Context type	Description	Dimensions	Artefacts/ Samples
101	Topsoil	Friable dark grey-brown sandy loam with occasional rounded flint.	0.20-0.30m thick	-
102	Subsoil	Firm mid grey-brown sandy clay loam with occasional small rounded pebbles.	0.10m thick	-
103	Natural	Compact orange-brown/red sandy clay with grey clay lenses.		
104	Fill of [105]	Firm grey-brown silty clay with moderate rounded pebbles at base and occasional charcoal.		Pottery and flint (SF1)
105	Ditch	Linear aligned E-W with a U-shaped profile and a concave base.	0.55m wide 0.11m deep	
106	Fill of [107]	Friable dark grey-brown clay loam with occasional small pebbles.		Glass
107	Post-med ditch	Linear aligned N-S with a U-shaped profile and a concave base.	0.80m wide 0.50m deep	
108	Fill of [109]	Firm light brown-orange clay with moderate coal and occasional small stones.		Pottery
109	Furrow	Linear aligned E-W. Not excavated.	1.5m wide	
110	Fill of [111]	Firm dark brown-grey silty clay with occasional charcoal and medium stones. Sharp boundary.		-
111	Ditch	Linear aligned E-W with shallow gently sloping profile and a flat base. Cuts [113].	0.84m wide 0.08m deep	
112	Fill of [113]	Firm light orange-brown clay with occasional small to medium rounded stones. Sharp boundary.		-
113	Ditch	Linear aligned E-W with a U-shaped profile and a concave base. Cut by [111]	1.10m wide 0.34m deep	
114	Fill of [115]	Firm light brown-orange clay with occasional charcoal and small stones. Merging boundary.		Pottery
115	Furrow	Linear aligned E-W with shallow profile and a flat base.	1.09m wide 0.10m deep	
116	Fill of [118]	Firm mid brown-grey silty clay with occasional small stones.		-

GRANGE PARK, LOUGHBOROUGH

Context	Context type	Description	Dimensions	Artefacts/ Samples
117	Fill of [118]	Firm dark blue-black charcoal and clay mix. Sharp boundary.		-
118	Pit	Sub-circular aligned E-W with moderately sloping sides and a concave base.	1.14m wide 0.07-0.19m deep	
119	Fill of [120]	Firm dark brown-grey silty clay with occasional charcoal flecks and small stones. Sharp boundary.		Pottery and CBM
120	Ditch	Linear aligned NW-SE with U-shaped profile and a concave base. Cuts [122].	0.65m wide 0.28m deep	
121	Fill of [122]	Firm mid grey-brown silty clay with occasional small stones. Sharp boundary.		-
122	Pit	Sub-circular with a U-shaped profile and a concave base. Cut by [120].	0.35m+ wide 0.40m deep	
123	Fill of [124]	Firm dark blue-grey silty clay with moderate charcoal. Sharp boundary.		-
124	Pit/terminus	Linear/sub-rectangular aligned NW-SE with a U-shaped profile and a flat base.	0.38m wide 0.18m deep	
125	Fill of [127]	Firm mid brown-grey silty clay with occasional small sub-rounded stones. Merging boundary.	0.32m thick	-
126	Fill of [127]	Firm mid red-brown clay. Merging boundary.	0.17m thick	-
127	Post hole	Circular with a U-shaped profile and a flat base.	0.66m diameter 0.44m deep	
128	Fill of [129]	Firm mid brown-grey silty clay with occasional small sub-rounded stones. Merging boundary.		-
129	Ring ditch	Curvilinear with a V-shaped profile and a concave base.	0.30m wide 0.21m deep	
130	Fill of [131]	Firm dark brown-grey silty clay with occasional small rounded stones. Sharp boundary.		Pottery
131	Ring ditch	Curvilinear with a shallow profile and a flat base.	0.50m wide 0.08m deep	
132	Fill of [133]	Firm dark brown-grey silty clay with occasional small sub-rounded stones. Sharp boundary.		Pottery
133	Ring ditch	Curvilinear with a shallow profile and a flat base.	0.45m wide 0.04m deep	

GRANGE PARK, LOUGHBOROUGH

Context	Context type	Description	Dimensions	Artefacts/ Samples
134	Fill of [135]	Firm mid brown-grey silty clay with occasional small rounded stones. Sharp boundary.		-
135	Terminus	Linear/sub-rectangular terminus aligned NE-SW with an asymmetrical profile and a concave base.	0.40m wide 0.15m deep	
136	Fill of [138]	Firm mid grey-brown silty clay with occasional charcoal flecks and moderate angular stone. Sharp boundary.	0.41m thick	Pottery, bone, CBM and stone.
137	Fill of [138]	Firm light brown-red clay with occasional small sub-round stones. Sharp boundary.	0.22m thick	-
138	Pit	Circular with a wide U-shaped profile and a flat base.	2.89m diameter 0.45m deep	
139	Fill of [141]	Firm dark blue-grey clayey silt with moderate charcoal flecks and occasional small sub-round flint. Sharp boundary.	0.25m thick	-
140	Fill of [141]	Firm mid brown-grey clayey sand. Merging boundary with (142).	0.20m thick	-
141	Pit	Sub-circular with a wide U-shaped profile and a flat base.	1.90m+ wide 0.65m deep	
142	Fill of [143]	Friable mid orange-brown clayey sand. Merging boundary.		-
143	Pit	Sub-circular with a V-shaped profile and a concave base.	0.60m+ wide 0.66m deep	
144	Fill of [147]	Firm mid yellow-brown silty clay with occasional charcoal. Sharp boundary.	0.25m thick	-
145	Fill of [147]	Firm mid brown-grey silty clay with occasional charcoal flecks and moderate medium angular stone. Sharp boundary.	0.25m thick	Pottery, CBM and stone.
146	Fill of [147]	Firm mid brown-grey clay with occasional small rounded stones. Sharp boundary.	0.18m thick	Pottery, bone and CBM.
147	Pit	Circular with an asymmetrical profile and a concave base.	3.10m diameter 0.65m deep	
148	Not used			
149	Ditch	Terminus of ditch [113] to west	Not excavated	



MOLA
Bolton House
Wootton Hall Park
Northampton
NN4 8BN
01604 809 800
www.mola.org.uk
ayates@mola.org.uk