

# Northamptonshire Archaeology

Archaeological evaluation at Thistleton Quarry, Phase 1, Rutland, Leicestershire August-September 2005



Steve Morris January 2006

Report 05/153

Northamptonshire Archaeology 2 Bolton House Wootton Hall Park Northampton NN4 8BE w. www.northantsarchaeology.co.uk t. 01604 700493/4 f. 01604 702822 e. sparry@northamptonshire.gov.uk



## STAFF

Project Manager	Adam Yates BA, AIFA
Text	Stephen Morris
Fieldwork Supervisor	Stephen Morris
Geophysical Survey	Adrian Butler BSc, MA, AIFA
	Ian Fisher BSc
Fieldwalking Survey	Stephen Morris
Metal detecting	Steve Critchley BSc
Illustrations	Pat Walsh BA
Flint	Yvonne Wolframm BSc
Roman Pottery	Andy Fawcett MA
Small Finds	Tora Hylton
Environmental finds	Karen Deighton MSc
Animal bone	Stephanie Vann MA

## QUALITY CONTROL

	Print name	Signed	Date
Checked by	Pat Chapman		
Verified by	Adam Yates		
Approved by	Bill Boismier		

## **OASIS REPORT FORM**

## PROJECT DETAILS

PROJECT DETAILS			
Project title	Archaeological Evalu	ation (Trial Trenching Phase), Quarry	
	Access Road, Thistlet		
Short description		Iron Age and Roman occupation were	
(250 words maximum)	revealed by geophysical/fieldwalking surveys and trial trench		
		oposed for a quarry development The few	
		apation is on the periphery of a settlement,	
		res representing part of a field system.	
		ead pattern of furrows across most of the	
	cultivation.	edieval ridge and furrow cultivation	
Project type		dwalking Surveys. Trial trench evaluation	
(eg desk-based, field	Ocophysical and Field	twarking Surveys. That trench evaluation	
evaluation etc)			
Previous work	Archaeological desk-	pased assessment in 2002	
(reference to organisation or	Thendeological desk (	50500 05505511011 III 2002	
SMR numbers etc)			
Future work	Unknown		
(yes, no, unknown)			
Monument type	Late Iron Age, Roman	no-British settlement	
and period			
Significant finds	Iron Age and Roman pottery and animal bone, Cu alloy coin,		
(artefact type and period)	Quern fragment		
PROJECT LOCATION			
County	Rutland		
Site address	Thistleton, Rutland, Leicestershire		
(including postcode)	4010		
Easting (use numeric 100km	4910		
grid square no.) Northing	3173		
Height OD	130m OD		
PROJECT CREATORS	130III OD		
Organisation			
Project brief originator	Leicestershire County	Council Archaeology Officer	
Project Design originator	Leicestershire Archae		
Director/Supervisor	Steve Morris	01055	
Project Manager	Adam Yates for Northamptonshire Archaeology		
Sponsor or funding body	Merriman Ltd	ипролоние и ненисоюду	
PROJECT DATE			
Start date	8th August 2005		
End date	10 <sup>th</sup> September 2005		
ARCHIVES	Content (eg pottery, animal bone etc)		
Physical	Pottery, bone, small	1 box pottery, 1 box bone,	
	finds	1 box small finds	
Paper	Contexts, registers	1 file	
	Plans, sections	3 plan sheets 4 section sheets	
Digital	Report, illustrations		
	<u> </u>		

1

## Contents

1	INTRODUCTION
2	TOPOGRAPHY AND GEOLOGY6
3	PREVIOUS ARCHAEOLOGICAL WORK6
4	GEOPHYSICAL AND FIELDWALKING SURVEYS6
	Geophysical methodology and survey results6
	Fieldwalking methodology and survey results9
5	TRIAL TRENCHING AIMS AND METHODS10
	<b>Aims</b>
	Methodology
6	EXCAVATED EVIDENCE11
	General11
	Archaeological Features
7	THE FINDS
	The Iron Age and Roman pottery by Andy Fawcett
	Other finds by Tora Hylton
	Coins by Ian Meadows21
8	FAUNAL AND ENVIRONMENTAL EVIDENCE
	Mammalian bone by Stephanie Vann
	Palaeo-environmental evidence by Karen Deighton
9	DISCUSSION
	Date and nature of archaeological features24
	BIBLIOGRAPHY

## APPENDICES

A1	Table of contexts and features
A2	Field walking finds
A3	Summery of Pottery; Tables 1 &2
A4	Small finds and coin catalogue

- A5 Animal bone; Tables 1 & 2
- A6 Environmental table, Quantity of taxa

## Figures

Fig 1:	Site location
Fig 2:	Magnetic Susceptibility Survey Results
Fig 3:	Detailed Geophysical Survey Results
Fig 4:	Detailed Geophysical Survey interpretation
Fig 5:	Detailed Geophysical Survey Results and Fieldwalking survey results
Fig 6:	Trench Location
Fig 7:	Trenches and features, trench 24, 25, 28, 29 and 31
Fig 8:	Trenches and features, trench 43, 48, 46, 48, 49 and 50
Fig 9:	Trenches and features, trench 53, 54, 55, 58, 61 and 63
Fig 10:	Sections 1, 2 and 3
Fig 11:	Sections 4, 5, 6 and 7
Fig 12:	Sections 8, 9 and 10

## Plates

Plate 1 and front plate:	Ring ditch [2406], trench 24
Plate 2:	Ring ditch [2504], trench 25
Plate 3:	Posthole [2408], trench 24
Plate 4:	Pit [5406], trench 54
Plate 5:	Post-pad [4321], trench 43

## ARCHAEOLOGICAL EVALUATION AT THISTLETON QUARRY PHASE 1 RUTLAND, LEICESTERSHIRE AUGUST-SEPTEMBER 2005

## ABSTRACT

An archaeological evaluation was undertaken in May and June 2005 on land for a proposed quarry near Thistleton, Rutland. Geophysical and fieldwalking surveys were followed by trial trenching. Dispersed areas of Iron Age and Roman occupation were revealed. The late Iron Age occupation was located in two areas to the north edge of the development, one comprising a group of gullies, pits and postholes, the other an isolated ring ditch. The Roman occupation was located to the west and east parts of the site, characterised by ditches and gullies together with the occasional pit. The few finds suggest the occupation is on the periphery of a settlement, with the linear features representing part of a field system. There was a widespread pattern of furrows across most of the site, relating to medieval ridge and furrow cultivation. Finds included Roman and medieval pottery, animal bone, a coin, and a fragment of lava quern. A number of undated linear features were identified, which were perhaps associated with Roman activity.

## **1 INTRODUCTION**

Northamptonshire Archaeology was commissioned by Merriman Ltd, to undertake archaeological work on land near Thistleton, Rutland in support of a planning application for a proposed quarry development. The site is located to the west of the village of Thistleton, and to the north side of the Witham Road (Fig 1).

The scope of work was set out in a brief issued by Richard Clarke, Senior Planning Archaeologist of Leicestershire County Council's Historic and Natural Environment Team, (LCCHNET). The work was carried out in August and September 2005 in accordance with approved specifications produced by Northamptonshire Archaeology (NA 2005).

The archaeological evaluation comprised a three phase approach; fieldwalking, geophysical survey and trial trenching in the areas designated as the 'Initial Development Area' in Phase 1 of the quarry developments.

## 2 TOPOGRAPHY AND GEOLOGY

The proposed quarry site lies on open cultivated farmland, occupying a field of 5.6ha in the 'Initial Development Area' in Phase 1. The land lies between 129m and 133m OD. The underlying geology consists of Upper and Lower Lincolnshire Limestone, with overlying Boulder Clay (*Geological Survey of Great Britain (England and Wales) Sheet 143*). Excavation showed the limestone to vary from a fragmented state to bedrock and contain patches of yellowish/orange brown silty clay. Where the boulder clay occurred it was yellow and orange in colour, with occasional limestone fragments and silty patches.

At the time of fieldwork the land was rolled, under stubble or seeded.

## **3 PREVIOUS ARCHAEOLOGICAL WORK**

Previous works have established that the proposed quarry site occupies an area of considerable archaeological potential. Non-intrusive evaluation works on the access road (Coward and Browning 2004) have identified remains associated with the Roman town of Thistleton, a site partly excavated in the 1950s and 1960s (Garwood 1995). The trial trenching (Morris 2005) that followed confirmed an extensive area of Roman occupation dated between the 1<sup>st</sup> and 4<sup>th</sup> centuries and was characterised by a metalled road and surfaces, stone structures, (walls and oven/kiln) ditches and gullies, pits and post-holes, and a single grave. Immediately to the north of the site is Thistleton Roman Villa, again partly excavated in the 1950s and 1960s (Garwood 1995).

## 4 GEOPHYSICAL AND FIELDWALKING SURVEYS

#### Geophysical methodology and survey results

All fieldwork was carried out in accordance with English Heritage and the Institute of Field Archaeologists Guidelines (EH 1995 & Gaffney, Gater and Ovendon 2002).

## **Reconnaissance Survey**

Initial extensive geophysical survey of the site was carried out by topsoil (volume specific) magnetic susceptibility (MS) survey. It is understood that where archaeological sites exist, feature fills may be ploughed up to the surface, thus increasing the MS of the plough soil in that area. The geophysicist is therefore studying MS contrasts across a site to indicate buried archaeology, and as an additional benefit, the results of other soil processes.

The survey utilised a Bartington MS2D MS meter and field coil. Readings were obtained on a 20m x 20m grid over the site. The data was subsequently entered into and interpolated in MapInfo v.6 GIS displayed as a continuous grey tone plot, in which higher MS levels are shown as darker shades (Fig. 2).

## **Gradiometer Survey**

All detailed magnetometer survey was undertaken using Bartington Grad601-2 fluxgate gradiometers. The Grad601-2 is constructed as a dual-sensor instrument with two vertical gradiometers separated on a yoke to enable two lines of survey to be recorded in tandem.

A total of 57 separate 30m x 30m grid-squares, totalling c 5.1ha, were surveyed in detail. Each grid square was traversed at rapid walking pace in zigzag traverses spaced at 1m intervals with data recorded every 0.25m along these.

The data was analysed using Geoplot 3.00s software. Low (negative) magnetism is shown as white and high (positive) magnetism as black in the resultant greyscale plots. To avoid the introduction of bias, minimal processing was carried out on the data. The 'Zero Mean Traverse' function was applied in order to bring the average level of each line of data into a balanced zero.

The processed data is presented here in the form of greyscale highlighting the magnetic anomalies (-5nT / +5nT scale, Fig. 3) and interpretive plot (Fig. 4) and are referred to directly in the following Survey Results section.

## **Reconnaissance Survey Results**

The results of the MS survey (Fig. 2) show a broad variation from east to west across the site. A c 16ha area of over 40 x10<sup>-5</sup> SI units was detected, centred on the middle field. To the east the MS falls off rapidly to readings in the 20's, teens and of 9-10 within the formerly separate field, easternmost. It would appear likely that the large MS zone reflects the local boundary of underlying boulder clay drift from which the topsoil has been derived. The former field was likely under a differing agricultural regime, such as pasture where the underlying material has yet to be incorporated as fully into the soil matrix.

The central field of Zone 1 was found to contain a high MS area (50-70 SI). The readings were most pronounced over part of the ridge crossing the field (above para. 3). Lincolnshire Limestone contains a high quantity of iron oxides making it highly magnetically susceptible and it is an eroded outcrop of this that is likely to have been included in the ploughsoil. The

continued high readings adjacent to the east and south field boundaries probably reflect the spread of material by continuous ploughing over centuries.

A small enhanced MS area (29 SI; 0.14ha) was detected on the southern boundary of the eastern field of Phase 1, possibly indicating an area of archaeology when considered with the proximity of features on the Access Road (Coward and Browning 2004; Morris 2005).

## **Detailed Survey Results**

Four areas were surveyed in detail, three in the Phase 1 area and a fourth in the Initial Development Area. The detailed gradiometry was targeted based upon the results of the MS survey, and where no useful MS zoning could be identified, on local topographical setting. The total area surveyed encompassed 4.32ha, each individual block assigned a letter A-D from East to West (Fig 3).

Area A was situated to the north-west of Trench 1 in the access road (Morris 2005), within an aea of enhanced MS (above) in line with the apparent direction of a group of enclosures identified in earlier geophysical work (Coward & Browning 2004). A curving positive anomaly was located in the south-west of Area A, the morphology of which compares well to part of other nearby ditched enclosures. Unfortunately, the feature was detected approximately 5m outside the Phase 1 boundary. To the north-east in this area a region of highly positive magnetism indicates either burning or a dump of highly-fired ceramic in the subsurface. The northerly orientation of the anomaly suggests that the deposit has been subject to movement by the plough some centuries ago as it follows the north-south positive lineation that indicate medieval ridge-and-furrow cultivation in the area.

Area B in Phase 1 was located over the zone of greatest MS in the field and also covered the rise onto the topographic ridge. High MS in the subsoil could be recognised by the increased intensity of the anomalies representing filled furrows. A number of discrete positive anomalies were detected in the area. Up to eight anomalies were situated in a cluster, possibly indicating pits 1-3m in diameter. To the south of these a higher intensity positive anomaly approximately 5m in diameter was located. The negative 'halo' surrounding this anomaly demonstrates that it is unlikely to have been caused as a classic response to a pit-type feature. As with similar anomalies detected by earlier surveys, a more deep-seated feature may be responsible

## Fieldwalking methodology and survey results

The survey was undertaken using standard procedures in accordance with The Institute of Field Archaeologist 'Standards and Guidance for Field Evaluation' (IFA 1994, revised 2001) and the Northamptonshire County Council, Fieldwork Standards and Guidance (1995).

The area of investigation comprised south part of three fields adjacent to the Witham Road, covering the area of the quarry development. Each field was walked separately, but the results were combined to form one plot (Fig 5). The fields were walked in parallel transects at 20 m intervals.

All pottery and tile of medieval or earlier date, together with worked and burnt flint were collected. The find spots were subsequently plotted by category in 20 m 'stints' of recovery within each transect. Post-medieval and modern material was also collected but not plotted.

All three fields under a light crop at the time of the survey that made surface finds visibility fair to good. The transects were laid out square to a baseline set up along the most convenient edge of each field. Parallel transects were laid out at right angles to the baselines, spaced at 20m intervals. Each field survey was undertaken by walking systematically at normal pace along the parallel transects with individual finds collected and plotted in 20m stints. The distribution of each category of finds has been plotted and tied in to the OS map at a scale of 1:2500 and analysed to identify meaningful concentrations.

## Flint

There was no significant concentration of flint recovered from the survey area, with a total of 23 worked flints collected. The majority of tool types recovered were end scrapers and discoidal scrapers. The only implement recovered was a natural flake that was then further retouched. The size of the assemblage does not allow for definite dating, but the presence of the end scrapers suggest a late Neolithic element and the discoidal scrapers an early/late Neolithic element to the implements. (Appendix 2)

Although there were no concentrations, most of the flint was recovered from the west part of the survey, on the slightly higher ground and the limestone geology, with a decline in flint finds to the east and the lower lying boulder clay geology.

## Roman pottery

Altogether 37 Roman pottery sherds were recovered from the survey, dated between the 1<sup>st</sup> to the 4<sup>th</sup> centuries AD, which includes a single sherd of samian, but was mainly greyware. There was a light random distribution of Roman pottery across the survey area, but there were no meaningful concentrations, although the number of pottery sherds picked up was slightly higher in the central and western part of the site (Appendix 2). The limited number of finds and their general random scatter probably represents no more than a manure scatter.

## Medieval pottery

A total of 44 sherds of medieval pottery were recovered in a light and even spread across the survey area. There were no significant concentrations of pottery and the distribution probably relates to a manuring scatter.

## **Post-medieval pottery**

The post-medieval pottery distribution extended across the survey area, and although it consisted of over half of the finds recovered, it showed no significant concentrations and probably represented no more than a field manure scatter. These finds were not plotted.

## 5 TRIAL TRENCHING AIMS AND METHODOLOGY

## Aims

The trenching was designed to characterise the nature, survival and the extent of the potential archaeological remains identified by geophysical and fieldwalking surveys, and to assess the potential for other areas to contain archaeological deposits. The trenching also aimed to provide sufficient information to help develop any further mitigation measures which may be needed in the areas to be affected by the proposed development.

#### Methodology

A total of 43 trenches were requested by LCCHNET, targeted on the potential archaeological features identified by the geophysical survey, otherwise they were regularly spaced across the site in a north-south or east-west alignment. Trench 55 was aligned north-east to south-west, so as it would be placed close to a curvilinear feature identified on the geophysical plot, but outside the development area.

All the trenches measured 50m long and 1.6m wide and were numbered 22-64 to follow on from previous work on the haul road. The trench positions are shown on Figure 6. Features

within each trench were numbered using the trench number as a prefix (ditch 410 being ditch 10 in Trench 4, ditch 1117 being ditch 17 in Trench 11, etc.).

The removal of the topsoil and other overburden was carried out by a tracked 360-degree mechanical excavator fitted with a toothless ditching bucket, operating under archaeological supervision. In all trenches mechanical excavation proceeded as far as the surface of the natural substrate (at a depth of 0.25m-0.60m), or the first significant archaeological horizons. Subsoil was a continuous deposit throughout most of the trenches that consisted of yellowish to orange brown loamy clay or clay between 0.05m and 0.40 m thick. The subsoil was patchy and non-existent in trenches located to the north-west of the site, where they overlay the natural limestone on the slightly higher ground (Trenches 22-27, 29, 32-35, 41 and 42). Most features were sealed directly by the subsoil. The topsoil generally consisted of a dark-yellowish brown clay loam, containing a moderate to frequent number of limestone fragments where the underlying geology was natural limestone.

All potential archaeological features were examined by hand excavation, normally by cutting a section through them (nominally 1m wide in the case of linear features. Standard Northamptonshire Archaeology single context recording procedures were employed.

The trenches and spoil were scanned using a metal detector at regular intervals.

## 6 EXCAVATED EVIDENCE

## General

Archaeological features were encountered in 16 of the 43 trenches excavated. Features were fairly widely spread across the site, but could be grouped into areas of activity. In the north-west of the site trenches 24 and 25 contained parts of a ring ditch. Trenches 28, 29, and 31 contained remains of ditches, gullies, pits and postholes in the south-east of the evaluation area, with a similar group of features identified in trench 43 on the north edge of the site. From the central part of the site to the east end of the evaluation area a dispersed number of ditches and gullies were identified, forming part of a sub-rectangular pattern of enclosures, with a few isolated pits and postholes, (trenches 46, 48-50, 53-55, 58, 61 and 63). Two quarries were identified in trenches 29 and 49.

A number of features are undated within each of the groups, but they are probably associated with the pattern and period of the dated features. The undated features are noted in the trench descriptions.

Northamptonshire Archaeology

Evidence of medieval ridge and furrow cultivation was noted in the most trenches. There were no features of archaeological significance in the remaining trenches.

Principal features are described in the main body of this report and a full context inventory is presented in Appendix 1. The terms 'ditch' and 'gully' are employed following common usage where a gully is understood to be a small ditch. There has been no attempt to differentiate the two by measured criteria.

## **Archaeological Features**

## Trenches 21, 22 and 23 (Fig 6)

Neither of these trenches contained significant archaeological features, but they all had remains of furrows that were regularly spaced in a north-south orientation.

## Trenches 24 & 25 (Figs 6 and 7)

A T-shaped trench which contained three sides of a large ring ditch, with the north and south sides of the ring ditch [2404] and [2406] located in trench 24 and east side of the ditch [2504] in Trench 25 (Fig 10, Section 1, 2 and 3, plate 1 and 2). The ditch was a steep sided feature, with a narrow base forming a V-shaped profile. The ditches on the north and south sides were at least 1.4m wide and 0.6m deep, with east side ditch [2504] 1.00m wide and 0.4m deep. The ditch [2404] on the south side, although generally V-shaped, had uneven sloping sides and the effect of probable subsidence made part of the north slope near vertical. The north side of the ditch [2406] appeared broader and terminated in a sub-circular butt-end on its eastern side.

The north and south sides of the ring ditch [2404]/[2406], had similar primary fills (2409) and (2407) respectively, which comprised orange brown clay, with a moderate to frequent number of limestone fragments. Both fills appear to have tipped into the ditch from the exterior. The middle fill (2408) of [2404] consisted of a greyish brown clay-loam, with a few charcoal flecks, and the middle fill (2412) of [2406] was dark orange brown sandy clay, and both fills contained a frequent number of limestone fragments. The upper fill (2405) of ditch [2404] was dark orange brown clay-loam with occasional charcoal flecks and the upper fill (2413) of ditch [2406] comprised of dark orange brown sandy clay, including a moderate number of small limestone fragments in both.

The primary fill (2505) of the east side ditch [2504] consisted of dark orange brown sandy clay, and frequent limestone fragments, with an upper fill (2510) which was a dark orange

silty loam, containing the occasional limestone chip. No finds were recovered from any of the ditch fills.

Internal features consisted of a small pit [2414], a posthole [2508], a hearth (2506) and a possible linear feature [2416]. The pit [2414] was a roughly sub-rectangular in plan with and slightly curving edges, 1.30m in length and 0.50m wide, aligned approximately north-east to south-west. The sides were near vertical with an uneven base and 0.45m to 0.50m deep. The fill (2415) comprised orange brown clay-loam with charcoal flecks, burnt clay and a few small limestone chips. No artefacts were recovered from the fill.

The posthole [2508] (Plate 3) was oval with steep to near vertical sides and a concave to uneven base. It was 0.54m long by 0.40m wide and 0.24m deep. The fill (2509) was dark orange brown silty-clay, with limestone inclusions. Late Iron Age or early Roman pottery was recovered from the fill. The posthole was overlaid by possible hearth material (2506).

Spread (2507) was dark grey brown to black silty clay, with a few charcoal/burnt clay flecks, and the occasional charred cereal grain, including a frequent number of small burnt white calcined bone fragments of an unidentified animal. The spread extended approximately 1m into the trench forming a level layer up to 0.12m thick and 0.60m wide There was no indication that the underlying natural limestone had been burnt, suggesting either the material had been introduced to the site or it had been spread from a probable hearth or area of burning beyond the limit of excavation, probably to the south of trench 25.

Linear feature [2416] was aligned approximately east-west, with a terminal at its east end. It had very irregular and uneven sides and contained sterile orange brown sandy clay (2417) and probably formed part a natural feature.

The ring ditch was approximately 16.5m in diameter from its outer edges, with a ditch terminal on the north side, which probably formed the north side access. The ring-ditch coincided closely with a large circular feature identified on the geophysical plot of this area. It appears to be isolated and located on a slight limestone ridge. The internal features are grouped closely together just off-centre, approximately 5m from the ditch on the north side. The pottery recovered from the posthole provides a Late Iron Age or early Roman date, but the general lack of cultural material from most of the features indicates a use other than domestic. The possible hearth material with the burnt animal bone and grain may indicate some form of ritual use.

## Trenches 26, 27 & 30 (Fig 6)

None of these trenches contained significant archaeological features, but they had remains of furrows regularly spaced in a north-south orientation.

## *Trenches* 28, 29 & 31 (Figs 6 and 7)

These trenches contained a number of ditches, gullies, postholes, a pit and a quarry that formed an area of activity to the south-west of the site.

Trench 28 had a single ditch [2806] (Fig 11, section 4) and four postholes [2804], [2812], [2814] and [2816]. The ditch [2806] was aligned approximately north-east to south-west, with steep to near vertical sides and a broad concave base, 1.00m wide and 0.64m deep. The primary fill (2807) was grey brown silty clay, with an upper fill (2818) of redeposited natural, a yellowish brown clay and limestone rubble. The ditch cuts the subsoil and the upper fill appeared to have been a recent backfill, which possibly indicated the ditch may be recent in date, but no dating material was recovered.

Postholes [2804], [2812] and [2814] were similar sub-circular features, 0.35m to 0.40m in diameter and between 0.04 to 015m deep, with steep sloping sides and level bases. Their respective fills (2805), (2813) and (2815) were dark orange brown clay loams and sandy clay. Posthole [2816] was slightly larger, 0.52m in diameter and 0.19m deep, with steep sloping sides and a level base. The fill (2817) was similar to the other posthole fills with a reddish brown clay loam and the occasional charcoal flecks, with fragments of limestone up to 0.15m in size, had been used as packing around the side. No finds were recovered from the postholes.

Postholes [2804] and [2812] formed a pair at the east end of the trench approximately 3m apart in an east-west orientation, while postholes [2814] and [2816] make an northwest-southeast alignment 1.5m apart, near the centre of the trench. Both pairs of post-holes suggest they formed some kind of structure, but nothing more significant than fence lines. The ditch and the possible fences were probably parts of agricultural field boundaries or enclosures, but as no finds were recovered, this phase of activity was not dated.

Remains of north-south aligned furrows were identified in the trench, from which mid 2<sup>nd</sup> to late 4<sup>th</sup> century Roman pottery was retrieved, although this was probably residual. A fragment of lava quern was also recovered from the furrow, which would fit into a Roman agricultural context.

Trench 29 contained two ditches [2906] and [2909] (Fig 11, section 7) and a quarry pit [2904]. The ditches were parallel and aligned east-west, with ditch [2909] partially truncating the north side of ditch [2906]. They had fairly steep sloping sides, with narrow flat bases and were 1.10m-1.20m wide and 0.40m deep. Each ditch had two fills (2907), (2908) and (2910), (29011) respectively. The primary fill (2907) of ditch [2906] was orange brown clay with a moderate number of limestone fragments and the upper fill (2908) was orange brown to grey clay with a few limestone fragments. The primary fill (2910) of ditch [2909] was grey brown to grey silty-clay with occasional limestone fragments. No finds were recovered from the ditches.

The quarry [2904] was 5m wide, with parallel sides and aligned east-west. The north side had a shallow slope to the centre of the feature to a depth of 0.76m. The south side was not fully excavated, but it appeared this would have a greater depth. The fill (2905) was orange brown sandy clay with a moderate number of limestone fragments. The quarry was probably used for limestone extraction but the date of when this occurred is unclear, although three sherds of  $2^{nd}$  to  $4^{th}$  century Roman pottery was recovered from the quarry fill, but these may be residual.

Trench 31 contained three gullies [3104], [3106], [3110] and a pit [3108]. Gully [3104] was a narrow gully aligned north-west to south-west, with a U-shaped profile, up to 0.30m wide and 0.20m deep. The gully terminated in a small semi-circular butt-end at the south-west. The fill (3105) was dark brownish-grey loamy clay, containing frequent large charcoal flecks, burnt clay including small limestone fragments and gravel. No finds were recovered.

Running parallel to gully [3104], 0.50m to its south-east side was gully [3106] (Fig 11, section 6). Gully [3106] had steep to near vertical sides, with a slightly concave to flat base, up to 0.60m wide and 0.45m deep. The fill (3107) was similar to (3105), a brownish grey loamy clay with frequent charcoal, some burnt clay and the occasional charred cereal grain, including limestone fragments. The fill contained 27 sherds of mid to late 2<sup>nd</sup> century Roman pottery.

Gully [3110] was aligned approximately north-west to south-east, with a V-shaped to U-shaped profile, 0.25m wide and 0.22m deep. The fill was a dark brownish-grey loamy-clay, with frequent charcoal flecks, the occasional charred cereal grain and small pebbles (3111). No finds were recovered.

Pit [3108] (Fig 11, section 5) was sub-rectangular/square, with vertical sides and a level but uneven base, 0.66m wide and up to 0.29m deep. The full extent of the feature lay beyond the limit of excavation. The primary fill (3112) consisted of a yellowish brown to dark brownish-grey silty clay, including frequent charcoal flecks. The upper fill (3109) was dark brownish-grey clayey silt, containing a moderate amount of charcoal and occasional small stones and burnt clay. No dating material was recovered.

The burnt material and grain deposited in the gullies and pit and the Roman pottery recovered indicate a possible settlement and agricultural processing in the vicinity of trench 31. A heavily weathered  $2^{nd}$  century AD coin was recovered from the trench sub-soil.

## Trenches 32 to 42 (Fig 6)

None of these trenches contained significant archaeological features, but most had remains of furrows regularly spaced in a north-south orientation. A single sherd of  $2^{nd}$  to  $4^{th}$  century Roman pottery was recovered from the topsoil in trench 40.

## Trench 43 (Figs 6 and 8)

Trench 43 contained a number of features grouped together at the east end of the trench, which included four gullies [4313], [4315], [4324], [4326], two postholes [4311], [4322], a post-pad [4321] and pit [4304]. The west end of the trench two pits [4307], [4328] and a gully [4309] were located.

Gullies [4313] and [4315] were similar shallow flat base features, 0.28m wide and up to 0.05m deep, and both which had similar dark orange brown clay fills (4314) and (4316) respectively. The two gullies inter-cut, [4313] from the south-west and [4315] south-east, but the similar cuts and fills made the relationship unclear. Gully [4315] had a flattened butt-end at its south-east terminal. It is possible that these features had structural function, may be as beam slots, but the limited extent in the trench makes this difficult to determine. Both gullies contained small fragments of Late Iron Age or early Roman pottery.

Gully [4326] was a shallow, linear feature aligned north-east to south-west, with fairly steep slopping sides and narrow flat base, 0.40m wide and up to 0.10m deep. Gully [4326] was a re-cut on its north-east side of gully [4324] and aligned similarly, with a squared butt-end. This gully was near vertically sided with a flat base, 0.45m wide and 0.17m deep. Both gullies had similar dark greyish brown, sandy clay fills, (4325) and (4327). No finds were recovered from either gully. These gullies lay parallel to gully [4313] approximately 10m apart and similarly may have been structural beam slots.

Located between the two pairs of gullies was a large sub-circular pit [4304] (Fig 12, section 8), with near vertical but uneven sides and a level, but uneven base, 1.50m in diameter and 0.45m to 0.50m deep. The primary fill (4306) comprised dark greyish brown sandy clay, with a moderate number of limestone fragments and the occasional charcoal flecks, but no dating material was recovered. The upper fill (4305) was a dark grey-brown, sandy clay loam, containing frequent number of small limestone fragments and charcoal flecks, including the occasional burnt clay fragments. This fill contained nine sherds of Late Iron Age or early Roman pottery.

Two small postholes [4311] and [4322] were also located in this part of the trench. Posthole [4311] was a shallow concave scoop, 0.25m in diameter and 0.06m deep, filled by (4312), dark grey/black sandy clay with the occasional charcoal fleck. Posthole [4322] was steep sided with a flat base, 0.20m in diameter and 0.12m deep. The fill (4323) was yellowish-grey silty clay, with the occasional pebble and charcoal fleck. Neither of the postholes contained any dating material.

Located centrally between the two pairs of gullies was a small circular pit [4321] (Fig 12, section 9, plate 5), 0.60m in diameter and 0.28m deep, with vertical sides and a flat base. It contained a probable post-pad, which was a small sub-angular boulder up to 0.33m in length. The flat top of the boulder was placed just above the level of the pit fill (4320), which comprised of a brown grey sandy clay loam, including a few medium sized limestone fragments that were possibly placed below and around the sides of the boulder as packing. No dating material was recovered.

Located at the west end of the trench was a shallow gully [4309], aligned north-west to southeast, with fairly steep sides and flat to slightly concave base, 0.35m wide and 0.07m deep. The fill (4310) was dark orange brown silty-clay, including a moderate number of limestone fragments, from which a sherd of Late Iron Age or early Roman pottery was recovered.

Gully [4309] partially truncated a shallow sub-circular pit [4328] on the north-east side. It had fairly steep sloping sides onto a flat base, at least 0.43m in diameter and up to 0.10m deep. The extremity of the pit lay beyond the limit of excavation. The fill (4329) comprised of orange/grey brown sandy clay, with a few small limestone fragments, but contained no dating material.

At the west end of the trench a pit [4307] was located, of which most lay beyond the edge of excavation. It was probably oval or sub-circular, with fairly steep sides onto a level but uneven base, with a diameter of at least 0.80m and 0.46m deep.

The activity in this trench appears to represent Late Iron Age or early Romano-British occupation, located in the vicinity of the trench, probably to the north side of it, beyond the present area of development. The postholes represent structural activity, but they are not substantial features and probably support no more than fence posts. If the boulder located in the pit was a post-pad it could have supported a large post and the parallel gullies were actually beam slots they may have been part of a building.

## Trench 44 & 45 (Fig 6)

Neither trench contained significant archaeological features, but both had remains of furrows regularly spaced in a north-south orientation.

## Trenches 46, 48-50, 53-55, 58, 61 & 63 (Figs 6, 8 and 9)

These trenches represent a dispersed pattern of features across the east side of the site, which include nine ditches or gullies, four pits, a posthole, a quarry and a possible track. All these features were undated, apart from ditch [6306].

## **Ditches & gullies**

The gullies and ditches [4804]/ [4806], [5004], [5306], [5404], [5504], [5804], [6104] and [6306] located in their respective trenches, formed a number of field boundaries which were all probably part of a broad field enclosure system across the east part of the site. Most of these gullies had shallow U-shaped profiles, between 0.40m to 0.55m wide and 0.10m to 0.35m deep. Ditches [5004] and [6306] were up to 0.84m and 0.96m wide respectively. The ditches/gullies contained single fills of grey to yellowish/orange brown, silty to loamy clay, of which the fill (6307) of ditch [6306] was the only one of these features to produce pottery from a single storage vessel dated to the  $3^{rd}$  to  $4^{th}$  century. The gullies in trenches 48 and 55 were not identified on the geophysical plot probably due to the small size of the features.

Although fragmented and dispersed across the site, a general southeast-northwest/southwestnortheast pattern of enclosures could be identified. Though ditch [6306] in trench 63 was slightly larger and had a north-south alignment which was more comparable to the pattern of north-south/east-west enclosures south of the Witham Road, identified on the geophysical plots (Coward and Browning 2004) and trenching (Morris 2005).

## Pits & quarry

The pits comprised [4604] and [4606] in trench 46, a quarry [4904] and pit [4909] in trench 49 and pit [5406] in trench 54. All these features appear to be isolated within the field system.

Pit [4606] was an oval feature, had moderately steep sides with a slightly concave base, and was at least 0.70m wide and 0.34m deep. It was truncated on its east side by pit [4604], which was also oval in shape, with steep sloping sides and a flat base, 1.40m wide and 0.44m deep. Both had similar dark grey brown silty clay fills (4605)/(4607), with chalky flecks, which were slightly larger in (4605).

At the north end of trench 49 a quarry [4904] and pit [4909] were located. The quarry was a slightly oval feature with steep sides, approximately 3.5m wide. It was excavated to a depth of 0.90m, but the feature was not bottomed. The quarry contained four fills (4904) to (4908) in descending order, all of which were dark grey-brown silty-clay, with the limestone inclusions decreasing from the lower to upper fill. The quarry was probably used for limestone extraction. The quarry corresponded closely with one of the group of anomalies identified on the geophysical plot interpreted as possible pits.

Pit [4904] was an oval pit with steep sides with an oval base, 0.90m wide and 0.35m deep. The fill was dark grey brown silty-clay.

A large circular pit [5406] (Fig 12, section 10, plate 4) was located in trench 54, with very steep sloping sides and a small rounded base, 1.70m in diameter and 0.85m deep. The primary fill (5407), the middle fill (5408) and the upper fill (5409) were all similar dark yellowish brown silty-clays, with the upper fill distinctly loamier. The fills had very few inclusions, the occasional small stone and charcoal fleck, and no finds were recovered. The function of the pit was unclear, but the steepness of the feature and the silty fills may indicate its use as a well. No related erosion or organic deposits relating to a well were found, but it is possible the feature is deeper to the south side beyond the limit of excavation.

## Posthole

A single sub-circular posthole [5304] was located in trench 53, which comprised of a small scoop 0.25m in diameter and 0.10m deep. The fill (5305) was a grey brown loamy-clay.

## Furrows

The furrows which were extensive across the whole of the site had been identified on the geophysical plots, and were found in most of the trenches. They formed a regular pattern, 8m to 10m apart aligned approximately north-south in the west of the site, turning slightly to a northeast to south-west orientation. The furrows were generally shallow, gently rounded features, 1 to 3m wide and 0.10m-0.20m deep. They were filled with a dark orange brown loamy-clay to silty-clay deposit. The furrows were probably medieval in date and from which a single late medieval sherd of glazed white ware was recovered a furrow in trench 62.

## Track

The remains of a possible track [6305] was identified at the north end of trench 63, aligned eastwest. The surface was visible for approximately 1m, comprising a dirty grey brown clay-loam with a patches of small rounded limestone fragments, chalk and charcoal flecks, but no finds were recovered. The track had a flat surface which rose gently on the south side over the subsoil. The surface was probably post-medieval and appears to have been buried recently, as fragments of undecayed wood lay on the surface and modern debris was found in the topsoil above it.

## Trenches 37, 51, 52, 56, 57, 59, 60, 62 and 64 (Fig 6)

None of these trenches contained significant archaeological features, but they had remains of furrows that were regularly spaced in a north-south orientation. A single sherd of Late Iron-Age or Roman pottery was recovered from the subsoil in trench 51. Late Medieval or early post-medieval pottery was retrieved from the topsoil of trenches 52 and 57

## 6 THE FINDS

The Iron Age and Roman pottery by Andy Fawcett

#### Introduction

The archaeological work resulted in the recovery of 225 sherds of pottery weighing 2235g. The assemblage consists mainly of Romano-British including some material of Iron Age date. The condition of the pottery is between abraded and slightly abraded; the diagnostic element is poor and most contexts contain just single sherds of pottery.

Pottery was recovered from 18 recorded contexts. In particular pottery was associated with trenches 24, 25, 28, 29, 31, 35, 40, 43, 51, 52, 54, 57, 62 and 63. Dating is based (where applicable) upon both the identification of fabric and form. The assemblage from each context was given a brief examination and subjected to basic quantification (a sherd count and weight per context). No attempt at detailed fabric description or comparison with material of a similar nature has been undertaken. A full date range for individual contexts and description, with a fabric type are included in Appendix 3.

## Iron Age

One major problem in distinguishing Iron Age from early Roman pottery is the perpetuation of the shelly ware tradition, which could date from the middle Iron Age through to the 2<sup>nd</sup> century AD. Therefore the pottery assemblage recovered the features in trenches 25 and 43 cannot be used to determine the phase of activity in itself, but the lack of any other Roman pottery from these features would be unusual, if they were Roman in date, which would indicate the earlier date.

## Roman

The condition of the pottery is between abraded and slightly abraded; the diagnostic element is poor and most contexts contain just single sherds of pottery. The best-dated assemblage is located in trench 31 (AD150-200), nevertheless this still contains only 27 sherds. The 155 pieces recovered from trench 63, all belong to the same storage vessel. Trench 25 hints at early Roman activity that may indeed be pre-conquest. After this, with the exception of trench 31, the dates are broad with occasional medieval and post-medieval contexts also observed. Only three sherds are from outside of the local/regional area, DOR BB 1 and LEZ SA 2.

#### Other finds by Tora Hylton

#### Introduction

A small number of non-ceramic finds were recovered, none from well dated deposits. An unstratified Roman coin (reported on by Ian Meadows) was recovered from the subsoil overlying trench 31, and an abraded and amorphous fragment of vesicular, grey lava quern, most probably from the Mayen-Niedermendig area of Eiffel, Germany was recovered from a furrow (2809). Its presence possibly indicated domestic activity may have occurred in the vicinity. In addition, an iron strap fragment was recovered from a furrow in trench 54. With the

exception of pottery, no other finds were recovered. A full catalogue of the finds are included in Appendix 4.

## Coins by Ian Meadows

A single coin was recovered from the subsoil of trench 31, which was little more than a flan and further work is unlikely to identify it more precisely with any certainty. Whilst it is possible that the bust that survives on the obverse of SF 26 might be identifiable to a number of possible emperors it is unlikely that it could be precisely and certainly related to any. The state of the weathering would suggest all the coin had been in the plough soil or exposed to weathering for a period (Appendix 4).

## 7 FAUNAL AND ENVIRONMENTAL EVIDENCE

#### Mammalian bone by Stephanie Vann

The animal bone was subjected to macroscopic examination and identifiable bone was noted and quantified by context. A summary of the results is presented in Table 1. Age was calculated where possible from bones where fusion was discernible, neonatal/juvenile bone and teeth (Appendix 5).

## Results

Preservation of the animal bone at this site was poor. Fragmentation was moderate and surface abrasion was moderate with bone exhibiting weathering and root damage in many instances. Fragmentation was result of both old and new breaks. Burning was noted on 47 fragments. These came from a single context, (2507), which dated to the Iron Age, and the material was white and calcined. There was no evidence of butchery or pathology. The species present were cattle, Sheep/goat and pig. No wild species or birds were present. Fragment counts for all phases were low, making it difficult to draw significant conclusions.

Three mandibles were suitable for recording tooth wear following Grant (1982) and the results are shown in Table 2. This is a widely used, published procedure that records the stage of tooth eruption and wear based on a series of defined stages, enabling an age to be assigned to individual animals and thus analysis of age at death patterns to be undertaken. (Appendix 5)

## Discussion

The low total fragment count makes it difficult to draw conclusions from this assemblage. The majority of the bone comes from trenches 31 and 43 and is dated to the 1<sup>st</sup>-2<sup>nd</sup> centuries AD, and it is this material that will be primarily focussed upon in this discussion.

Cattle are the dominant species within this phase, followed by pig. There was also an individual example of a sheep/goat present. However, nearly all of the identifications to species were based upon teeth, which had a greater level of survivability than the bone. Most bones were too poorly preserved to identify them to species level and, as such, have been defined merely as large or small mammal. The counts for these would suggest that there was a greater number of ovicaprids present than the individual tooth would indicate as there are smaller mammal bones present than large mammals, the small mammal count including animals up to an ovicaprid size.

Sheep/goat and cattle are regularly exploited throughout the Romano-British period, as are pigs (Maltby 1981). The recordable mandibles would be classified as sub-adult to adult following the York System (O'Connor 2003: Table 31). This suggests that animals were probably slaughtered before they reached full maturity in many instances. It is not uncommon on archaeological sites to discover that pigs were slaughtered at approximately this stage. This is due to the fact that almost all of the value of the pig lies in its meat and lard. High reproduction rates enable a substantial kill off of young animals and relatively fewer animals are required to reach maturity (Maltby 1981: 183).

## Palaeo-environmental evidence by Karen Deighton

Seven soil samples were selected for assessment, all collected by hand from the excavation. These were processed using a siraf tank fitted with a 500mesh and flot sieve. The resulting flots were examined using a microscope.

## Results

The charred seeds were in a poor state preservation, showing fragmentation and abrasion. Chaff indicated the presence of spelt wheat (*Triticum spelta*) and barley (*Hordeum vulgare*). The wild/weed species present included fat hen (*Chenopodium album*), cleavers (*Galium aparine*) and taxa from the pink family (Caryophallacae). The small quantities of chaff and weeds would

seem to suggest a late stage in crop processing, a storage crop or cereal prepared for use. The table for the quantity of taxa present see Appendix 6.

## Discussion

All of the samples processed produced charcoal, some of which could be identified to taxa, which would provide an insight into fuel use at the site. Four of the samples produced charred seeds, although identification was difficult due to poor preservation. However basic quantification would give a guide to the arable economy of the site. Potential for further work could include analysis of charcoal and the basic quantification and tabulation of seeds and chaff.

#### 8 **DISCUSSION**

The results of the trial trenching have displayed a dispersed pattern of archaeological features, but with small areas of concentrated activity and interest. This confirmed the results of the geophysical survey identifying isolated features and areas devoid of archaeology. Although some ephemeral features were not detected, it is unlikely any major archaeological features were missed. The fieldwalking survey results also appeared to bear out the unlikelihood of any substantial occupation on this site. The evidence from the survey work and the trenching indicates a low level of prehistoric activity, with the development of a Late Iron Age to Roman rural landscape.

#### Date and nature of archaeological features

The trenching showed no indication of pre-Iron Age occupation on the site. The few worked flints can be interpreted as background scatter relating to intermittent prehistoric activity of an ill-defined but probably transient nature. The undated features could in theory be pre-Roman or later, but their proximity to Roman dated features and the presence of the Roman Town of Thistleton, located to the area south of the Witham road and their proximity to Roman dated features in these trenches makes this proposition unlikely.

#### Late Iron Age/Early Roman

Probable Iron-Age/early Roman activity was identified with the isolated ring ditch in trenches 24 and 25, and with linear features, pits and postholes in trench 43. The pottery recovered from these features was essentially shelly ware, which can date from the Iron Age into the early Roman period. The lack of any other type of Roman pottery from these features would be unusual if they were Roman, which tends to indicate that they are of Late Iron Age date.

The features in trench 43 indicate an area of occupation on the north edge of the site, in which structural activity was suggested by the presence of a possible post-pad and steep sided parallel and flat based linear features that may be beam slots. Together these features possibly form part of a rectangular building with a central posted aisle, but this is only tentative as the linear features could be gullies. If there were remains of a rectangular structure in trench 43, its form would likely make it more of an early Romano-British than Iron Age in date. Whether there was a building or not in the trench, there was still evidence of settlement in the vicinity, possibly extending to the north beyond the present development area. The settlement probably related to a small farmstead, which can be suggested by the recovery of domesticated farm animal bones from the features in trench 43.

The ring ditch was a large, substantial sub-circular feature over 16m in diameter, sited in an isolated location, on a low ridge of natural limestone. The ditch was generally V-shaped, between 1.00m to 1.4m wide and 0.4m to 0.6m deep, which would probably make it too large to be a roundhouse eaves-drip gully and with no cultural finds from the ditch makes it unlikely to have functioned as such. An apparent access is located on the north side of the ring-ditch also makes it unusual, as opposed to the conventional south to south-east side, if it was for domestic use. It is possible there may be other access points through the ring ditch, although the geophysical plot does not make this clear, but it does appear to indicate the west side may be open. The related features showed activity had occurred internally, located near the centre of the ring ditch, from which Late Iron-Age/early Roman pottery was recovered. The purpose of these features was not defined, although the ashy spread containing burnt bone indicated a hearth or some form of burning was possibly located within the confines of the ring ditch

It is possible that there is a connection between the ring ditch and the occupation indicated in trench 43, which lies approximately 250m to the north-east, with both sites located on the limestone ridge and tentatively of a similar date. It is possible that the ring ditch was a local ritual centre, not only of the identified site of occupation, but other sites that may lie beyond the present area of development.

## Roman

The pottery from the site indicates two small areas of clear Roman date, with  $1^{st}-2^{nd}$  century pottery from trench 31 at the west end of the site and  $3^{rd}$  to  $4^{th}$  century pottery from trench 63 to the east.

Trench 31 contains a limited number of Roman features, with richly burnt deposits and one feature producing a number of  $1^{st}$  to  $2^{nd}$  century pottery finds, which possible related to occupation and agricultural processing in the vicinity, possibly further to the south.

The ditch in trench 63 was the only other clearly Roman dated feature that formed a possible field boundary or enclosure, that corresponds to the field pattern that was identified to the south of the Witham Road.

## **Undated** features

Two trenches, (28 and 29) located to the west of trench 31 and eight trenches (48-50, 53-55, 58 and 63) located between trench 31 and 63 contain mostly undated features. It is likely that the majority of the features in these trenches are related to Roman activity, due to the influence of the Roman town or their closeness to Roman features identified on the site.

The features in trenches 28 and 29 are mostly undated except for the quarry in trench 29 that is tentatively dated to the  $2^{nd}$  to  $4^{th}$  century. Both trenches indicate occupation and are probably on the periphery to a centre activity that occurred further to the west or south of the site.

The general southeast-northwest/southwest-northeast pattern of enclosure ditches identified in trenches 48-50, 53-55, 58 and 63 located in the east part of the site, including a few isolated pits, were all undated, but it is possible they related to a Roman field system.

The ditch identified in trench 28 may be of a later date, due to possible recent backfilling of the upper fill, indicating the ditch may have been visible on the surface until of late. The ditch is aligned approximately north-east to south-west, which was a similar alignment as the ridge and furrow. This could make the feature a part of a medieval or post-medieval boundary or enclosure ditch.

## **BIBLIOGRAPHY**

Clark, S, 2002 An Archaeological Desk-based Assessment of the impact of a proposed access road on land at Thistleton, Rutland, University of Leicester Archaeological Services report **2002-146** 

Cooper, N, 2000 The Archaeology Of Rutland Water University of Leicester Archaeological Services

Coward, J, and Browning, J, 2004 Geophysical and Fieldwalking Survey on land affected by a proposed access road on land at Thistleton, Rutland, University of Leicester Archaeological Services report **2004-182** 

English Heritage 1995 Geophysical Survey in Archaeological Field Evaluation, Research and

Professional Services Guideline, 1

Gaffney, C, Gater, J, and Ovendon, S, 2002 The Use of Geophysical Techniques in

Archaeological Evaluations, Institute of Field Archaeologists Technical Paper, 6

Garwood, P, 1995, The Settlement Site, draft archive report

Grant, A. 1982. The use of tooth wear as a guide to the ageing and sexing of domestic animals, pp 91-108.

Jones, M and Dimbleby, G (eds). *The Environment of Man: the Iron Age to the Anglo-Saxon Period*. British Archaeological Report British Series **87**, Oxford

Maltby, M. 1981. Iron Age, Romano-British and Anglo-Saxon animal husbandry – a review of the faunal evidence, pp 155-203. In Wilson, B, Grigson, C and Payne, S (eds.). *Ageing and Sexing Animal Bones from Archaeological Sites*. British Archaeological Reports British Series **109**. Oxford

Morris, S. J. 2005. *Archaeological evaluation on land for an access road to Thistleton Quarry, Rutland, Leicestershire,* Northamptonshire Archaeology

NA 2005 Project design for archaeological evaluation of Thistleton quarry extension phase 1, Thistleton, Rutland, Leicestershire, Northamptonshire Archaeology

O'Connor, T.P. 2003. *The Analysis of Urban Animal Bone Assemblages: A Handbook for Archaeologists. The Archaeology of York Vol 19: Principles and Methods.* York Archaeological Trust and Council for British Archaeology.

Perrin, R. J., 1999 'Roman pottery from excavations at or near to the Roman small town of Durobrivae, Water Newton, Cambridgeshire, 1956-58, *Journal Of Roman Pottery Studies* **8**, 1-141

Northamptonshire Archaeology

a service of Northamptonshire County Council

2<sup>nd</sup> February 2006

## **APPENDIX 1: TABLE OF CONTEXTS AND FEATURES**

Abbreviations:

Cardinal Points (e.g. N-S, north to south)

L.o.E. Limit of excavation

Context [\*\*] identifies the cut, (\*\*) identifies fill

Dimensions given as length x width x depth

All measurements in metres (m) or millimetres (mm)

occ. occasional; mod. moderate; freq. frequent

B.o.S. – Break of Slope.

TRENCH	CONTEXT	Туре	DESCRIPTION	DEPTH BELOW GROUND LEVEL (m)
24	2404	Cut	Curvi-linear ditch, E-W, steep irregular 45° sloping sides, narrow base, V-shaped profile. 1.20m wide, 0.65m deep. South side of ring-ditch	0.20m-0.30m
	2405	Fill	Firm dark orange brown, clay-loam with occ. sub-angular limestone fragments and charcoal flecks. Upper fill of ditch [2404].	
	2406	Cut	Curvi-linear ditch, E-W, steep 30°- 45° sloping sides, narrow base, V- shaped profile. 1.20m wide, 0.60m deep. North side of ring-ditch	
	2407	Fill	Compact orange- brown silty-clay. Containing frequent limestone fragments (20mm-60mm) Primary fill of ditch [2406].	
	2408	Fill	Compact to firm greyish-brown clay loam, with frequent (60%) limestone fragments (20mm-70mm) and few charcoal flecks. Middle fill of ditch [2404].	
	2409	Cut	Compact to firm orange-brown loamy-clay, with moderate (30%) limestone fragments (20mm-70mm) Primary fill of ditch [2404].	
	2410	Cut	Furrow	
	2411	Fill	Fill of furrow [2410]	
	2412	Fill	Compact dark orange brown sandy clay, wit frequent limestone fragments (20mm-50mm). Middle fill of ditch [2406].	
	2413	Fill	Firm dark orange brown sandy clay. Few limestone fragment (30%). ) Upper fill of ditch [2406].	
	2414	Cut	Pit cut, sub-rectangular, narrowing in the middle, long axis aligned NE-SW. Near vertical sides cut on to an uneven base. 1 30m in length, 0.50m wide.	
	2415	Fill	Firm orange brown clayey –loam, with frequent small limestone chips (<50mm), charcoal and burnt clay flecks. Fill of pit [2414].	
	2416	Cut	Natural feature	
	2417	Fill	Fill of [2416]	
25	2504	Cut	Curvi-linear ditch, N-S, steep 60°- 70° sloping sides, narrow base, V- shaped profile. 1.20m wide, 0.40m deep. East side of ring-ditch	0.20m-0.30n
	2505	Fill	Loose orange brown sandy-clay, with frequent medium to large limestone fragments (>60mm). Primary fill of ditch [2504]	
	2506/7	Spread	Dark grey brown to black silty clay, with a few charcoal and burnt clay flecks, including a frequent number of small burnt white calcined animal bone fragments. The spread extended approximately 1m into the trench forming a level layer up to 0.12m thick and 0.60m wide.	
	2508	Cut	Oval posthole, with near vertical sides on to a rounded uneven base. U-shaped. L. 0.54m. W. 0.40m. 0.24m deep.	
	2509	Fill	Soft –firm dark orange brown silty-clay, with frequent limestone chips (>50mm), including occ. charcoal and burnt clay flecks. Fill of posthole [2508].	
	2510	Fill	Dark yellowish/orange brown silty-loam with occ. limestone chips. Upper fill of ditch [2504].	
28	2804	Cut	Sub-circular posthole, with 30° sloping sides and a flat base. Diameter 0.38m. 0.15m deep	0.40m-0.80m

TRENCH	CONTEXT	Туре	DESCRIPTION	DEPTH BELOW GROUND LEVEL (m)
	2805	Fill	Firm dark orange brown clay-loam, containing gravel (30%) and limestone chips (>40mm). Fill of posthole [2804].	
	2806	Cut	Linear ditch aligned NW-SE, with 45° sloping side's steep (at top) to near vertical sides and a broad concave base, 1.00m wide and 0.64m deep.	
	2807	Fill	Firm to compact grey brown silty-clay. Few (5%-10%) small limestone chips and occ. charcoal flecks Fill of ditch [2806].	
	2808	Cut	Furrow	
	2809	Fill	Fill of [2808].	
	2810	Cut	Furrow	
	2811 2812	Fill Cut	Fill of [2810] Sub-circular posthole, with 30° sloping sides and a flat base. Diameter 0.38m. 0.15m deep	
	2813	fill	Firm orange brown/grey sandy clay, with occ. small stone and gravel. Fill of [2812]	
28	2814	Cut	Circular posthole, with vertical sides and a flat base. Diameter 0.38m. 0.04m deep.	0.40m-0.80m
	2815	Fill	Soft, red brown clayey-loam. Fill of posthole [2814]	
	2816	Cut	Circular posthole, with steep 450 sloping sides and a flat base. Diameter 0.52m. 0.19m deep.	
	2817	Fill	Soft, dark reddish brown, clayey loam, with occ. charcoal flecks and small limestone chips. Fragments of limestone up to 0.15m in size had been used as packing around the side. Fill of [2817]	
	2818	Fill	Compacted light yellowish brown clay and limestone rubble (>0150mm). Upper fill of ditch [2806], possible backfill.	
	2819	Cut	Furrow	
20	2820	Fill	Fill of [2819]	0.05 0.45
29	2904	Cut	Quarry pit, 5m wide, with parallel sides and aligned east-west. The north side had a shallow $(20^\circ)$ slope to the centre of the feature to a depth of 0.76m. The south side was not fully excavated, but it appeared this would have greater depth.	0.25m-0.45m
	2905	Fill	Compact dark orange brown sandy clay with a moderate number (30%) of limestone fragments (>100mm). Fill 0f [2904].	
	2906	Cut	Linear ditch aligned E-W, with steep 30°-45° sloping sides and a narrow flat base. 1.20m wide. 0.40m deep.	
	2907	Fill	Compact light orange brown clay, with a moderate number of medium number (40%) limestone fragments gravel and small stone. Primary fill of [2906].	
	2908	Fill	Compact Mid orange/grey brown clay, with a moderate number of medium number (40%) limestone fragments gravel and small stone. Upper fill of [2906].	
	2909	Cut	Linear ditch aligned E-W, with steep 30°-45° sloping sides and a narrow flat base. 1.10m wide. 0.40m deep.	
	2910	Fill	Compact Mid grey brown clay, with frequent number of medium number (20%) limestone fragments (>80mm). Primary fill of [2909].	
	2911	Fill	Compact Mid grey brown silty-clay, with a moderate number of medium number (20%) limestone fragments. Upper fill of [2909].	
31	3104	Cut	Gully NE-SW. 60° to near vertical sloping sides on to rounded base. U-shaped profile. 0.30m wide. 0.19m deep. South-east end terminates in rounded butt-end.	0.30m-050m
	3105	Fill	Dark brownish grey loamy clay, with frequent charcoal flecks and burnt clay, including the occ. limestone fragments (>120mm) and gravel. Fill of [3104].	
	3106	Cut	Linear ditch NE-SW aligned, with steep (75°) to near vertical sides on to a flat base, U-shaped profile, and 0.60m wide. 0.45m deep.	
	3107	Fill	Compact brownish grey loamy clay, containing frequent charcoal and burnt clay flecks, including a moderate amount of limestone chips and gravel. Fill of [3106].	

TRENCH	CONTEXT	Туре	DESCRIPTION	DEPTH BELOW GROUND LEVEL (m)
	3108	Cut	Sub-rectangular pit, with near vertical sides and a level, but uneven base. 0.80m wide. 0.29m deep.	
	3109	Fill	Dark brownish grey clay-silt, with moderate (10%) charcoal, burnt clay flecks and a few small stone. Upper fill of [3108].	
	3110	Cut	Small linear gully, aligned NW-SE, with 45°-60° sloping sides V to U-shaped profile.0.25m wide. 0.22m deep.	
	3111	Fill	Soft to firm dark brownish clay, with frequent charcoal flecks and occ. small pebble. Fill of [3110]	
	3112	Fill	Firm to compact yellowish-brown to dark greyish brown silty clay, with frequent charcoal flecks and v.occ. small stones. Primary fill of pit [3108].	
43	4304	Cut	Sub-circular pit, with near vertical irregular sides and a level uneven base, (cut into nat. fragmented limestone). 1.50m wide. 0.45m deep.	0.25m -0.35m
	4305	Fill	Dark brownish grey sandy-clay-loam, with frequent (5%-10%) charcoal flecks and small limestone chips/gravel (>50mm), including a few flecks of burnt clay. Upper fill of pit [4304].	
	4306	Fill	Dark greyish sandy-clay with a moderate number (40%) of small limestone fragments (>150mm) and occ. charcoal flecks. Primary fill of pit [4304].	
	4307	Cut	Oval pit, with 30°-45° sloping sides and a level, but uneven base. At least 0.95m wide and 0.46m deep.	
	4308	Fill	Compact dark orange brown silty clay, with a moderate number (20%-30%) of medium limestone fragments (>150mm). Primary fill of pit [4307]	
	4309	Cut	Shallow linear gully, aligned NW-SE, with 30° sloping sides onto a flat base. 0.35m wide. 0.07m deep.	
	4310	Fill	Compact dark orange brown silty-clay, with a moderate no.(40%) of small limestone chips and gravel. Fill of [4309]	
	4311	Cut	Small circular posthole, with 20°-30° sloping sides onto a flat base. 0.25m in diameter. 0.06m deep.	
	4312	Fill	Soft dark grey/black sandy clay, with a few charcoal flecks (10%). Fill of posthole [4311].	
	4313	Cut	Linear feature aligned NE-SW, 45° to near vertical sides and a flat base. 0.28m wide. 0.04m deep. Possible gully or beam slot.	
	4314	Fill	Firm dark orange brown clay, with v. occ. small stones/gravel and charcoal flecks. Fill of [4313].	
	4315	Cut	Linear feature aligned NW-SE, 45° sloping sides and a flat base. 0.28m wide. 0.05m deep. Possible gully or beam slot. Inter-cuts with [4313], relationship is unclear.	
	4316	Fill	Firm dark orange brown clay, with v. occ. small stones/gravel and charcoal flecks. Fill of [4315].	
	4317	Fill	Compact dark orange brown silty- clay, with v. occ. small stones/gravel. Upper fill of [4307].	
	4318	Cut	Furrows	
	4319 4320	Fill Fill	Fill of [4318] Brown grey sandy clay loam, with the top of a boulder placed just	
	4320	F III	above the level of the pit fill, and a few medium sized limestone fragments were placed below and around the sides of the boulder as packing. The boulder possibly forms the base of a post-pad. Fill of [4321].	
	4321	Cut	Sub-circular pit, with steep near vertical sides and a flat base. 0.60m in diameter. 0.28m deep.	
	4322	Cut	Small oval posthole, with steep 70o-80o sloping sides and flat base. 0.18m-0.20m diameter. 0.12m deep.	
	4323	Fill	Yellowish grey silty-clay, with occ. pebbles and charcoal flecks. Fill of [4322].	
	4324	Cut	Linear feature aligned NE-SW, with near vertical sides and a flat base. 0.45m wide. 0.17m deep. Terminates at its SW end in a squared butt- end, cutting [4326] Possible gully or beam slot.	

TRENCH	CONTEXT	Туре	DESCRIPTION	DEPTH BELOW GROUND LEVEL (m)
	4325	Fill	Soft to firm dark greyish-brown sandy clay loam, containing frequent pebbles/gravel, small limestone chips and few charcoal flecks. Fill of [4324].	
	4326	Cut	Linear feature aligned NE-SW, with 450 sloping sides and a flat, narrow base. 0.40m wide. 0.10m deep. Cut at its NE end by [4324] Possible gully or beam slot.	
	4327	Fill	Soft dark greyish-brown sandy clay loam, containing a moderate no.(20%) of small limestone chips/gravel and a few charcoal flecks. Fill of [4326].	
	4328	Cut	Shallow sub-circular pit, with 30° sloping sides and a flat base. Diameter (at least) 0.43m. 0.10m deep. Cut on its SW side by gully [4309].	
	4329	Fill	Compact orange grey/brown sandy clay, with a moderate no. (25%) of small to medium limestone fragments and gravel. Fill of pit [4328].	
46	4604	Cut	Oval pit, with steep 45° to near vertical sides and a flat base. 1.40m wide. 0.44m deep. Cuts pit [4606] on its west side	0.40m-0.70m
	4605	Fill	Firm dark grey silty-clay, containing the occ. medium/large chalk chips/flecks. Fill of pit [4604].	
	4606	Cut	Oval pit, with steep 45° to 70° sloping sides and a slightly concave base. 0.70m wide. 0.34m deep. Cut on its east side by pit [4604]	
	4607	Fill	Firm dark grey brown silty-clay, containing the occ. small chalk chips/flecks. Fill of pit [4606].	
48	4804	Cut	Shallow linear gully, aligned SE-NW, with 30°-45° sloping sides and level, but uneven base. 0.30m wide. 0.07m deep.	0.25m-0.35m
	4805	Fill	Soft dark reddish/orange brown clay/silt containing a few (5%) small limestone chips/fragments (>0.10m) and the occ. gravel (>0.01m).	
	4800	Cut Fill	Shallow linear gully, aligned NE-SW, with 30°-45° sloping sides and level, but uneven base. 0. 35m-0.40m wide. 0.05m-0.10m deep. Soft dark reddish/orange brown clay/silt containing a few (5%) small	
40			limestone chips/fragments (>0.10m) and the occ. gravel (>0.01m).	0.40
49	4904	Cut	Oval quarry pit, with steep $60^{\circ}$ - $70^{\circ}$ sloping sides, approximately 3.5m wide and excavated to a depth of 0.90m, but the feature was not bottomed.	0.40m
	4905	Fill	Firm dark grey silty-clay, with occ. (5%) small/medium limestone chips (0.05m) and chalk and charcoal flecks. 0.20m deep. Upper fill of Quarry pit [4904]	
	4906	Fill	Firm dark grey silty-clay, with mod (10%) medium/large limestone chips (0.10m) and chalk flecks. 0.30m deep. Fill of Quarry pit [4904]	
	4907	Fill	Firm dark grey-brown silty-clay, with frequent. (20%) small/medium limestone chip/fragments (>0.15m). 0.20m deep. Fill of Quarry pit [4904]	
	4908	Fill	Very firm dark grey brown silty-clay, with v. freq. (50%) medium /large limestone chips/fragments (>0.15m). 0.20m deep. Upper fill of Quarry pit [4904]	
	4909	Cut	Oval pit with 30°-45° sloping sides and a level, but uneven base. Diameter 0.90m. 0.35m deep.	
	4910	Fill	Dark grey brown silty-clay, with the occ. small limestone chip. Fill of pit [4909].	
	4911 4912	Cut Fill	Furrow Fill of [4911].	
50	5004	Cut	Shallow linear gully, aligned E-W, with 30°-50° sloping sides and a level, but uneven base. 1,10m wide. 0.16m deep.	0.20m-0.50m
	5005	Fill	Firm dark grey brown silty clay, with a moderate no. of small to moderate limestone fragments. Fill of [5004].	
53	5304	Cut	Small sub-circular posthole, with 45° sloping sides and a small concave base. 0.25m in diameter. 0.10m deep.	0.30m
	5305	Fill	Firm grey brown loamy-clay, containing the occ. small stone/gravel (>30mm), including the occ. small grit and charcoal fleck. Fill of [5304].	
	5306	Cut	Shallow linear gully, aligned approx. SE-NW, with 10°-15° sloping	

TRENCH	CONTEXT	Туре	DESCRIPTION	DEPTH BELOW GROUND LEVEL (m)
			sides and concave base. 0.40m wide. 0.05m-0.10m deep.	
	5307	Fill	Firm dark yellowish loamy-clay, containing the occ. small stone/pebble (>60mm) and the occ. small grit/gravel (20mm).Fill of [5306].	
54	5404	Cut	Linear gully, aligned SW-NE, with 30o-45o sloping sides and a flat to slightly concave base. Broad U-shaped profile. 0.65m-0.70m wide. 0.25m deep.	0.50m-0.55m
	5405	Fill	Firm dark yellowish/grey silt- clay loam, containing the occ.(2%)small stone/pebble (>50mm) and the v. occ. gravel /grit, including the occ. charcoal fleck. Fill of [5404].	
	5406	Cut	Large circular pit with very steep 60° sloping sides and a small rounded base, 1.70m in diameter and 0.85m deep. Possible well ?	
	5407	Fill	Compact dark yellowish /orange clay/silt, with occ. small dark grey patch. The fill contains the v. occ. small rounded pebble /gravel (60mm) and v.occ. charcoal fleck. Form a diffuse boundary with fill (5408). Fill of [5406].	
54	5408	Fill	Firm dark yellowish brown clay/silt, with v. occ. (2%) small rounded pebble/stone (>50mm) and v.occ. small grit/gravel, including the occ. charcoal fleck. Form an indistinct/diffuse boundary with fill (5407) and (5408). ). Fill of [5406].	0.50m-0.55m
	5409	Fill	Firm to crumbly dark yellowish brown silty-clay-loam, with occ. (5%) small rounded pebble/stone (>80mm) and .occ. small grit, including the occ. charcoal fleck. Forms a diffuse boundary with fill (5408). Fill of [5406].	
55	5504	Cut	Shallow gully, aligned approx. SW-NE, with $30^{\circ}$ -45° sloping sides and a flat to slightly concave base. The SW end terminates in a sub-circular butt-end. 0.40m wide. 0.08m-0.10m deep	0.30m-0.45m
	5505	Fill	Firm to crumbly dark grey/yellowish brown clay loam, containing a few (5%) limestone fragments (>100mm) and the small rounded pebble/gravel (>30mm), including the occ. charcoal fleck. Fill of [5504].	
58	5804	Cut	Shallow linear gully, aligned approx. NW-SE, with slightly concave 30° -45° sloping sides and a rounded base. Broad U-shaped profile. 0.40m wide. 0.12m-0.15m deep.	0.25m-0.28m
	5805	Fill	Firm dark yellowish brown silty-clay, with the occ. (2%) small stone/pebble (>100mm) and grit/gravel (>20mm). Fill of [5804]	
61	6104	Cut	Linear gully aligned approx. SE-NW, with 45° sloping sides and a slightly rounded base. Broad U-shaped profile. 0.55m wide. 0.25m deep.	0.40m-0.45m
	6105	Fill	Compact to firm dark yellowish brown silty-clay-loam, with the occ.(2%) small stone/gravel (50mm), few small grit, including the v. occ. charcoal fleck. Fill of [6105].	
63	6304/5	Layer	Remains of a possible track aligned east-west. The surface was visible was for approximately 1m, comprising of a dirty grey brown clay-loam with a patches of small rounded limestone fragments, chalk and charcoal flecks, but no finds were recovered. The track had a flat surface which rose gently on the south side over the subsoil.	0.66m-0.75m
	6306	Cut	Linear, but undulates in its course, aligned approx. N-S, with 30°-45° sloping sides and a level but uneven base. 0.95m -1.00m wide. 0.22m-0.31m deep.	
	6307	Fill	Compact orange brown clay, with the occ. small stone (10%) and gravel/chalk flecks (15%). Fill [6306].	

## **APPENDIX 2: FIELDWALKING FINDS**

## Summary of the flint artefacts

Flint type	Flake	core	End Discoida		Notched	Misc.
			Scrapper	Scrapper		Retouched
Flint no.	2	1	4	5	4	7

## Summary of the Roman pottery

Samian 1 <sup>st</sup> -2 <sup>nd</sup> C	Colour-coat ware Mid 3 <sup>rd</sup> - 4 <sup>th</sup> C.	Greyware $2^{nd}$ - $4^{th}$ C.	Shelly-ware	Undiagnostic	
1	4	29	2	1	

## **APPENDIX 3: SUMMARY OF POTTERY**

Table 1

Fabric & Form Key	
LEZ SA 2	Lezoux samian ware (category 2)
UNS WH	Unsourced white ware
UNS OX	Unsourced oxidised ware
DOR BB 1	Dorset black burnished ware (category 1)
BSW	Black surfaced/Romanising wares
LNV RE	Lower Nene Valley reduced ware
UNS SH	Unsourced shell tempered ware
UNS GS	Unsourced grog& shell tempered ware

.

## Table 2

Context	Pottery type	Tot No	Tot wt g	Date	Vessel type
2509	UN GS	12	82	L. I-Age /Early Roman	Non-Diagn.
2809	LNV RE	1	68	E.2nd-E.4 <sup>th</sup> C	Non-Diagn.
2905	LNV RE	3	6	E.2nd-E.4 <sup>th</sup> C	Non-Diagn.
3107	UNS WH, BSW, UNS OX	27	352	M. 2 <sup>nd</sup> -L.2 <sup>nd</sup> C	Jar, flagon
4001	LNV RE	1	9	E.2nd-E.4 <sup>th</sup> C	Non-Diagn.
4305	UNS SH	9	107	L. I-Age /Early Roman	Non-Diagn.
4310	UNS SH	4	14	L. I-Age /Early Roman	Non-Diagn.
4314	UNS SH	2	1	L. I-Age /Early Roman	Non-Diagn.
4316	UNS SH	1	2	L. I-Age /Early Roman	Non-Diagn.
5102	UNS WH	1	4	L. I-Age /Early Roman	Non-Diagn.
					Butt beaker
5201	UNS OX	1	18	L. Med / Early. P. Med	Non-Diagn.
5402	LEZ SA 2	1	16	E. $2^{nd}$ -L. $2^{nd}$ C	Drg 18/31
5701	Glazed black earthenware	1	56	L.1 <sup>st</sup> -M3 <sup>rd</sup> C	Jar
6202	Glaze white ware	1	11	Roman	Non-Diagn.
6302	DOR BB 1	2	19	E.2nd-M.4 <sup>th</sup> C	Non-Diagn.
6307	UNS SH	155	1444	$3^{rd}$ - $4^{th}$ C	Jar
TOTAL		225	2235		

## Pottery date range and type for individual contexts

G = jar, J = flagon, ND = non-diagnostic.

## **APPENDIX 4: SMALL FINDS AND COIN CATALOGUE**

#### **Finds Catalogue**

SF 26	Coin, copper alloy.
	SF 26, Quarry, Trench 31, 3102,
	An AE As of second century date.

SF 27 Strap fragment, iron. D-shaped cross-section with one straight edge and one slightly curved edge. Nature of object difficult to determine. Measurements: 111 x 25mm
SF 27, Quarry, Trench 54, Furrow

SF 28 Quern fragment, lava. Amorphous fragment of lava quern. ? vestige of grinding surface but no other features apparent. Measurements: 50 x 45 x 40mm
 SF 28, Quarry, Trench 28, 2809, Furrow

- 34 -

## **APPENDIX 5: ANIMAL BONE**

Phase	Bos Cattle	Ovicaprid Sheep/Goat	Sus Pig	Large Mammal	Small Mammal	Unid.
Iron Age	0	0	0	0	0	47
C1st – C2nd	7	1	3	1	12	80
TOTAL	7	1	3	1	12	127

Table 1: Total number of fragments per species

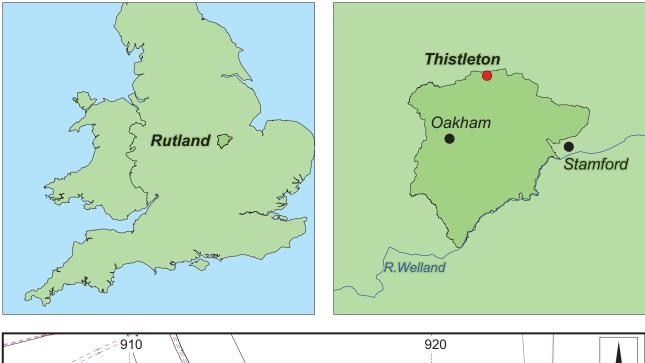
Table 2: Ageing of Species by Tooth Wear (Grant, 1982)

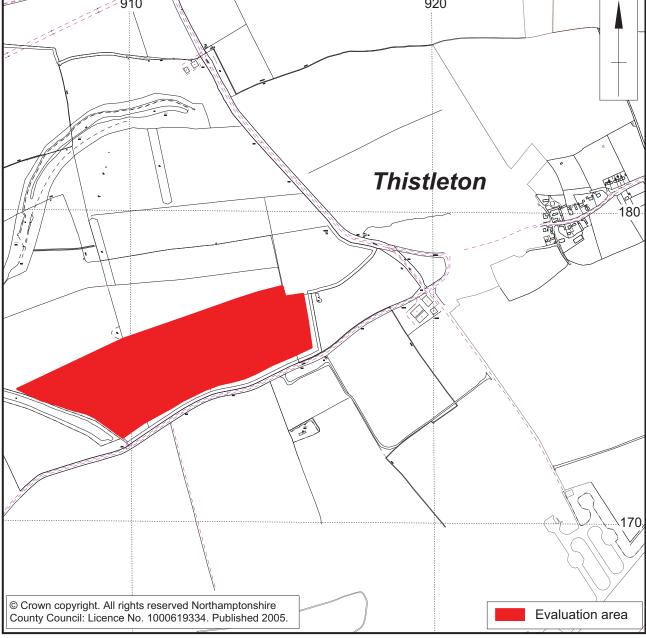
Context	Species	Dp4	M1	M2	M3
4306	Pig	-	Н	F	С
4306	Pig	-	J	-	-
4320	Pig	-	D	В	-

## **APPENDIX 6: ENVIRONMENTAL MATERIAL**

Quantity of taxa

Sample	Context	Charcoal	Cereal	Chaff	Wild/weed
			grains		
14	2507	1	1		
15	2509	1	2		1
16	3111	4	2		1
19	3107	6	2	1	1
23	4305	2			
26	2507	2			
27	2415	6			









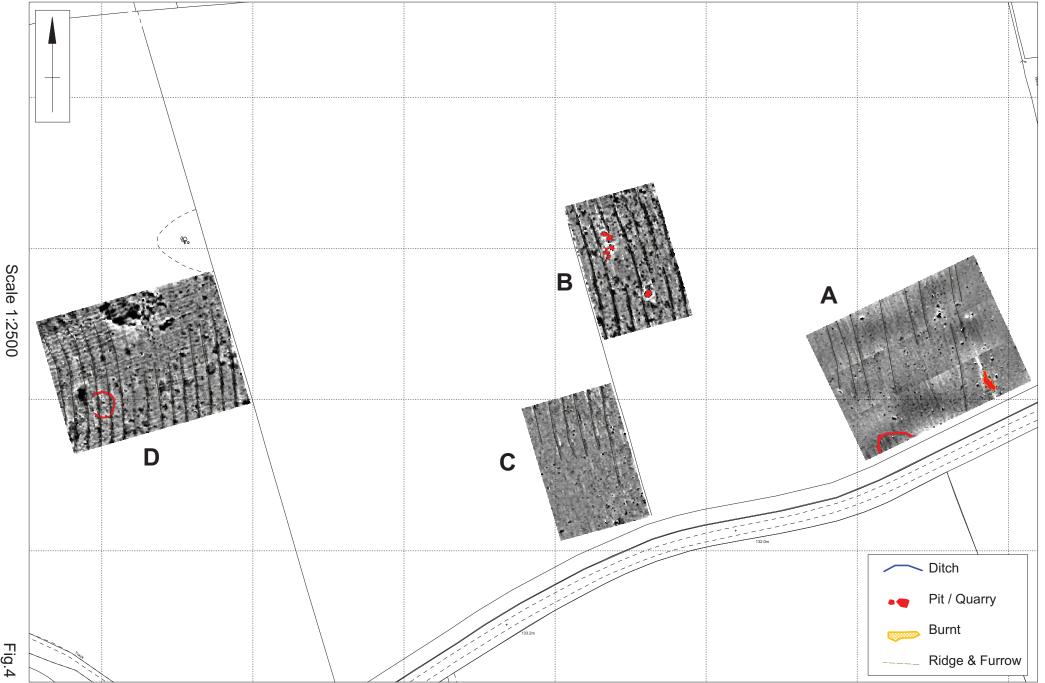
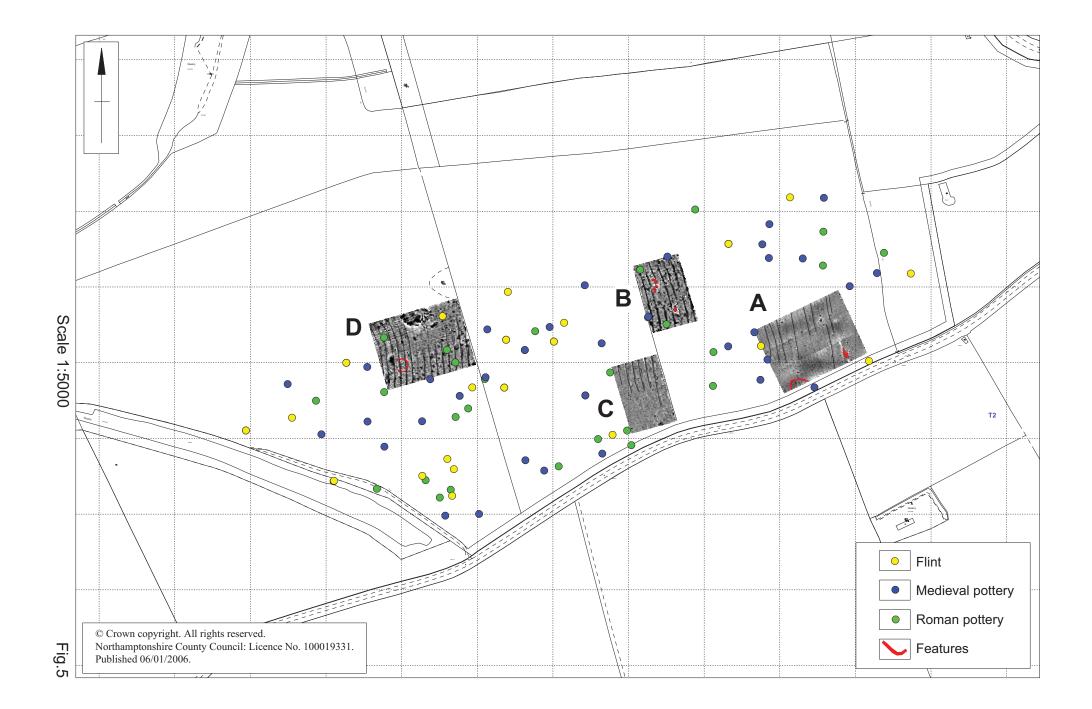
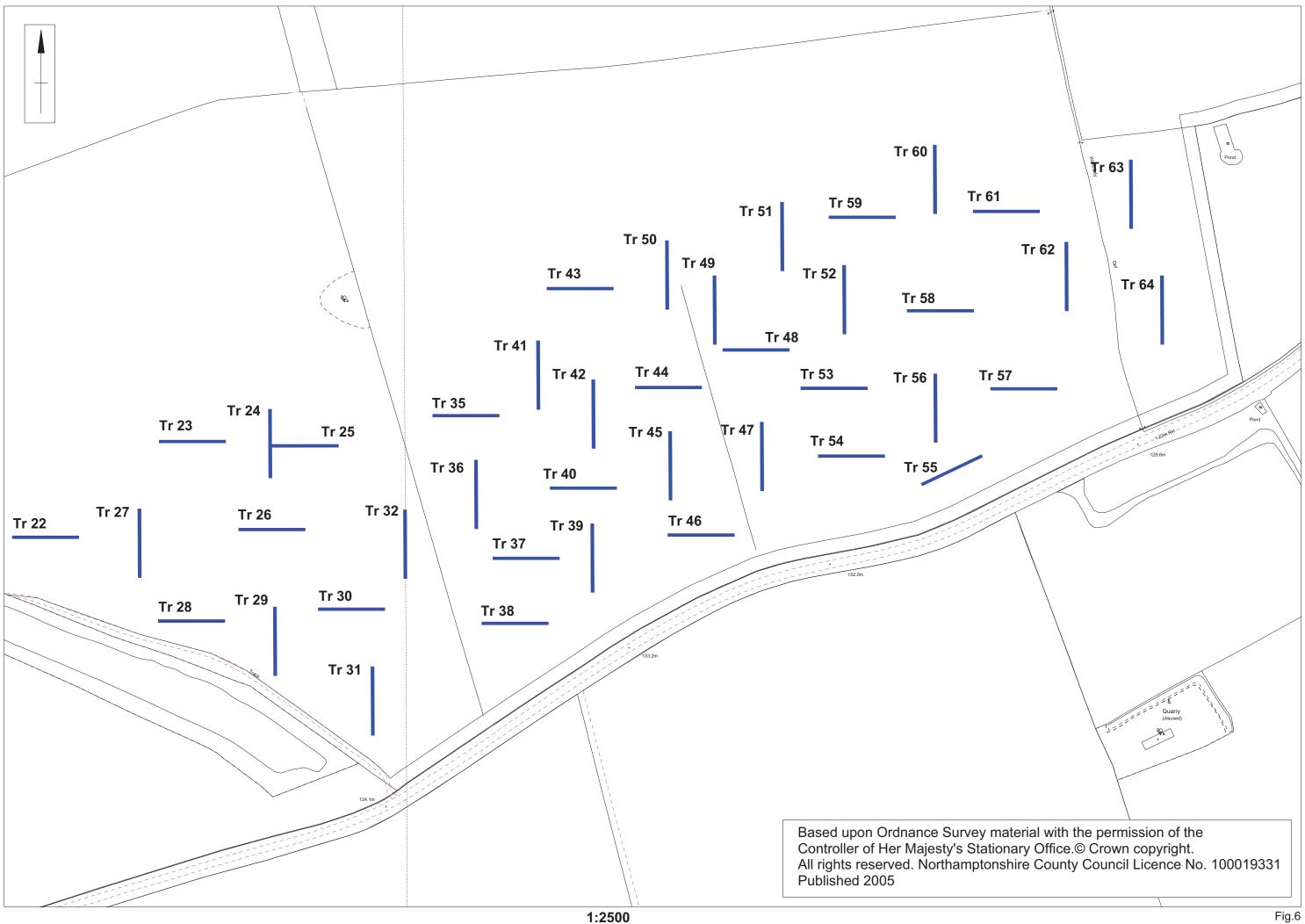
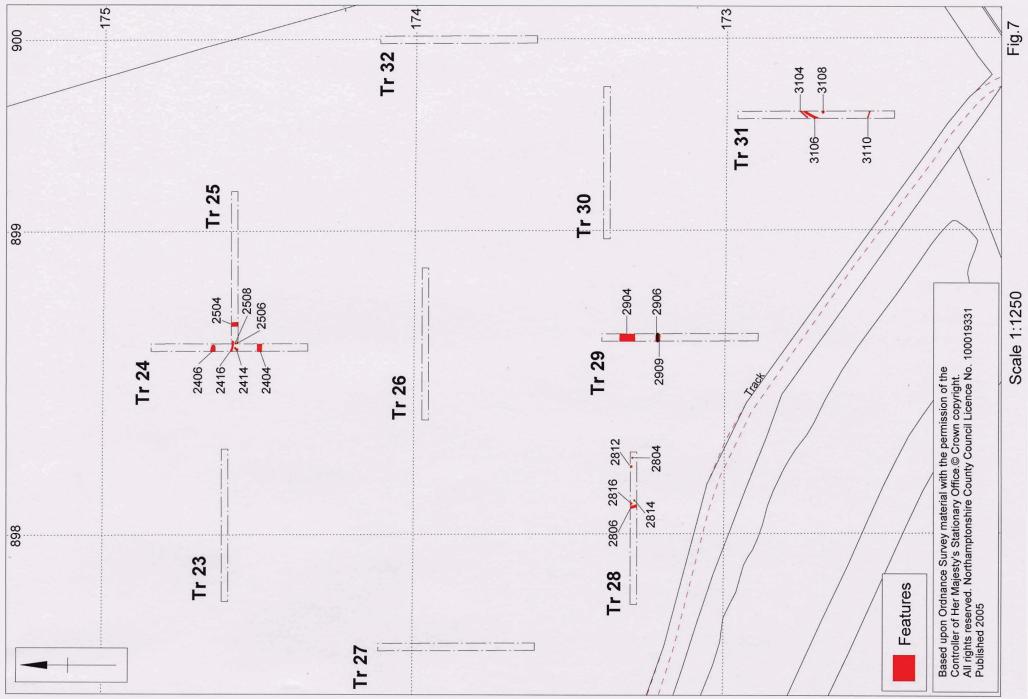
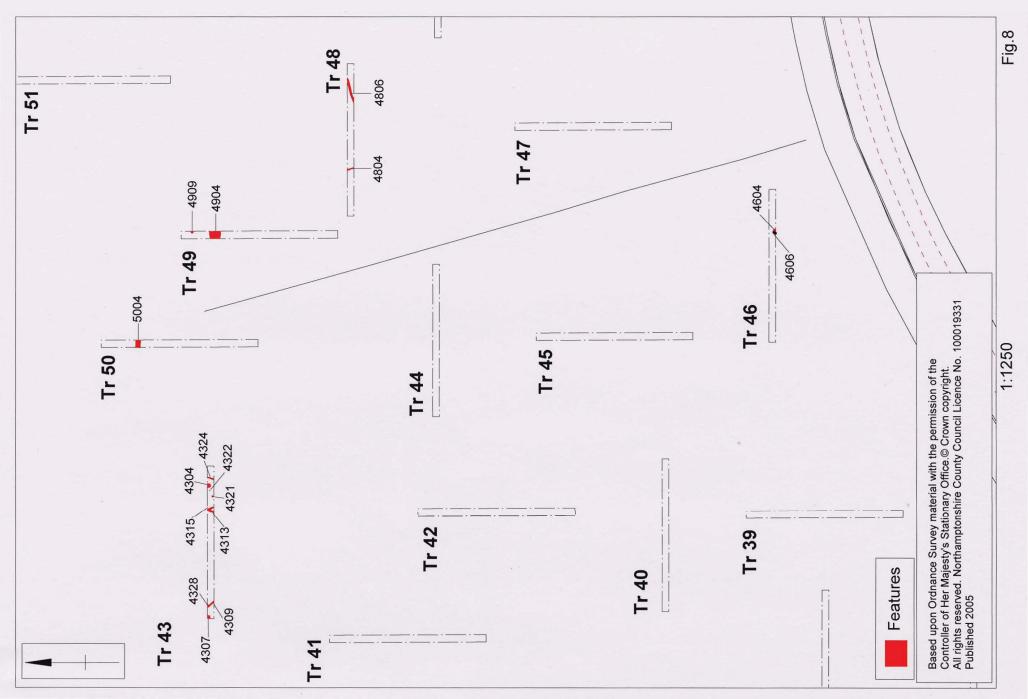


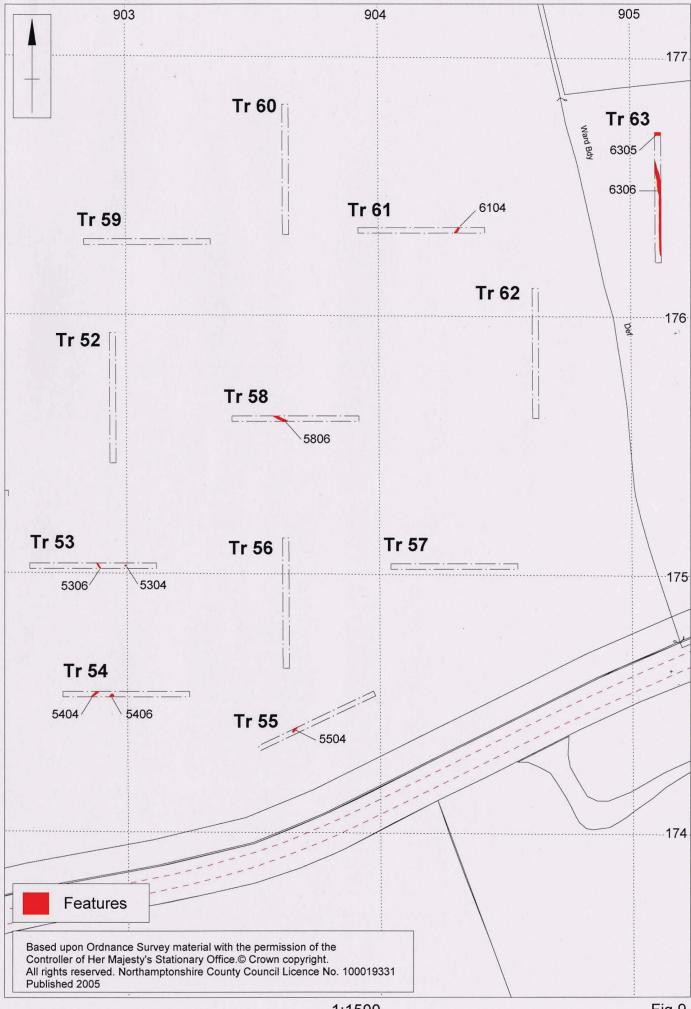
Fig.4

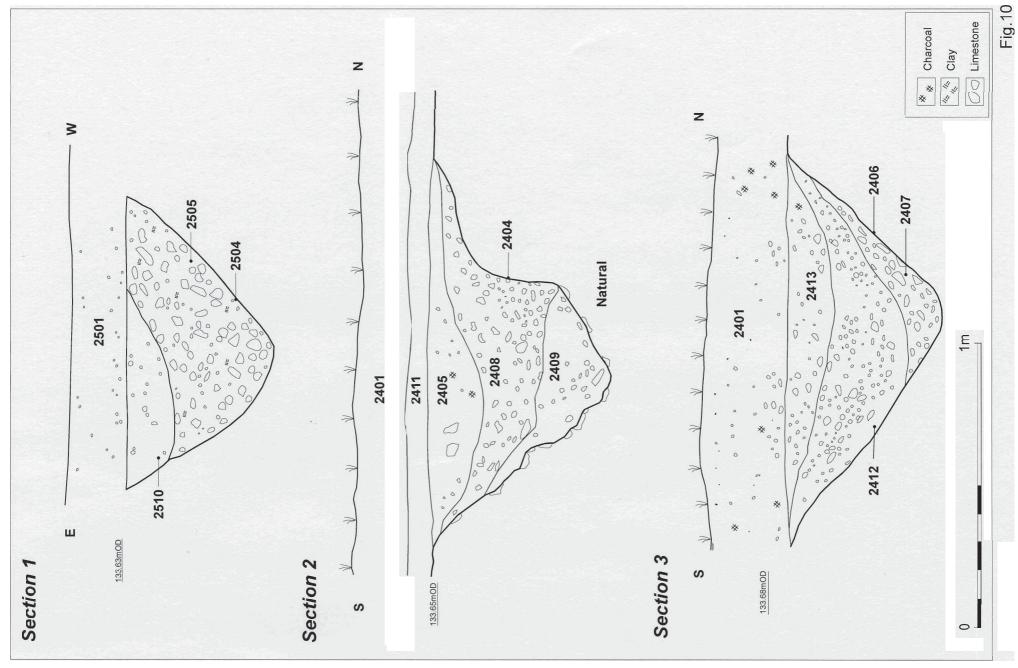


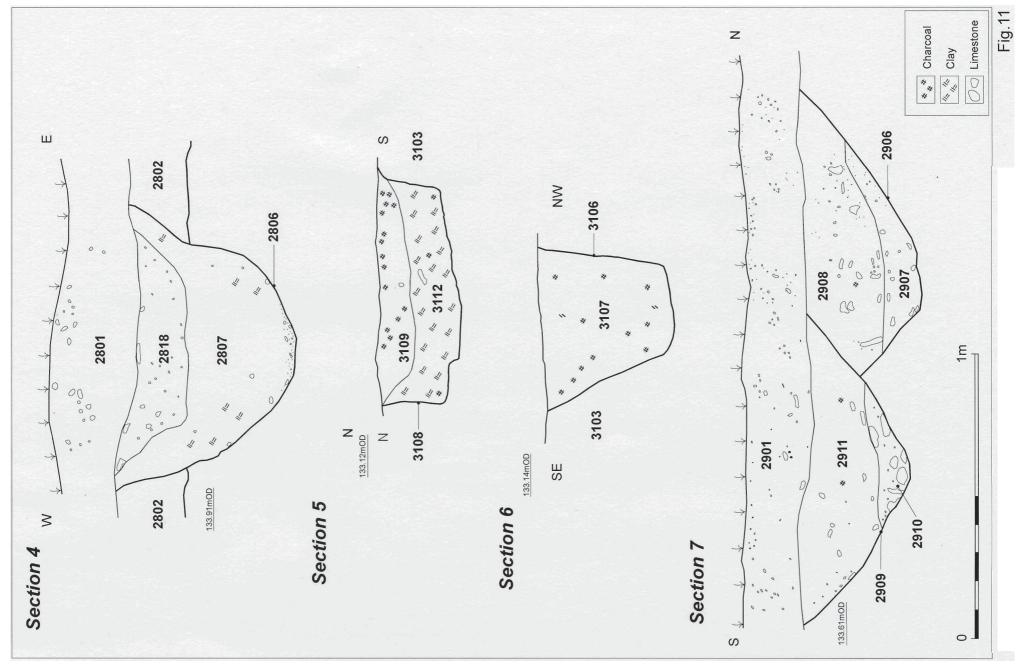


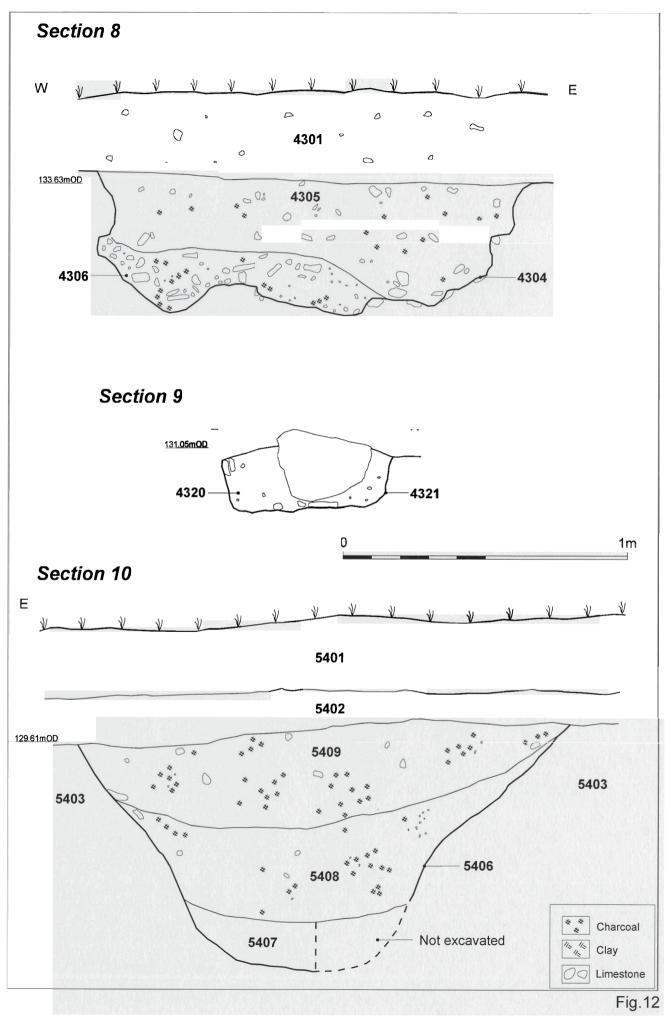












## **Thistleton Quarry**



Plate 1. Ring ditch [2406] trench 24



Plate 2. Ring ditch [2504] trench 25

## Thistleton Quarry



Plate 3. Post-hole [2508] trench 25



Plate 4. Pit [5406] trench 54



Plate 5. Post-pad [4321] trench 43