



ARCHAEOLOGICAL
SERVICES
WYAS

Darrington Quarry Northern Extension
Darrington
West Yorkshire

Phase 1 Pre-Determination Trial Trenching

October 2008

Report No. 1881

C L I E N T

Darrington Quarries Ltd.

Darrington Quarry Northern Extension

Darrington

West Yorkshire

Phase 1 Pre-Determination Trial Trenching

Summary

An archaeological evaluation by trial trenching was carried out on the site of the proposed northern extension of Darrington Quarry, near Knottingley. The work followed an assessment that included the use of aerial photographs and extensive further evaluation by geophysical survey which together revealed a landscape of former enclosure and field systems. A total of 23 trenches were targeted upon geophysical anomalies, sampling a range of archaeological features and deposits. The results indicate that the earliest activity took place in the pre-Roman Iron Age, most tangibly demonstrated in the form of human pit burial with associated artefacts that have been radiocarbon dated to 380-180 cal. BC. The main period of exploitation, as represented by the pottery appears to have been in the later Roman period with peaks of activity in the 3rd and 4th centuries.



ARCHAEOLOGICAL
SERVICES
WYAS

Report Information

Client: Darrington Quarries Ltd
Address: Darrington Leys, Cridling Stubbs, Knottingley, West Yorkshire, WF11 0AH
Report Type: Archaeological Evaluation
Location: Darrington
County: West Yorkshire
Grid Reference: NGR SE 500 223
Period(s) of activity represented: Iron Age, Romano-British
Report Number: 1881
Project Number: 3321
Site Code: DNQ08
Planning Application No.: 07/00003/FUL
Museum Accession No.:
Date of fieldwork: 14th July – 1st September 2008
Date of report: October 2008
Project Management: Ian Roberts BSc FSA MIFA
Fieldwork supervisor: David Williams BA
Report: David Williams, Ian Roberts and Andrew Walsh
Illustrations: John Prudhoe, Andrew Walsh
Specialists: Dian Alldritt (carbonised plant macrofossils and charcoal)
Hilary Cool (small finds)
Malin Holst (human bone)
Ruth Leary (pottery)
Jane Richardson (animal bone)
Phil Weston (flint)

Produced by: Archaeological Services WYAS, PO Box 30,
Nepshaw Lane South, Morley, Leeds LS27 0UG
Telephone: 0113 383 7500
Email: admin@aswyas.com

Authorisation for
distribution: -----

ISOQAR ISO 9001:2000

Certificate No. 125/93

© Archaeological Services WYAS

Contents

Report information	ii
Contents	iii
List of Figures	iv
List of Plates.....	v
List of Tables.....	v
Acknowledgements	vi
1 Introduction.....	1
Site location and topography	1
Soils, geology and land-use	1
2 Archaeological and Historical Background.....	1
3 Aims and Objectives.....	2
4 Methodology	2
5 Results.....	5
Introduction.....	5
Trial Trenching.....	5
Summary.....	19
6 Artefact Record	22
Pottery.....	22
Flint	28
Small Finds	29
7 Environmental Record	31
Human bone	31
Animal bone.....	31
Carbonised Plant Macrofossils and Charcoal	34
Radiocarbon Dating.....	38
8 Discussion and Conclusions	38
9 Further Work.....	40

Figures

Plates

Appendices

Appendix 1: Inventory of primary archive

Appendix 2: Concordance of contexts yielding artefacts or environmental remains

Appendix 3: Written Scheme of Investigation for archaeological evaluation by trial trenching

Appendix 4: Detailed archive catalogue of the pottery

Bibliography

List of Figures

- 1 Site location
- 2 Site plan showing location of trenches, with respect to crop marks, geophysical survey data and earlier excavations
- 3 Trench 1, plan and section
- 4 Trench 4, plan and sections
- 5 Trench 5, plan and section
- 6 Trench 6, plan and sections
- 7 Trench 7, plan and sections
- 8 Trench 7b, plan and section
- 9 Trench 8, plan and section
- 10 Trench 9, plan and section
- 11 Trench 11, plan and section
- 12 Trench 13, plan and section
- 13 Trench 14, plan and sections
- 14 Trench 15, plan and section
- 15 Trench 16, plan and sections
- 16 Trench 17, plan and section
- 17 Trench 18, plan and section
- 18 Trench 19, plan and section
- 19 Trench 20, plan and section
- 20 Trench 21, plans and section
- 21 Trench 22, plans and sections

List of Plates

- 1 Trench 1, looking north
- 2 Trench 2, looking north-east
- 3 Trench 3, looking south
- 4 Trench 4, showing stoney layer 123 in ditch 142, looking south
- 5 Trench 5, looking north
- 6 Trench 6, looking west
- 7 Trench 7, looking south-west
- 8 Pit 102 in Trench 7, looking north-west
- 9 Trench 7b, looking north-west
- 10 Trench 8, looking north
- 11 Trench 9, looking north-east
- 12 Trench 10, looking north-west
- 13 Trench 11 showing ditch 203 and pit 201, looking south-east
- 14 Trench 13 showing ditch 217
- 15 Trench 14, looking north
- 16 Trench 15, looking north-east
- 17 Trench 16, looking south-east
- 18 Trench 17, looking north-west

- 19 Trench 18, looking north-east
- 20 Trench 19, looking north-east
- 21 Trench 20, looking east
- 22 Trench 21, looking west
- 23 Trench 22, looking south-west
- 24 Trench 22 showing Enclosure ditch terminus 295, looking south-east
- 25 Trench 22 showing Enclosure ditch 254, looking south-east
- 26 Trench 22, Skeleton 1 during excavation
- 27 Trench 22, Skeleton 1 in the base of pit 249
- 28 Trench 23, looking south
- 29 The two annular rings found with Skeleton 1, before and after conservation

List of Tables

- 1 Pre-determination trial trench details and rationale
- 2 Trench summary
- 3 Quantity from excavated trenches and contexts
- 4 Quantities of wares
- 5 Spot-dates by context
- 6 Animal bone fragments by context
- 7 Animal bone fragments by phase
- 8 Carbonised plant remains and charcoal
- 9 Radiocarbon dating results

List of Graphs

- 1 Relative quantities of vessel types

Acknowledgements

Archaeological Services WYAS would like to thank Darrington Quarries Ltd for commissioning the project and Bob Binstead and Lee Jordan who provided access to the site as well as on site advice and welfare facilities. The project was managed by Ian Roberts and the excavation was supervised by David Williams and Debora Moretti assisted by Christina Elcock, Paul Gelderd, Alex Harrison, Felicity Howell, Mike Vidler, Siobhan Ruddy, Richard Szymanski and Tom Weavill. Surveying was undertaken by Sam Harrison and Emma Watson. Ian Sanderson, Principal Archaeologist for West Yorkshire Archaeology Advisory Service, monitored the project.

The post-excavation finds and environmental processing was supervised by Alison Morgan who coordinated the post-excavation specialists. In addition to all the named specialists Archaeological Services WYAS would also like to thank Karen Barker for conserving the objects recovered from the project. The report was prepared by David Williams, Ian Roberts and Andrew Walsh.

1 Introduction

An archaeological evaluation was commissioned by Darrington Quarries Ltd in an area of proposed limestone extraction. The results of this evaluation are to accompany the planning permission application and are designed to help inform that decision. A total of 23 trial trenches of varying lengths and widths were targeted upon potential archaeological features so that they could be investigated and characterised. The area of proposed extraction is located just north of the M62 motorway and south of Knottingley. The site covers approximately 45 hectares and has been subject to an Environmental Impact Assessment (EIA) produced by RPS Consultants.

Site location and topography

The proposed development site is located to the north of the village of Darrington at a height of approximately 30m above Ordnance Datum (OD) and centred on NGR SE 4500 4223 (Fig. 1). The site is a roughly rectangular area of land bounded by Knottingley to the north and west, a railway line to the east, and the M62 to the south (Fig. 2). The land is gently undulating with a ridge of high ground located to the south; this then dips down towards the centre of the site.

Soils, geology and land-use

The solid geology of the site is mapped as Magnesian Limestone of the Permian period (Institute of Geological Sciences 2001). The soils comprise well-drained loamy soil of the Aberford Series (Soil Survey of England and Wales 1980). A small rectangle of land in the south-eastern part of the site is under arable use and has recently been used for wheat crops. The remainder of the site was not under any agricultural regime.

2 Archaeological and Historical Background

The desk-based assessment (Ford 2007) revealed that there was, at the time, relatively little known archaeological potential within the proposed extraction area. Fragmented cropmarks, however, pointed to the existence of former fields systems and enclosures in the surrounding landscape, there being a well defined crop mark of a trapezoidal enclosure in the south eastern part of the site.

The potential for invisible remains has been borne out by the discoveries made through geophysical survey, trial trenching and excavation on the Darrington Quarry West site, immediately to the south of the M62 (Heapy 2008, Williams in prep.). Consequently, the site presently under consideration has been subject to a 56% (25.25ha) geophysical (magnetometer) survey (Webb 2008). As well as enhancing the plan of the trapezoidal crop mark enclosure, the survey results have revealed fragments of a former regime of ditched land division and associated enclosures, which do not entirely coincide with previously mapped land allotment. Many of the boundaries are erratic and generally the enclosures are

appended to the principal boundaries. The arrangement is typical of many irregular Late Iron Age or Romano-British enclosure and field systems found elsewhere on the Magnesian Limestone in this region (Roberts *et al.* 2008).

3 Aims and Objectives

The presence and extent of this former landscape exploitation cannot be fully mapped by crop marks and geophysical anomalies alone, as the manifestation of these phenomena are dependent upon factors that include lighting, ground conditions and crop regime at the time aerial photographs were taken, and the magnetic susceptibility of the soil filling the archaeological features. Moreover, whilst crop marks and geophysical survey are good at revealing large former linear features, they do not tend to reflect the positions of smaller features, such as pits and post-holes, or indeed some ditches that have been heavily degraded by modern ploughing.

Ultimately, should planning permission be granted, the site is to be evaluated by a 4% sampling strategy. The purpose of the pre-determination trenches reported here is to investigate the 'visible' archaeological features and enclosures, as already revealed by the remote sensing methods, with the overall aim of ensuring that they did not constitute or include archaeological features or deposits that would warrant preservation *in situ*.

Consequently, the objectives of the work were to gather sufficient information to establish the extent, condition, character and date (in so far as circumstances permitted) of archaeological features and deposits within selected trenches, as agreed with West Yorkshire Archaeological Advisory Service (WYAAS). In addition to this there were the general objectives to confirm the date, character and degree of preservation of the principal phases of activity on the site and to assess their physical survival and the palaeoenvironmental potential of their fill on different underlying geologies.

The purpose of the information gained during this evaluation is to provide the Planning Authority with sufficient data in order that they may make a reasoned and informed decision about the proposed development with regard to whether archaeological deposits should be preserved *in situ*, or may more appropriately be preserved by record following a watching brief, strip and record operation, or full open area excavation.

4 Methodology

The pre-extraction evaluation strategy required by WYAAS necessitates 4% of the site to be subject to trial trenching, a total of 18,000m². To aid the planning decision (determination) a total of 3,700m² (<1%) of the site would initially be opened up, in the form of 23 trial trenches (Fig. 2). This pre-determination work focuses upon the anomalies revealed in the

geophysical survey data. The remaining 3.1% of the evaluation trenching will be carried out post-determination if planning permission is granted. The trial trenches were excavated in accordance with a Written Scheme of Investigation produced by ASWYAS.

All work was carried out in accordance with accepted professional standards and guidelines (English Heritage 2006, Institute of Field Archaeologists 2001) and in accordance with the ASWYAS site recording manual (ASWYAS 2007).

The 23 evaluation trenches were generally 2m wide, and either 50m or 100m long, although trenches targeted on possible enclosures were 4m wide, so that any internal features or structures were more easily identifiable. Table 1 shows the rationale behind the location of the 23 evaluation trenches.

The trenches were laid out using a Trimble Geo-explorer GPS system. The trench limits and exposed archaeological features were subsequently surveyed using a 600 series Geodimeter total station and fixed in relation to nearby permanent structures and to the Ordnance Survey national grid.

All topsoil and subsoil deposit were removed in level spits (not more than 0.2m) using a 360° excavator equipped with a smooth bladed ditching bucket under direct archaeological supervision. All machining was stopped at the first identifiable archaeological horizon or natural deposits. The stripped surface was cleaned by hand and inspected for any archaeological remains. All linear features were subject to a manual sampling regime of 10% of their total length within the trial trench, each section excavated was no less than 1m in length. Sections were, where possible, located adjacent to the trench edge to provide the full stratigraphic sequence. All terminal-ends, corners and intersections were fully investigated. All discrete features revealed such as pits and post-holes were at a minimum 50% excavated (by area).

All archaeological features were accurately recorded in plan at a scale of 1:50 and all excavated features were recorded in sections at scales of either 1:10 or 1:20. All plans and sections include spot heights related to the Ordnance Datum (OD) in metres. A full written and photographic record was made of all archaeological features. A soil-sampling programme was undertaken for the identification and recovery of carbonised remains, vertebrate remains, molluscs and small artefactual material. Soil samples of up to 40 litres were taken from the fills of excavated features where appropriate.

The evaluation took place in two phases between the 14th July-11th August and 18th August-1st September 2008. The week long hiatus was caused by land access issues due to crops in the south-eastern part of the site. The work was monitored throughout by WYAAS. An inventory of the primary archive is presented in Appendix 1, and a concordance of contexts, finds and environmental samples is presented in Appendix 2. As required by WYAAS, a copy of the Written Scheme of Investigation is presented in Appendix 3. ASWYAS currently hold the site archive in a stable and secure location.

Table 1. Pre-determination trial trench details and rationale

Trench	Dimensions	Orientation	Rationale
1	50m by 2m	N-S	To investigate a possible enclosure as revealed by a magnetic anomaly
2	50m by 2m	SW-NE	To investigate discrete features as suggested by magnetic responses
3	50m by 4m	N-S	To investigate a possible enclosure as revealed by a magnetic anomaly
4	100m by 4m	NW-SE	To investigate a possible enclosure as revealed by strong magnetic anomaly
5	50m by 4m	N-S	To investigate a possible enclosure as revealed by strong magnetic anomaly
6	50m by 4m	E-W	To investigate a possible enclosure as revealed by strong magnetic anomaly
7	50m by 4m	SW-NE	To investigate a possible enclosure as revealed by strong magnetic anomaly
7b	50m by 4m	NW-SE	To investigate the principle field boundary as revealed by strong magnetic anomaly
8	50m by 2m	N-S	To investigate an area of magnetic disturbance
9	50m by 4m	SW-NE	To investigate a possible enclosure as revealed by strong magnetic anomaly
10	50m by 2m	NW-SE	To investigate a weak geophysical responses
11	50m by 2m	SW-NE	To investigate a principal field boundary as revealed by strong geophysical response
12	50m by 2m	SW-NE	To investigate a principal field boundary as revealed by strong geophysical response and weaker responses that may represent enclosures
13	50m by 4m	N-S	To investigate a weak geophysical responses that may represent an enclosure
14	50m by 2m	N-S	To investigate an area of magnetic disturbance and a possible continuation of principle field boundary
15	50m by 2m	SW-NE	To investigate weak geophysical responses
16	50m by 2m	NW-SE	To investigate two field boundaries as revealed by strong geophysical responses
17	50m by 2m	NW-SE	To investigate a field boundary as revealed by strong geophysical responses
18	50m by 2m	SW-NE	To investigate a field boundary as revealed by weak geophysical responses
19	50m by 2m	SW-NE	To investigate weak geophysical responses that may represent an enclosure
20	50m by 2m	E-W	To investigate weak geophysical response and a crop mark
21	50m by 2m	E-W	To investigate possible outer boundary ditch of a trapezoidal enclosure represented by weak geophysical responses
22	100m by 4m	SW-NE	To investigate a trapezoidal enclosure as revealed by crop marks and a strong geophysical response
23	50m by 2m	N-S	To investigate a weak geophysical response

5 Results

Introduction

The fills of the majority of features across the site were a reddish brown colour, being either sandy silts or sandy clays. The colour and texture of fills in individual features are only discussed if they varied from this norm. A summary of the results from each trench, including trench dimensions, the archaeological features and finds identified, and a brief interpretation, is presented in Table 2. Plans of the key trenches are presented together with relevant sections in Figures 3-21.

Trial Trenching

Trench 1 (Figs 2 and 3; Plate 1)

Trench 1 measured 50m long and 2m wide, and was located on the far western side of the site on a north-south alignment. The trench was targeted upon a potential enclosure or ring gully identified by the geophysical survey. The topsoil and subsoil were removed by machine to an average depth of 0.55m below ground level, at which point the natural, a reddish brown clay with flecks of limestone, was exposed at a minimum height of 40.28m OD. A series of four segmented gullies which ran south to north were located and appear to be the features located by the geophysical survey.

Each segment of the gully (161, 163, 165 and 167) was excavated and contained a single fill in which there was an abundance of sandstone pebbles some of which had been heat affected. The fully exposed segments were between 2.5m and 4.5m long, and up to 0.6m wide and 0.25m deep. No finds were recovered from the excavated sections.

Trench 2 (Fig. 2; Plate 2)

Trench 2 measured 50m by 2m wide, and was orientated south-west to north-east. The trench was targeted upon weak magnetic responses revealed by the geophysical survey. The topsoil and subsoil were removed by machine to an average depth of 0.62m below ground level, at which point the natural, a reddish brown clay with flecks of limestone, was exposed at a minimum level of 38.06m OD. Plough furrows were exposed within the trench. No other archaeological features or deposits were identified.

Trench 3 (Fig. 2; Plate 3)

Trench 3 measured 50m by 4m wide, and was orientated north to south. The trench was targeted upon two possible enclosure ditches revealed by the geophysical survey. Due to overhead power cables the proposed trench location was moved approximately two metres north. The topsoil and subsoil were removed by machine to an average depth of 0.50m below ground level, at which point the natural, a reddish brown clay with flecks of limestone, was exposed at a minimum level of 40.51m OD. Plough furrows were observed cutting north-west to south-east across the trench, but no archaeological features or deposits were encountered.

Trench 4 (Figs 2 and 4)

Trench 4 measured 100m by 4m and was orientated north-west to south-east forming a cross with Trench 7. The trenches were targeted on a rectangular enclosure, identified by geophysical survey. The topsoil and subsoil were removed by machine to an average depth of 0.56m below ground level, at which point the orange brown clay natural was exposed at a minimum height of 40.02m OD. Three ditches, corresponding with the results of the geophysical survey, were identified within the trench.

Ditch 121 was a shallow linear feature, filled by a single deposit which contained no finds. It was on the same alignment as the plough furrows in this area of the site.

Ditch 142 (Fig. 4, S.015) was formed an irregular U-shaped cut and contained two fills 123 and 141. The lower fill 123 was made up of a firmly compacted layer of mixed sandstone and limestone cobbles (Plate 4), which contained one fragment of pottery and a number of animal bones. The upper fill 141 was made up of a mid orangey brown silty clay. No finds were recovered from this context. This ditch formed the eastern corner of the enclosure in this area.

To the north west of ditch 142, a ditch was exposed running for *c.*20m longitudinally along the trench. This ditch corresponds with the geophysical survey results and probably forms the northern end of the enclosure in this area. Three sections were excavated through this ditch (115, 113 and 110). At the intersection of Trenches 7 and 4 the ditch was found to be 1.6m wide, 0.8m deep and to possess a U-shaped profile with very steep sides. It contained a sequence of three fills. The primary fill 138 consisted of a 0.48m deep light yellow grey sandy silt which contained no finds. This was overlain by 137 consisting of a 0.45m deep, light greyish brown sandy clay with an abundance of heat affected sandstone cobbles. Animal bone was recovered from this deposit. The final fill in the sequence 114 was made up of a dark greyish brown sandy clay, with occasional burnt cobbles. This deposit contained both an abundance of pottery and animal bone (Fig. 4, S.004). At this point the ditch cut through a patch of very sandy material (117 and 119) which was originally thought to be a large natural feature. However, the south-western side of the feature the fill, which was made up of a light greyish brown sandy clay, contained a reasonably large assemblage of pottery and animal bone.

Another section excavated through this ditch revealed a similar ditch profile (Fig. 4, S.006). Ditch 113 contained a single fill, 112, and a possible re-cut 122 which also contained a single fill, 111. Large quantities of pottery and bone were recovered from this later fill.

At the intersection with another ditch (135), probably the north-western corner of the enclosure, the relationship was not clear; however, the primary fill of ditch 110 (155), was made up of a compacted stone surface which followed the curve of the base with no break. With the lack of a cut observed in section it can be suggested that the north-west to south-east ditch here (110) cut gully 135 (Fig. 4, S.016). Situated stratigraphically above ditch fill 155 was deposit 109, which contained occasional burnt sandstone cobbles and frequent small

limestone inclusions. Both pottery and bone were recovered from this ditch fill along with a small copper ring. Ditch 135 was a flat bottom U-shaped affair containing a single fill (136), yielding both pottery and animal bone, as well as two iron objects.

To the north-west of ditches 110 and 135 a gully (127) was exposed for 14m along the trench, orientated approximately north-west to south-east. At its south-eastern terminal (125) the gully was 0.29m deep and 0.9m wide, containing a single fill 124. The fill did not yield any finds. A second section was excavated at the intersection with a second, smaller, gully (131), and an irregular feature (134), which was probably natural. The relationship between the two gullies was not clear in either section or plan. At this point the main gully, 127, was 0.40m deep and contained a single fill 126; the profile was similar to the terminal end 125. The fill was a dark orangey brown silty clay with fragments of limestone. No finds were recovered from this context; however, cut into the top of the fill was a small circular pit 129. This was 0.06m deep and contained a single fill rich in charcoal (Alldritt, see below), with some evidence of burning *in situ* although no associated finds were recovered.

Gully 131 was 0.17m deep and had a more V-shaped profile. It contained a single mid orangey brown clayey silt (130) which produced no finds.

Trench 5 (Figs 2 and 5; Plate 5)

Trench 5 measured 50m by 4m and was orientated north to south. The trench formed a cross with Trench 6, which was orientated east to west. The two trenches were targeted on a possible D-shaped enclosure represented in the geophysical survey data. The topsoil and subsoil were removed by machine to an average depth of 0.55m below ground level, at which point the orange brown natural was exposed at a minimum height of 38.82m OD. Three features were located within the trench: a linear ditch (194), and pits 156 and 158, the latter two being located at the intersection of Trenches 5 and 6 and are described below (Trench 6).

Ditch 194 (Fig. 5, S.033) is part of an extensive north-east to south-west orientated ditch, identified during the geophysical survey, which runs across the site. At this location it also formed the south-western side of a possible enclosure identified in the geophysical survey data. The ditch cut was 1m deep and 3.1m wide, and had a V-shaped profile with two broad steps on either side. Two fills were identified. A primary fill (193) was a mid grey yellow sandy clay with frequent sandstone pebbles some of which had been heat affected. Some animal bone was recovered from this fill. The upper fill (192) was very similar to 193 but was notably lighter in colour and contained many more sandstone pebbles. Pottery and animal bone were recovered from this fill.

Trench 6 (Figs 2 and 6; Plate 6)

Trench 6 measured 50m by 4m and was orientated east to west forming a cross with Trench 5. The topsoil and subsoil were removed by machine to an average depth of 0.58m below ground level, at which point the mid reddish brown natural with limestone inclusions was

exposed at a minimum level of 38.93m OD. The revealed features in Trench 6 consisted of two ditches located one either end of the trench and two poorly defined pits.

Ditch 150 (Fig. 6, S.018) was 0.8m wide and had a V-shaped profile which terminated close to where the section was excavated. Only one fill was present (149) which contained frequent sandstone pebbles most of which had been heat affected. No finds were recovered from this deposit. This ditch was a partial recut of ditch 152 which was much shallower, at 0.21m deep, and exposed across the full width of the trench. It contained a single fill 151 of light greyish brown sandy clay which did not contain any finds. This feature is a continuation of ditch 194, identified in Trench 5 and on the geophysical survey as a principle field boundary ditch crossing this area of the site.

At the western edge of the trench was Ditch 171, which was 1m wide and 0.66m deep, possessing a U-shaped cut with steep sides and an uneven base (Fig. 6, S.028). The form of the cut indicates that the feature terminated at this location. It contained a single fill 170, which was made up of a mid brown orange clayey sand with frequent limestone fragments. No finds were recovered from the fill. The ditch had been cut by a shallower and broader ditch (169), which was visible across the full width of the trench. It contained a single fill 168 which was made up of a mid brown orange sandy silt with frequent sandstone pebbles some of which had clear indications of being heat affected. Located in the base of both ditch cuts were several roughly circular features (173, 175, 177, 181, 183, 184). All contained similar dark orangey brown, slightly clayey, sand. No finds were recovered from any of the features excavated. Although fairly well defined it is possible that these features are natural solution holes filled with sandy material.

Pits 156 and 158 were very poorly defined in plan. On excavation two distinct features were revealed, with pit 158 cutting 156. Pit 156 which was sub-oval in plan measured 0.22m deep and 1.1m wide. The single fill (157) was mid greyish brown silty clay from which no finds were recovered. Pit 158 was again poorly defined and very uneven, measuring 2.3m in width and 0.4m in depth. The single fill 159 was also a mid greyish brown silty clay. The lack of finds from both features and poor definition casts doubt on their validity as archaeological features.

Trench 7 (Figs 2 and 7; Plate 7)

Trench 7 measured 52m by 4m and was orientated north-west to south-east. The trench was targeted on a rectangular enclosure, identified by geophysical survey and intersects with Trench 4. The topsoil and subsoil were removed by machine to an average depth of 0.66m below ground level, at which point the mixed natural of reddish brown clay with limestone inclusions and a yellow orange clay were exposed at a minimum height of 39.63m OD. This trench was originally planned to be 100m in length but overhead power lines to the south meant that it had to be curtailed, and only half of the original length was excavated. The remaining 50m of the trench were relocated to become Trench 7b. All the features identified within the trench were located in the south-western half of the trench.

Pit 102 (Fig. 7, S.001), located 1.5m south-west of ditch 115 (see Trench 4), was irregular in plan. A 1m wide slot was excavated through it against the north-western baulk. The cut was 0.32m deep and was 3.60m wide with a shallow, but rounded profile (Plate 8). It contained two fills, the primary fill of which was a dark grey brown silty clay with clear dumps and tip lines of burnt material. The fill included a large assemblage of pottery (including some samian), as well as animal bones and cereal grains. Sealing this deposit was the upper fill, 100, a mid orange brown silty clay with frequent sandstone pebbles, which also contained pottery and animal bones.

Gully 154 was well defined in plan (being 6m long and 0.8m wide) although upon excavation it was impossible to find any clear edges. The fill (153), was a reddish brown silty clay which was clearly distinct from the natural. Three post-holes (144, 146 and 148) were located against the north western baulk and might have been associated with 154. All three were well defined containing a similar dark reddish brown silty clay fill with occasional sandstone pebbles. Three sherds of pottery were recovered from post-hole 144.

Ditch 106 (Fig. 7, S.003) correlated well with the geophysical data for a feature dividing two possible enclosures. The ditch was 0.53m deep and 1.4m wide and possessed U-shaped profile with a rounded base. It contained a single fill (107) of mid orangey brown clayey silt with an abundance of large limestone blocks and sandstone pebbles, ranging in size from 0.3-0.5m. A small number of pottery sherds and animal bones were recovered from the fill.

Adjacent to ditch 106 was ditch terminus 108 (Fig. 7, S.002), which was 0.17m deep and 0.73m wide and filled by a deposit (105) of a dark grey brown silty clay with large amounts of heat affected sandstone pebbles. A large assemblage of pottery was recovered from this ditch.

Trench 7b (Figs 2 and 8; Plate 9)

Trench 7b measured 50m by 4m and was orientated north-west to south-east. Trench 7b targeting the principle field boundary in this area identified by the geophysical survey. The topsoil and subsoil were removed by machine to an average depth of 0.50m below ground level, at which point the natural limestone and reddish brown clay were exposed at a minimum height of 38.29m OD. Two ditches were uncovered within the trench.

Ditch 188 was 0.72m wide and 0.58m deep with a V-shaped profile with a rounded base. It contained a single fill (189) of mid yellow brown clay silt with frequent limestone inclusions and occasional sandstone cobbles. The fill contained both flint fragments and animal bone.

The only other feature located within this trench was an irregular linear feature, 0.75m wide and 0.28m deep and 0.75m wide, the full extent of which was difficult to determine. The primary fill (186) consisted of a mixed orange-grey brown silty clay, from which no finds were recovered. The upper fill (187) was made up of a grey brown sandy silt with no visible inclusions. The feature does correspond to the agricultural trends picked up on the geophysical survey, suggesting that it may be a plough furrow.

Trench 8 (Figs 2 and 9; Plate 10)

Trench 8 measured 50m by 2m and was orientated north to south, being targeted upon an area of magnetic disturbance. The topsoil and subsoil were removed by machine to an average depth of 0.35m below ground level, at which point the natural limestone bedrock was exposed at a minimum height of 37.24m OD. The large magnetic disturbance observed on the middle portion of the trench corresponds with an area of shallow limestone natural, less than 0.1m below the topsoil.

A single archaeological feature (191) was investigated at the southern end of this trench, which was not picked up by the geophysical survey. Ditch 191 was 0.43m deep and 1.54m wide and had a broadly U-shaped profile. It was cut into the limestone natural on a north-east to south-west orientation and contained a single fill (190), the basal part of which contained an abundance of small stones as well as occasional larger stones that showed signs of having been heated.

Trench 9 (Figs 2 and 10; Plate 11)

Trench 9 measured 50m by 2m and was orientated north-east to south-west. The trench targeted a possible ditch identified by the geophysical survey. The topsoil and subsoil were removed by machine to an average depth of 0.30m below ground level, at which point the natural limestone, with patches of mid orangey sand, was exposed at a minimum height of 35.22m OD. The archaeology uncovered in this trench consisted of a ditch, 195, and a linear feature on the same alignment as the plough furrows visible on the geophysical survey.

Ditch 195 was made up of a U-shaped cut, 2.15m wide and 0.60m deep. It had a single fill (196), a mid orange brown sandy clay with occasional large rounded sandstone cobbles. No finds were recovered from the deposit.

Feature 197 was 1.38m wide and 0.31m deep and was visible on the same orientation as agricultural anomalies identified on the geophysical survey and is probably a plough furrow.

Trench 10 (Fig. 2; Plate 12)

Trench 10 measured 50m by 2m wide, and was orientated north-west to south-east. The topsoil and subsoil were removed by machine to an average depth of 0.4m below ground level on to the natural fragmented limestone with occasional bands of sandy material at a minimum height of 40.11m OD. Although targeted upon weak geophysical responses no archaeological features or deposits were exposed.

Trench 11 (Figs 2 and 11)

Trench 11 measured 50m by 2m wide, and was orientated north-east to south-west. The topsoil and subsoil were removed by machine to an average depth of 0.50m below ground level, at which point the natural limestone was exposed. The natural is possibly the consequence of having been eroded by fluvial processes probably associated with the preglacial Lake Humber (see Gaunt, Chase and Bateman 2005). The natural was exposed at a

minimum level of 40.11m OD. Three features, a linear ditch and two discrete pits or post-holes were revealed.

Post-hole 208 was located 15m from the south-western end of the trench against the south eastern baulk. It had a circular cut with steep sides and a slightly rounded base. It contained a single fill 207 which was made up of a mid brown orange sandy silt with frequent limestone inclusions, from which no finds were recovered.

Pit 201 appeared sub-circular in plan with an uneven base and was 1.05m wide and 0.5m deep (Fig. 11, S.043; Plate 13). The single fill of the pit (202) contained abundant amounts of gritty limestone fragments and occasional rounded sandstone pebbles, although no finds were recovered from the fill.

Ditch 203 was 1.6m and wide 0.4m deep. Its single fill 204 also contained an abundance of gritty limestone fragments and occasional rounded sandstone pebbles, from which no finds were recovered. There was no visible relationship between the ditch and Pit 201 as both fills (202 and 204) were identical in colour and texture.

Trench 12 (Fig. 2)

Trench 12 measured 50m by 2m wide, and was orientated north-east to south-west, and targeted a large field boundary and potential enclosures thought to be reflected in the geophysical survey data. The topsoil and subsoil were removed by machine to an average depth of 0.60m below ground level. The natural was variable and at the north-eastern end of the trench eroded limestone was exposed for 15m. After this the natural changed to a silty sand with subangular stones and pebbles, both a mixture of limestone and sandstone. The natural was exposed at a minimum height of 35.96m OD. Although targeted upon weak geophysical responses no archaeological features or deposits were apparent.

Trench 13 (Figs 2 and 12)

Trench 13 measured 50m by 4m wide, and was orientated north to south. The trench targeted a large field boundary and a possible enclosure which were identified during the geophysical survey. The topsoil and subsoil were removed by machine to an average depth of 0.35m below ground level. The depth of the topsoil did differ; it was relatively thin at the southern end (0.15m) and much deeper at the northern end (0.50m). This difference appears to be because the trench followed the gradient of the ground which drops down towards the north. The natural limestone geology appeared to have been eroded by same fluvial process observed in Trench 11 as much of the stone present was heavily weathered. The natural was exposed at a minimum height of 31.97m OD. Two features were observed within the trench, pit 214 and ditch 217.

Pit 214 was roughly rectangular in plan (3m by 2m) with a U-shaped profile. The fill (215), was a mid orangey brown sandy silt with an abundance of limestone fragments and rounded sandstone pebbles. No finds were recovered from this feature.

Ditch 217 was located at the northern end of the trench and corresponds with a strong geophysical response, which crosses this area of the site and which probably forms part of a probable Late Iron Age or Romano-British boundary ditch. A 1m slot was excavated through it to reveal a cut 0.4m deep and 2.3m wide. It contained a single fill 216 with frequent medium sized stones (Plate 14). No archaeological finds or dating material were identified within this fill.

Trench 14 (Figs 2 and 13; Plate 15)

Trench 14 measured 50m by 2m wide, and was orientated north to south, and targeted upon a large area of magnetic disturbance. The topsoil and subsoil were removed by machine to an average depth of 0.40m below ground level. The natural consisted of fragmented limestone which showed some evidence of having been affected by fluvial processes. Occasional bands of sandy material were also exposed. The natural levels were exposed at a minimum height of 35.96m OD. Trench 14 relocated from its original position at the southern edge of the site due to the presence of overhead power cables. Four archaeological features and a furrow were revealed.

Gully 206 was located against the east side of the trench and terminated within the area of the trench. The feature was 0.55m wide and 0.20m deep and had a U-shaped profile. The single fill (205) contained occasional heat affected sandstone cobbles but no finds were recovered from this context.

Gully 200 was 0.63m wide and 0.11m deep with a U-shaped profile. The gully was orientated north-east to south-west and terminated within this trench. It contained a single fill (199), from which no finds were recovered.

Ditch 213 (Fig. 13, S.050) was located 28m from the southern end of the trench and may represent the continuation of the probable field boundary ditch identified in Trench 11 and 13. It was 1.75m wide and 0.37m deep, it was also continuous across Trench 14. The cut was very well defined and was broadly U- shape in profile with a flat base. It contained two fills; the primary fill (212), contained an abundance of sandstone and limestone inclusions and yielded a single fragment of flint. The upper fill (211) was made up of light reddish brown silty sand with occasional heat affected stones. No finds were recovered from this deposit either.

Ditch 210 (Fig. 13, S.047) was located in the northern area of the trench. The cut of this feature was fairly irregular, being 1.57m wide and 0.37m deep. It was difficult to distinguish the edges of the feature within the gravelly natural. The southern side of the feature was cut by a land drain which ran along the entire length of the exposed ditch making it impossible to gain a full profile. The single fill (209) contained an abundance of small limestone fragments and frequent charcoal flecks, but no finds.

Trench 15 (Figs 2 and 14; Plate 16)

Trench 15 measured 50m by 2m wide, and was orientated north-east to south-west and targeted upon weak geophysical responses that may represent an enclosure. The topsoil and subsoil were removed by machine to an average depth of 0.46m below ground level. The natural levels were exposed at a minimum height of 31.88m OD and consisted of heavily eroded limestone affected by some fluvial process. In other places the natural was very powdery and contained an abundance of solution holes. Because of this the archaeology within Trench 15 was ambiguous and it was difficult to distinguish between natural and archaeological features.

Pit 222 was located at the south-western end of the trench and although it could be a shallow solution hole the sides of the feature were not smoothed off, as would be expected for a solution hole. The single fill (221) did not produce any finds.

Gully 220 appeared in plan to possibly be one side of a ring gully. The cut was 0.9m wide and 0.22m deep. The fill (219) was a mid orange brown sandy silt which was distinct from the natural deposits in the area. The inclusions also consisted of small sandstone pebbles and limestone fragments. No finds were recovered from this context.

The full extent of ditch 225 was difficult to ascertain as it was cut into very mixed area of natural deposits. A full profile was obtained next to the south-eastern edge of the trench, where a feature with fairly irregular sides and base, 2.3m wide and 0.77m deep and with a U-shaped profile was discerned (Fig. 14, S.056). The primary fill (224), was made up of a light greyish brown silty sand with very few limestone inclusions. The upper fill (223), consisted of a light orangey brown silty sand, again with very few limestone inclusions. No finds were recovered from this feature.

Trench 16 (Figs 2 and 15; Plate 17)

Trench 16 measured 50m by 2m wide, and was orientated north-west to south-east it was located in an area of low ground surrounded by gentle slopes to the north-east and the south. The trench targeted two field boundaries indicated as strong geophysical responses. The topsoil and subsoil were removed by machine to an average depth of 0.45m below ground level. The natural consisted of heavily eroded limestone which in places was very clay like; the natural levels were exposed at a minimum height of 26.86m OD.

Ditches 230 and 232 (Fig. 15, S.061 and 071) were two parallel ditches in the north western end of the trench. They correspond to the location of one of the strong geophysical responses. Ditch 230 was better defined, being 1.3m wide and 0.42m deep, with a single fill (231) of mid orangey brown coarse sandy material with occasional rounded sandstones. No finds were recovered from this context. Ditch 232 was 3.5m to the south east of 230 and was 1.4m wide and 0.5m deep, with edges that were very difficult to define.

Gully 227 was characterised by a very irregular cut. Although in plan it looked like two terminals had been recut to form a continuous ditch it contained a single fill (226), a light yellow brown silty sand which did not contain any inclusions or finds. Although it might be a heavily truncated later field boundary the fill suggests it is a natural feature.

Gully 235 and Pit 240 were located at the south-eastern end of the trench. The gully 235 was 0.52m wide and 0.18m deep with a U-shaped cut and a rounded base. The feature was very well defined against the natural limestone. The relationship between the gully and pit was not clear as the both fills (234 and 241) were of similar light orange brown silty sand. Pit 240 was at least 1.24m wide and was 0.41m deep, although it was not possible to gain a full profile. Solution holes were clearly visible in the base and sides of this feature.

It is notable that there is no sign of a feature likely to have been responsible for the strong north-west to south-east geophysical anomaly in the southern half of the trench.

Trenches 17 and 18 (Figs 2, 16 and 17; Plates 18 and 19)

Trench 17 and 18 were located in the far northern corner of the site, forming an L-shaped in plan. Both trenches measured 50m by 2m and targeted possible field boundaries visible on the geophysical survey. Trench 17 was orientated north-west to south-east and Trench 18 was orientated north-east to south-west. The topsoil and subsoil were removed from each trench by machine to an average depth of 0.52m below ground level. The natural consisted of fractured limestone and patches of sandy clay deposits, the natural levels were exposed at a minimum height of 27.15m OD.

Trench 17 contained one archaeological feature, ditch 243, which was 1.10m wide and 0.29m deep. It had a shallow U-shaped profile and was well defined in plan. This was filled by a mid orange brown silty sand with frequent amounts of heat affected stones and occasional limestone fragments. No finds were recovered from this deposit. This feature corresponds to a strong magnetic enhancement in this area which forms a field boundary in this area of the site.

One archaeological feature was identified in Trench 18, located 15m from the south-western end of the trench. Ditch 239, which terminated within the trench, was 1.20m wide and 0.24m deep with very steep sides and an undulating base. The single fill (238), was made up of a dark greyish brown silty sand with an abundance of heat affected sandstone pebbles. No finds were recovered from this deposit. Based on the weak responses of the geophysical survey this maybe a segmented linear field boundary.

Trench 19 (Figs 2 and 18; Plate 20)

Trench 19 measured 50m by 2m wide, and was orientated north-east to south-west. The trench targeted weak geophysical responses which may have formed part of an enclosure. The topsoil and subsoil were removed by machine to an average depth of 0.50m below ground level. The natural consisted of fractured limestone that changed to a red brown sandy

natural with frequent sandstone pebbles. The natural levels were exposed at a minimum height of 25.52m OD.

Ditch 229 was located at the point where the natural changed. It was not possible to obtain a full profile due to the angle that the ditch crossed the trench. Once excavated, what was visible of the cut appeared to be U-shaped in profile and 1.47m wide and 0.49m deep. The feature was very well defined, filled by a greyish brown silty sand (228). No finds were recovered from this context.

This feature was visible as a weak response on the geophysical survey and probably forms part of the same ditch as found in Trench 18 (ditch 239).

Trench 20 (Figs 2 and 19; Plate 21)

Trench 20 measured 50m by 2m wide, and was orientated east to west. It was located on a slight rise towards the east, which develops into a relatively flat area. The trench targeted north-west to south-east aligned linear feature observed on aerial photographs which actually appears to terminate at the position of the trench. The topsoil and subsoil were removed by machine to an average depth of 0.34m below ground level. The natural consisted of fractured limestone bedrock with some solution holes in filled with a light reddish brown clay with no limestone inclusions. The natural levels were exposed at a minimum height of 35.26m OD.

Four potential features were identified in plan. All were investigated and found to be either very shallow or have traits indicative of them being the product of natural agencies. Due to the limited nature of the trench it was not possible to see the features in their entirety although a gully, located towards the western end of the trench, did appear similar to those excavated in the Darrington Quarry Western extension (Williams, in prep.) and could conceivably represent a right angled deviation in the linear crop mark. It was approximately 8m long, and three sections were excavated through it (289, 291 and 293). Each contained a single fill, and it was a maximum of 0.22m deep and 1m wide.

Feature 284 was identified as a possible pit. It was 0.41m deep, 1.5m wide and filled by an orangey brown silty sand (Fig. 19, S.087). No finds were recovered. Gully 278 was considered to be natural feature formed in the limestone.

Trench 21 (Figs 2 and 20; Plate 22)

Trench 21 measured 50m by 2m wide, and was orientated east to west. It was located on a slight rise towards the east, which forms a relatively flat area in the landscape, where the trapezoidal enclosure is situated (see Trench 22). As well as targeting a weak geophysical anomaly forming what appeared to be a possible enclosure, the trench investigated an intermittent linear which ran parallel to the large trapezoidal enclosure ditch. The topsoil and subsoil were removed by machine to an average depth of 0.33m below ground level. The natural consisted of fractured limestone bedrock with frequent patches of reddish brown clay. The natural levels were exposed at a minimum height of 33.82m OD.

The potential features in the western end of the trench were not manifested upon excavation and are likely to be natural phenomena. Only at the eastern end of the trench were definite archaeological features encountered in the form of a large ditch (288) and a small gully (274).

Ditch 288 (Fig. 20, S.088) ran diagonally across the trench orientated north-east to south-west. A 1.1m wide section was excavated and a full profile was obtained. The cut was 1.83m wide, 0.9m deep and possessed a V-shaped profile with a flat base. It contained two fills, the upper fill (286) being a mid orange brown sandy silt with moderate subangular limestone and occasional rounded heat affected sandstone cobbles. No finds were recovered from this fill. The primary fill of the ditch (287), was an orange brown sandy silt, with frequent angular and tabular inclusions. The slumping of the material would suggest that there was a bank on the south-east side of the ditch, located between the ditch 288 and the large enclosure ditch identified in Trench 22. No finds were recovered from this fill.

Gully 274 was 0.65m wide and 0.22m deep, orientated approximately north-west to south east. It was not identified by the geophysical survey, although its orientation suggests that it could have been a field boundary associated with the later use of the site.

Trench 22 (Figs 2 and 21; Plate 23)

Trench 22 measured 100m by 4m wide, and was orientated north-east to south-west on plateau of land in the south-eastern part of the site. The trench targeted a well defined trapezoidal enclosure that was visible on both aerial photographs and in the geophysical survey data. The topsoil and subsoil were removed by machine to an average depth of 0.39m below ground level. The natural consisted of fractured limestone bedrock and was exposed at a minimum height of 32.87m OD.

Two separate parts of the enclosure ditch were exposed and excavated: a section across the south-eastern entrance terminal in the north-east die of the enclosure; and a section through the south-west ditch. The entrance terminal (295) was cut through natural limestone bedrock and was well defined, symmetrical and with steep side and a flat base (Fig. 21, S.095; Plate 24). The ditch here was very large, being 3.6m wide and 1.9m deep, and contained seven fills, although the upper four (266-268 and 272) might be regarded as post-fill levelling. The primary deposit (270) was a light orange brown sandy silt with an abundance of limestone fragments. Both animal bone fragments and pottery were recovered from this fill.

Immediately above, a thin secondary deposit (276) contained abundant pottery, charcoal and burnt bone. The circumstances of this deposit, on the south western (interior) side of the ditch, suggests it originated from within the enclosure, perhaps through the dumping of domestic refuse. The main fill of the ditch (269), was made up of limestone blocks and heat affected sandstone cobbles and blocks, with very little soil matrix. Pottery, parts of a possible crucible and animal bone were all recovered from this context. The upper fills 272, 268, 266 and 267 were all clayey silt deposits and represent the final levelling or silting up over the ditch fills proper, perhaps following subsidence. Each of these fills contained animal bone and pottery. An iron nail and a copper object were also recovered from context 266, which

also contained a small amount of charcoal. Context 268 was made up of a compacted reddish brown clay which had been burnt. It was not clear if this had been heated *in situ* or dumped into the top of the ditch having been fired elsewhere.

On the opposite side of the enclosure the south-west ditch was investigated. At this location the ditch (254) was only 2m wide and 1.2m deep (Fig. 21, S.086; Plate 25). The ditch here had a similar profile to the entrance terminal but was less symmetrical. It contained five fills of which the primary fill (255) mostly consisted of limestone blocks of varying size within a mid orangey brown sandy silt. This deposit probably represents the initial silting up of the ditch after it has been cut, when the sides have not had a chance to stabilise. Subsequently, deposits 282 and 283 were located on either side of the ditch, both being of a dark yellow brown sandy silt with occasional limestone fragments, which seem to indicate the slow silting up of the ditch. Stratigraphically above both of these deposits was context 281, a 0.93m deep mixed deposit with a lot of limestone blocks, especially towards the base, which effectively infilled the void of the ditch. Pottery and animal bone was recovered from the primary fill (255), although no finds were recovered from the other fills.

While various discrete features were investigated within the enclosure area no coherent structures were identifiable from the available evidence. Post-hole 260 was located between the two terminals of the enclosure ditch and was one of a pair of features identified by the geophysical survey in the enclosure entrance, which together could represent some form of gate or entrance structure. The post-hole was 1.25m wide and 0.35m deep and the cut was well formed with near vertical sides with a flat base. The single fill (261), was made up of yellow brown clayey silt with frequent limestone inclusions. A single fragment of animal bone was recovered from this context.

To the south of pit 260 was post-hole 262, although being only 0.2m wide and 0.06m deep the fill (263), which was a highly compacted reddish brown clay, appeared to have been heat affected or baked. No finds were recovered.

Pit 264 had irregular sides which were stepped with a flat base. The single fill (265), was made up of a dark reddish brown sandy silt. The purpose of this feature is not clear and a larger area would require stripping to see how it relates to other internal features within the enclosure.

Feature 247 was a possible ditch or gully terminus identified in the south eastern baulk. It was 0.85m wide and 0.26m deep and filled by a single deposit which contained no finds. Feature 258 was identified as a possible post-hole (0.4m in diameter and 0.13m deep), although on excavation was found to be quite irregular and was probably of natural origin. No finds were recovered.

Exposed against the south-eastern baulk was a small feature, 256, which when fully excavated was identified as a ditch or gully terminus. The cut showed clear signs of burning

in situ and its single fill (257), was also rich in charcoal. The feature maybe responsible for the geophysical anomaly detected at the centre of the enclosure.

Two pits were located to the north east of the enclosures terminal, outside of the enclosure. Pit 252 was a bowl shaped pit, 0.83m wide and 0.19m deep, containing a single homogenous fill, 253, made up of light orange brown silty sand with occasional limestone fragments. No finds were recovered from this feature.

The Burial Pit (Fig. 21, S. 073; Plates 26 and 27)

The most significant discrete feature within Trench 22 was a large circular pit (249) which was located 1m north-west of ditch terminal 295, just outside the entrance to the trapezoidal enclosure, which contained the articulated skeletal remains of an adult woman. The pit measured 1.5m in diameter and was 0.9m deep, with steep, near vertical sides and a flat base (Fig. 21, S.073). The pit was filled by two deposits; a lower fill of darker brown silty sand which filled about 75% of the pit (251) and upper fill of lighter coloured material (250). There was no indication in the fill that the inhumation had been inserted into it and it is supposed that the pit was open and clear of debris when the body was interred. The fact that some of the bones had concreted onto the natural limestone bedrock, further suggests that the pit was fully open and clean when burial took place.

The body is that of a mature adult woman which has been radiocarbon dated to 380-180 cal. BC. The skeleton was located just off centre, on the north-east side of the pit with the head to the south-east. The body had been laid out in extended fashion, but with the head and upper torso leaning against the pit wall. The hands were placed over the pelvic area and in the vicinity of the lower left ulna and radius were annular ornaments (see Cool below; Plate 29), which may have adorned a bracelet.

Although the upright position of the head and upper torso gave the impression of the body having been wedged into the pit, it should be noted that the full extent of the pit was not utilised (nor excavated) and the position of the body might be regarded as deliberate, rather than expedient. The off-centre position also begs the question of what else might have accompanied the burial to warrant this asymmetrical interment. The excavation revealed no evidence for grave goods, though it is possible that such could have been organic items made of wood and skins and suchlike which have not have survived.

Trench 23 (Fig. 2; Plate 28)

Trench 23 measured 50m by 2m wide, and was orientated east to west near the eastern edge of the site. The topsoil and subsoil were removed by machine to an average depth of 0.33m below ground level. The natural consisted of fractured limestone bedrock with frequent patches of reddish brown clay. The natural levels were exposed at a minimum height of 28.50m OD. Although targeted upon weak geophysical responses no archaeological features or deposits were exposed.

Summary

Table 2 below provides a brief summary of each trench and interpretations based on the results of the evaluation combined with the geophysical survey and/or crop marks.

Table 2. Trench summary

Trench	Dimensions (m)	Topsoil (m)	Subsoil (m)	Natural	Archaeology	Finds	Interpretation
1	50 x 2	0.35	0.2	Reddish brown clay with limestone inclusions	Segmented gully with four segments visible.	None	?Romano-British enclosure
2	50 x 2	0.31	0.29	Reddish brown clay with limestone inclusions	Furrows	None	-
3	50 x 4	0.34	0.16	Reddish brown clay with limestone inclusions	Furrows	None	-
4	100 x 4	0.37	0.19	Orange brown clay with limestone inclusions with change to reddish brown clay with limestone inclusions	4x ditches, 2x gullies, 2x pits	Romano-British pottery, samian, mortaria, copper alloy and iron objects, fired clay, animal bone	RB enclosure ditches. The ditches towards the north-west would appear to be ancillary enclosures.
5	50 x 4	0.3	0.2	Reddish brown clay with limestone inclusions. Occasional sandy patch visible.	1x ditch, 2x pits	Romano-British pottery, animal bone	Part of ?Romano-British enclosure
6	56 x 4	0.3	0.27	Reddish brown clay with limestone inclusions	2x ditches	No finds	Part of ?Romano-British enclosure

Trench	Dimensions (m)	Topsoil (m)	Subsoil (m)	Natural	Archaeology	Finds	Interpretation
7	52 x 4	0.45	0.21	Yellow orange clay turning into reddish brown clay with limestone inclusions.	1x ditch , 2x gullies, 1x pit, 3x postholes, furrows	Romano-British pottery, ?medieval pottery, samian, mortaria, flint, fired clay, animal bone	Part of Romano-British enclosure, possibly internal sub-divisions and a large rubbish pit
7b	50 x 4	0.3	0.2	Weathered limestone and reddish brown clay	2x ditches	Flint, animal bone	Part of extensive field systems probably of Romano-British date
8	50 x 2	0.35	-	Limestone bedrock with occasional bands of sandy material.	1x ditch terminus	No finds	Not visible on geophysical survey. Most likely part of a field system
9	50 x 4	0.30	-	Weathered limestone and patches of mod orangey sand	1x ditch, 1x furrow	No finds	Part of extensive field systems, of likely Romano-British date.
10	50 x 2	0.26	0.12	Fragmented limestone with patches of sand	No archaeology	No finds	-
11	50 x 2	0.22	0.28	Heavily eroded limestone	1x ditch, 1x pit, 1x posthole	No finds	? Romano-British field boundary
12	50 x 2	0.4	0.2	Eroded limestone and large spread of reddish brown silty sandy material	No archaeology	No finds	-
13	50 x 4	0.35	-	Heavily eroded limestone	1x ditch, 1x pit	No finds	Part of extensive field boundary.
14	55 x 2	0.22	0.18	Limestone gravels and occasional bands of sandy material	2x ditches, 2x gullies	Flint	Part of a field system, perhaps a small enclosure.

Trench	Dimensions (m)	Topsoil (m)	Subsoil (m)	Natural	Archaeology	Finds	Interpretation
15	50 x 2	0.23	0.23	Weathered limestone with solution holes	1x ditch, 1x ring gully?, 1x pit	No finds	Possible enclosure. Archaeology is fairly ambiguous. Possibly natural features.
16	50 x 2	0.22	0.38	Weathered limestone.	2x ditches, 2x gully, 1x pit	No finds	Field system/enclosure ditches. Some of the archaeology is fairly ambiguous, possibly natural.
17	50 x 2	0.3	0.22	Fragmented limestone with patches of sand	1x ditch	No finds	Part of a field system, possibly an enclosure.
18	50 x 2	0.40	0.11	Fragmented limestone with patches of sand	1x ditch terminus, furrows	Post-medieval pottery	Part of a field system ditch, possibly an enclosure.
19	50 x 2	0.35	0.15	Fragmented limestone with patches of sand and a large spread of reddish brown clay	1 x ditch	No finds	Part of field systems.
20	50 x 2	0.23	0.11	Fractured limestone with solution holes and patches of sandy material	?Natural features	No finds	Possible natural features or relatively ploughed out field boundary
21	50 x 2	0.18	0.15	Fractured limestone with solution holes	1x ditch, 1x gully	No finds	Boundary ditch respecting the trapezoidal enclosure.
22	100 x 4	0.19	0.20	Fractured limestone with solution holes	1x enclosure ditch , 1x gully, 1x ?flue, 3x pits, 2x posthole	Romano-British pottery, mortaria, copper alloy and iron objects, jet, ?glass, slag, crucible, fired clay, human bone, animal bone	Large well defined trapezoidal enclosure with internal features. Late Romano-British. Iron Age pit burial. Late Iron Age and Roman phases.
23	50 x 2	0.29	0.18	Limestone with solution holes	No archaeology	No finds	-

6 Artefact Record

Pottery by Ruth Leary

Factual Data

The pottery was examined in context groups and catalogued according to the Guidelines of the Study Group for Romano-British Pottery for basic archiving (Darling 2004). The fabrics were recorded in broad groups and source suggested where appropriate. Reference was made to the National Fabric Collection where appropriate (Tomber and Dore 1998). Details of fabric variations were recorded where appropriate. Forms were described.

Quantity and provenance

In total, 444 fragments were submitted for examination. Of these 43 fragments were identified as a vessel related to metallurgical processes, two fragments were fired clay, two were not ceramic and one was worked stone, and three were medieval or post-medieval. The remainder comprised sherds of Romano-British pottery and two sherds of prehistoric date. These were examined and recorded by ware and vessel type and given spot dates (Tables 3-5 and Graph 1). The date range of the context groups are given below. Detailed lists are in Appendix 4. The pottery was well-preserved.

Range and variety of material

Wares

The fabric of the pottery was first examined by eye and sorted into ware groups on the basis of colour, hardness, feel, fracture, inclusions and manufacturing technique. National fabric collection codes are given wherever possible (Tomber and Dore 1998).

Medium-quartz-tempered grey ware was the most common ware present. This was characterised by the subrounded quartz inclusions typical of the South Yorkshire kilns operating from the mid-second to the mid-fourth century around Doncaster (Buckland *et al.* 1980). The second most common fabric group was black burnished ware category 1. A small amount of this may have also come from the kilns near Doncaster which are known to have been making BB1 vessels during the second century but the majority were of Dorset type and dated to the late second and third century in types not known in this ware in the South Yorkshire potteries. Dales ware was present in small numbers. This ware was common at Castleford in the early fourth century but has been found at South Yorkshire sites in the third century. A number of Crambeck wares and East Yorkshire calcite gritted wares were identified from Trench 22 and these date to the fourth century probably during the expansion period of the Crambeck industries in the mid-fourth century.

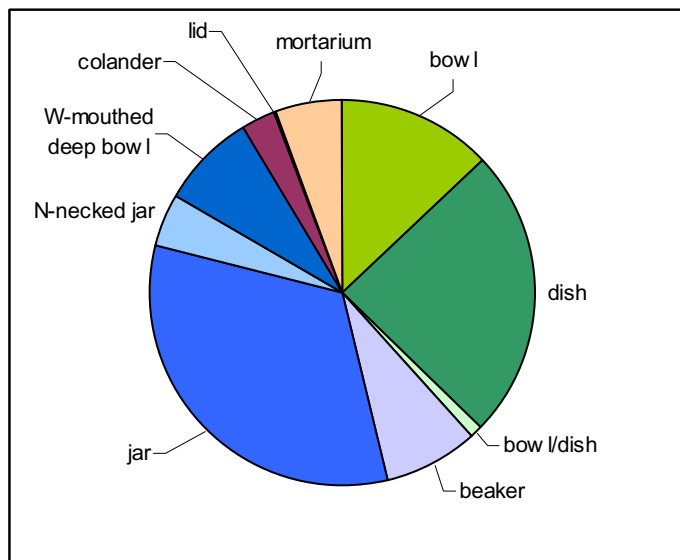
Twelve samian ware sherds were identified and need further specialist identification. To this group of fine wares may be added two Nene Valley colour-coated sherds and some oxidised wares which may belong to a group of rather coarse table wares made at the South Yorkshire kilns. Mortaria were identified from Mancetter-Hartshill, Crambeck and possibly a local or Midlands white ware. Two grog-tempered sherds are of a type found in late prehistoric and

early Roman levels in this area. Two handmade quartz-tempered sherds are also likely to be prehistoric in date. No amphora or imported ceramics other than samian were identified.

Forms

A relatively large proportion of the assemblage comprised tablewares such as bowls, dishes and beakers, although the beakers were coarse ware types rather than fine colour-coated wares. Samian ware bowls were present and included one decorated vessel. Other bowls comprised flat-rim and grooved flat-rim vessels of the second and earlier third centuries in BB1 and grey ware. Plain- and grooved-rim dishes were present of similar date range and one colander was identified. The jars comprised BB1 and GRB1 jars of the second and third century, a cupped-rim jar, Dales ware jars and a proto-Huntcliff jar. Crambeck grey ware jars were represented by bodysherds. A BB1 lid was also identified. Deep grey ware bowls of the type made at the South Yorkshire kilns were present with the earlier bead and club-type rims and a flat rim more common in the third and fourth centuries. One sherd had been made into a spindle-whorl. A group of 43 crucible sherds from context 269 were of unusual type. One handmade base with a splayed simple base in a medium quartz tempered fabric may be from a non-crucible vessel since although it had burnt material adhering, No slaggy accretions were identified. The other sherds were over burnt and had a tapering rounded rim. They appeared to come from an open vessel and had much slaggy material adhering to the inside.

Graph 1. Relative quantities of vessel types



Chronology

The pottery indicates peaks of activity in the late second to mid-third century and in the mid-fourth century. Small amounts of pre-Roman Iron Age and early Roman pottery was identified. The relatively high proportion of Dales ware (6%), so common at Castleford

during the early fourth century, may indicate continuous activity though the early fourth century.

Function and site status

The vessel types present suggested a rural settlement of medium to high status and the presence of a relatively large number of samian sherds would support this. In addition the assemblage included several specialist vessels such as colanders and mortaria for specific food preparation tasks. The crucible sherds indicate metallurgical activity.

The pottery

The assemblage included two well-defined and tightly dated chronological groups belonging to the second quarter of the third century and the mid-fourth century. Although relatively small in size these are useful additions to the known groups from rural sites in the region and are additionally valuable because they do not comprise the usual ceramic accumulation of longer duration so often found within ditch deposits and middens on rural settlement sites in West and South Yorkshire. The third century group particularly adds to our understanding of changes in the supply of pottery to the rural settlements at this time and suggests that this site followed the pattern found at Castleford but not Doncaster in the late third and early fourth century. Late groups such as this one, belonging to the mid-fourth century, are not common and this group usefully demonstrates the dominance of East Yorkshire coarse wares and the presence of Nene Valley colour-coated wares with a decline in pottery from the South Yorkshire industries.

The assemblage also adds to a growing number of assemblages from rural settlement in West Yorkshire which allow us to begin to detect variations in the character and status of these settlements and in their relationships with the local urban and military centres thus filling in the more details of the lives of the rural populations which made up the majority of Roman Britons.

Nature of occupation and aspects of trade and exchange

The assemblage falls into the range for rural settlement in this area and adds to our understanding of that range. The two tightly dated groups give us a window on the ceramics of those periods which is not as clear in groups which have accumulated over a longer period and include more residual and intrusive material. Further study of the group with comparisons to other assemblages of the same and different date may reveal changes in the status or function of the settlements over time.

The assessment study suggests several potential lines of enquiry based on the evidence so far obtained. Wares compared well with the Castleford pattern (Rush 2000, 158) rather than the Doncaster pattern and this aspect of the group merits further investigation and comparison with other rural sites in the south and West Yorkshire. The reasons for different supply patterns to rural sites may be very complex involving individual relationships but could also reflect administrative zones. Evans (1989, 256) has suggested the difference in the supply of

third century BB1 to Castleford and Doncaster may be related to the civitas boundaries and it is notable that the border of the fourth century provinces, *Britannia Secunda* organised by York and *Flavia Caesariensis* from Lincoln, may lie somewhere between Doncaster and Castleford. The suggestion that such provincial distinctions were affecting the pottery supplied to the rural settlements is intriguing and, in turn, makes these differences more significant since they may disclose the boundaries of the civitas and/or provinces with some accuracy.

The rarity of good mid to late fourth century groups, with relatively little residual material, increases the value of the small late group and this makes a useful addition to the existing body of evidence for this period. This group suggests that the South Yorkshire industries were no longer supplying so much pottery to this area by the mid-fourth century and it is important to establish if this was due to the decline of that industry or to changes in the supply patterns to the urban and military sites in the area. Comparison with other rural and urban sites in South and West Yorkshire will clarify this.

Regional or greater significance to pottery studies

The importance of studying the relationship of military and urban sites to rural settlements in the vicinity has been highlighted as a national priority (Willis 1997, 7.2). The assemblage informs this study and additionally has potential to provide evidence for the position of significant civitas or provincial boundaries. Additionally the group adds to the evidence for the contrasting supply pattern for the nearby military and urban settlements at Castleford and Doncaster. The study of evidence relating to the nature of organisation of pottery supply to the army in the north being another priority identified by Willis (1997, 3.9).

Table 3. Quantity from excavated trenches and contexts

Trench	Context	Total
2	114	15
2	All	15
4	109	5
4	111	98
4	123	2
4	136	2
4	All	107
5	192	3
5	All	3
7	100	32
7	101	91
7	105	71
7	107	3
7	116	22
7	143	3
7	All	222
18	236	1
18	All	1
22	255	7
22	266	18
22	267	8
22	268	3
22	269	48
22	270	6
22	272	6
22	All	88
Grand Total		444

Table 4. Quantities of wares

Fabric code	Count	Common ware name	Tomber and Dore code
BB1	110	Black burnished ware 1	DOR BB1
BB1/RBB1	1	Dorset or Doncaster black burnished ware 1	DOR/ROS BB1
CRA RE	11	Crambeck grey ware	CRA RE
CRA WH	1	Crambeck white mortarium	CRA WH
CRUC	48	crucible or mould?	
CT	1	calcareous tempered	
CTA2	28	Dales ware	DAL SH
EYCT	9	East Yorkshire calcite-gritted ware	HUNT CG
FC	2	Fired clay	
GRA7	1	Parisian ware	ROS FR
GRB	5	Grey ware	
GRB?	4	Grey ware	
GRB1	184	Grey ware, probably South Yorkshire	
GRB1?	1	Grey ware, probably South Yorkshire	
GTA	2	Grog-tempered ware	
MED?	1	Medieval?	
MH2	7	Mancetter-Hartshill mortarium	MAH WH
MWH	2	White ware mortarium	MAH WH?
NP	2	not pottery	
NV1	2	Nene valley colour-coated ware	LNV CC
OAB	2	Medium-quartz tempered oxidised ware	
OAB/MED	1	Medium-quartz tempered oxidised ware, possibly Medieval	
OAB1	6	Medium-quartz tempered oxidised ware	
PM	1	Post-Medieval	
PQ	2	Handmade quartz-tempered ware, prehistoric?	
RBB1?	1	Doncaster black burnished ware 1?	ROS BB1?
TS	12	Samian	SAM
worked stone?	1	stone	
RBB1/GRB1	1	Doncaster black burnished ware 1 or grey ware BB1 copy	ROS BB1?
Grand Total	444		

Table 5. Spot-dates by context

Trench	Context	Date range
2	114	c.AD 225 to mid-3 rd century
4	109	2 nd century, after AD 120
4	111	c.AD 225 to mid-3 rd century
4	123	Pre-Roman Iron Age?
4	136	2 nd century
5	192	Romano-British
7	100	First half of 3 rd century
7	101	c.AD 225 to mid-3 rd century
7	105	c.AD 225 to mid-3 rd century
7	107	2 nd century, after 120, probably before late 2 nd century
7	116	Mid-2 nd century or later
7	143	Medieval and late 2 nd to mid-3 rd century
18	236	Post-Medieval
22	255	Mid-2 nd to mid-4 th century
22	266	AD 280+, optimum mid-4 th century +
22	267	AD 280+, optimum mid- century
22	268	AD 280+, optimum mid- century
22	269	Late 3 rd to 4 th century
22	270	AD 280+, optimum mid-4 th century +
22	272	AD 280+, optimum mid-4 th century +

Flint by Phil Weston

The flint artefacts recovered during excavation must be considered residual as they were all recovered from post-prehistoric features. Therefore, their presence can only be interpreted as evidence of low-level prehistoric activity in the area.

Catalogue

- 1 Chip. Butt missing. Light grey, opaque. Secondary. Patinated. Not sharp. *Trench 7; context 118*
- 2 Broken blade. Distal end missing. Prepared butt. Light grey-white, opaque. Tertiary. Heavily patinated. Fairly sharp. Distal end has been roughly retouched to form a scraping edge. There are six negative scars on its dorsal side indicating the piece was struck from a multi-platform core. *Trench 7B; context 189*
- 3 Flake. Unprepared butt. Dark grey-white, opaque. Secondary. Moderately patinated. Fairly sharp. Has a hinge termination. *Trench 14; context 212*
- 4 Poor quality flint nodule most likely derived from river cobbles or clay with flints. Exhibits several negative scars indicating its use as a multi-platform core. One edge has been retouched to form a fairly rudimentary chopping edge. *Trench 7; unstratified*

Small Finds by Hilary Cool

A copper alloy ring was recovered from ditch fill 109. The wear on this ring would suggest it might have been used as part of some form of harness. Simple rings such as this are not closely dateable typologically, and so it could be any date from the later prehistoric period onwards.

Two annular rings were recovered from grave fill 251 (Plate 29). The smaller of these rings is clearly made of jet (or a closely related material in the fossil fuel range). The material of the larger ring is more problematical. It appears dull opaque grey with small white flecks. During conservation it was suggested that it was made of glass. This is considered to be unlikely as the two small chips on the circumference show none of the features to be expected if it was glass (conchoidal fracture, glossy surface) and it is more likely to be stone, but not of the fossil fuel range. It is recommended that the item be submitted to a geologist for an opinion.

Typologically these two rings do not belong to any Roman or immediately post-Roman forms and a pre-historic date is to be preferred. Simple rings made of jet-like material like this occur sporadically from the Bronze Age onwards and more research would be needed to date and identify them more closely. The fact that these two rings have come with an inhumation burial that has been dated via the radiocarbon technique is of great value in wider studies of Iron Age artefacts, as dating such artefacts is frequently problematic.

It seems most likely that both these rings were used either as part of dress fastenings or beads. The size of the smaller one would be appropriate for a bead. The larger one would fall into the size range of large glass annular beads of the later Iron Age and so it too could be a bead. Other possible functions such as it being a spindle whorl seem less likely given its overall size and weight and the large size of the central perforation.

Catalogue

- 1 Copper alloy ring. Rounded D-section worn thin at one point of circumference. Diameter 18mm, section 3 x 2.5mm. *Trench 4; context 109; SF 1*
- 2 Annular ring with oval cross-section. Diameter 23mm, perforation diameter 10.5mm, maximum thickness 4.5mm. *Trench 22; context 251; SF 4*
- 3 Annular ring with oval cross-section. Diameter 16.5mm, perforation diameter 6.5mm, maximum thickness 4mm. *Trench 22; context 251; SF 4*

Other Metallic Items by I. Roberts

Six further metallic items, one of copper alloy and five of iron, have been submitted for X-ray analysis. The five iron items seem to be parts of nails, one small item possibly being a hobnail. Two of these, the possible hobnail included, are from the fill of ditch 135 in Trench 4, whilst the other three are derived from the fill and sealing deposits (269 and 266

respectively) of ditch 295, the entrance terminal of the trapezoidal enclosure in Trench 22. Deposit 266 also produced the fragment of copper alloy sheet, which X-ray suggests might be part of a vessel rim.

Catalogue

- 4 Head and part of the shank of an iron nail, 35mm long, head 17mm and shank 5mm in diameter. *Trench 4; context 136; SF 2*
- 5 Head and part of the shank of a small iron ?hobnail, 10mm long and head 6mm in diameter. *Trench 4; context 136; SF 3*
- 6 Head and part of the shank of an iron nail, 22mm long, head 15mm and shank 5mm in diameter. *Trench 22; context 226; SF 6*
- 7 ?Part of the shank of an iron nail, 20mm long and shank 4mm in diameter. *Trench 22; context 269*
- 8 ?Part of the shank of an iron nail, 70mm long and shank 5mm (max.) in diameter. *Trench 22; context U/S*
- 9 Fragment of copper alloy sheet, seemingly with curved lipped rim, 40mm by 25mm, possibly from a plate or dish of about 120mm in diameter. *Trench 22; context 266; SF 8*

7 Environmental Record

Human bone by Malin Holst

A single skeleton, recovered from pit 249 is moderately well preserved. There are few post-mortem breaks, but considerable erosion has led to the loss of much of the bone surface, which may in turn have resulted in the loss of some pathological manifestations. Concretions were found on many bones, though these did not obscure the bone surface.

The skeleton was a middle aged female (26-45 years) of gracile build, with a calculated stature of 148cm (4 ft 11 ins). Lesions in the eyes suggest that she had suffered from iron deficiency anaemia during childhood. Evidence for non-specific inflammation evident on the shins; the inflammation had been mild and was receding at the time of death. There was slight spinal degenerative joint disease.

Animal bones by Jane Richardson

Introduction

In total, 811 animal bone fragments were recovered. The data are presented by context (Table 6) and by phase: pre-Roman Iron Age, the second quarter of the 3rd century AD and the mid-4th century AD (Table 7). Unfortunately the assemblage is not statistically viable, particularly when the number of bone zones (easily identifiable and non-reproducible parts) is considered. Once sub-divided by phase, it falls well below the minimum reliable sample size of around 500 (with reference to a number of statistical parameters after van der Veen and Fieller 1982, 296).

Methodology

Bones were identified to taxa wherever possible, although lower-order categories were also used (e.g. sheep/goat, cattle-sized). The separation of sheep and goat bones was routinely attempted, using the criteria of Boessneck (1969) and Payne (1969, 1985), but in the apparent absence of goat, the sheep/goat bones are assumed to be of sheep. As the assemblage was small, all fragments were recorded although identification of diagnostic element zones was also made.

For age-at-death data, epiphyseal fusion (after Silver 1969) and the eruption and wear of deciduous and permanent cheek teeth were considered. Dental eruption and wear were recorded using the letter codes of Grant (1982).

Bone condition, erosion and fragment size were recorded in order to assess bone preservation, while gnawing, burning and butchery marks were noted to determine bone treatment. Butchery was routinely differentiated into chop and cut (knife) marks and the position and direction of these marks were noted in order to identify dismembering, filleting and skinning activities.

Given the fragmented nature of the assemblage, the recovery of biometrical data was not attempted. One pathological bone was noted, a cattle third molar with a reduced third cusp (associated with 3rd-century activity).

Results

The assemblage is of questionable relevance due to its small size and the fragmented nature of many of the bones. The very low proportion of bones identified as diagnostic zones (9%) is a reflection of the highly fragmented nature of the assemblage. Bone condition varied widely from robust, well-preserved examples to highly eroded and porous bones. Bone loss due to poor preservation is highly likely therefore, but appears to be inconsistent across the site. Bones from the 4th-century enclosure to the east were more eroded, cracked and porous than those from 3rd-century features to the west. Gnawing, butchery and burning, however, are rare and presumably had little impact on bone preservation and survival. For example, only two large mammal bones from 3rd-century deposits and seven bones (including cattle and sheep) from 4th-century deposits were butchered.

Too few bones were recovered from pre-Roman Iron Age features to warrant further comment. The bone associated with the burial is from a small song bird and is likely to be residual.

The 3rd-century assemblage is dominated by cattle and sheep/goat bones. The presence of bones associated with meat-rich joints suggests that food waste was discarded here, although a prevalence of mandible and skull fragments indicates that primary butchery (the removal of low-utility body parts) was also occurring locally. The occurrence of juvenile and sub-adult sheep bones suggests that some animals were raised specifically for their meat. Aged cattle were also present and raise the possibility that some were maintained to maturity for breeding purposes (and/or for their secondary products such as milk and traction).

The 4th-century assemblage is dominated again by cattle and sheep, and by meat-rich bones as well as primary butchery waste. Sub-adult cattle and sheep attest to the slaughter of animals for their meat, although older, breeding livestock are also indicated. Interestingly, the presence of neonatal cattle and sheep bones from the 4th-century enclosure confirms that livestock was being raised nearby, perhaps even corralled within the enclosure during parturition. Pigs, meanwhile, contributed very little to the diet.

Conclusions

Unfortunately the bone assemblages are too small for meaningful interpretation and any conclusions reached here should be treated with caution. Nevertheless, the Romano-British assemblages are likely to reflect localised animal husbandry practices including slaughter. During both of these phases, cattle and sheep dominated almost to the exclusion of any other animal.

Table 6. Animal bone fragments by context

	Cattle	Cattle-size	Horse	Pig	Sheep	Sheep/goat	Sheep-size	Passerine	Total
100		6		1		4			11
101		4				6	7		17
105	1	1				2	9		13
107	1			1		2	1		5
109	1	21		1		2			25
111	1	4				2	5		12
112		4							4
114	9	46							55
116		6		1	1	2	2		12
123	7	6		1					14
136	2	2				6	5		15
137	20	3							23
143		2					1		3
189				1			4		5
192		6							6
193	2								2
251								1	1
254	4					1	10		15
255	6	40					10		56
262							1		1
266		23				1	3		27
267	17	12				2	15		46
269	169	99		1	2	1	64	56	392
270	7	11				11	12		41
272	5	1				1	1		8
276						2			2
Total	252	297	5	4	2	108	142	1	811

Table 7. Animal bone fragments by phase (zones in parentheses)

	Cattle	Cattle-size	Horse	Pig	Sheep	Sheep/goat	Sheep-size	Passerine	Total
PRIA	(2) 7	6		1				(1) 1	(3) 15
3rd century	(4) 37	(1) 105	(1) 4	1	(1) 1	(8) 26	(1) 34		(16) 208
4th century	(23) 208	(1) 186	(1) 1	(1) 2	(1) 1	(28) 82	108		(55) 588

Carbonised Plant Macrofossils and Charcoal by Diane Alldritt

Introduction

A total of twenty-five flots from the excavations were assessed for carbonised plant macrofossils and wood charcoal. In addition two bags of sorted charred material from the retents were examined for the presence of identifiable wood charcoal.

Methodology

Bulk environmental samples were processed by ASWYAS using an Ankara style water flotation system (French 1971). Subsequent flots were examined using a low powered binocular microscope. The majority of flots produced small amounts of charred material, with generally only 5ml to <2.5ml present. Samples 1 (101) and 10 (128) were the exceptions to this producing 15ml and 45ml of carbonised remains respectively. Occasional samples were barren of carbonised plant and produced modern material and/or shell remains only. Modern root fragments were present but fairly scarce, indicating an overall very low level of modern contamination. Identified plant remains including charcoal were removed and bagged separately by type.

All charcoal suitable for identification was examined using a high powered Vickers M10 metallurgical microscope at magnifications up to x200. The charcoal was mostly found to be in a very good state of preservation, with numerous pieces suitable for radiocarbon dating. The reference photographs of Schweingruber (1990) were consulted for charcoal identification. Plant nomenclature utilised in the text follows Stace (1997) for all vascular plants apart from cereals, which follow Zohary and Hopf (2000).

Results

Results are presented in Table 8 below.

Discussion

The twenty-five samples from Darrington Northern Quarry Extension produced a small amount of identifiable carbonised plant material and charcoal concentrated mainly in two of the samples, with the remaining samples producing much less. Charcoal fragments were nicely preserved and large enough to identify accurately. Cereal grain was present, albeit fairly scarce, with the majority in good condition.

Carbonised cereal grain was identified from sample 1 (101) only, with the grain found to be almost all *Triticum* sp. (wheat) type, with occasional grains fully identifiable as *Triticum spelta* (spelt wheat). Sample 42 (215) contained a single indeterminate grain but this was probably a trace occurrence. The main concentration of cereal grain was therefore in context (101) and, with all the grain most likely to be wheat, it is probable this represented a single burning episode, for instance in a corn drying kiln or hearth place.

Only a single carbonised weed seed was recovered, a *Galium aparine* (cleavers) from sample 60 (257). This is a common weed of waste ground and disturbed places and probably an

accidental inclusion in the sample. The cereal crop could be seen to be extremely clean, with no chaff or weeds present by the time it reached its final drying/cooking stage before becoming accidentally preserved by burning.

Wood charcoal was concentrated in a fairly large amount in sample 10 (128), with smaller quantities recovered from samples 1 (101), 26 (193) and 60 (257). The only types identified were *Betula* (birch) and *Corylus* (hazel), with the majority being birch. Both are scrub or open woodland/woodland edge types growing as shrubs or small trees. Birch is also tolerant of wetter conditions, including acid peat bog. Interestingly no other fuel types, such as burnt peat fragments, or any indicators of the use of peat such as charred rhizomes, were present. Wood charcoal would therefore appear to be the preferred fuel of the site. In context (101) the charcoal was found in conjunction with cereal grain so may have been used as fuel for cereal drying processes and other burning activities.

Non-marine mollusc shells were present throughout the samples, but most abundant in samples 25 (190; field boundary ditch), 42 (215; field boundary ditch), 59 (255; trapezoidal enclosure ditch) and 62 (251; Iron Age burial pit).

Conclusion

The environmental samples have produced a narrow range of nicely preserved carbonised plant material and wood charcoal concentrated in two main samples. Cereal identification suggested an agricultural economy using wheat as the main crop, with the lack of chaff or weeds suggesting this was perhaps grown elsewhere and transported to the site for final processing or consumption.

Wood charcoal was the main source of fuel, with birch and hazel suggesting the presence of open or sparse scrub woodland in the area. The charcoal would be suitable for submission for radiocarbon dating. Further identification work could be done on the charcoal from sample 10 (128) but would not necessarily produce a greater range of wood types, as all appeared to be short-lived and most likely within the birch/hazel, possibly also alder, range.

The assessment samples have produced a small amount of carbonised plant material in a good state of preservation. No further work is recommended on this set of samples. Any future sampling work has the potential to produce good quality carbonised cereal grain and wood charcoal, albeit perhaps concentrated in only a few areas of the site.

Table 8. Carbonised plant remains and charcoal

Darrington Northern Quarry Ext.	Sample	1	3	6	10	13	14	17	21	23	24	25	26
	Context	101	107	112	128	133	143	141	155	162	189	190	193
	Total CV	15ml	<2.5ml	2.5ml	45ml	0	<2.5ml	<2.5ml	<2.5ml	2.5ml	<2.5ml	<2.5ml	5ml
	Modern	<2.5ml	<2.5ml	<2.5ml	2.5ml	<2.5ml	<2.5ml	<2.5ml	<2.5ml	<2.5ml	5ml	10ml	<2.5ml
Carbonised Cereal Grain	Common Name												
<i>Triticum spelta</i>	spelt wheat	6											
<i>Triticum</i> sp.	wheat	7											
Indeterminate cereal grain (+embryo)		8											
Charcoal													
<i>Betula</i>	birch	3 (0.10g)			7 (1.9g)								
<i>Corylus</i>	hazel	1 (0.05g)			2 (0.58g)								2 (0.08g)
Indet.		3 (0.14g)			1 (0.44g)								
Carbonised Weeds													
<i>Galium aparine</i>	cleavers												
Other Carbonised Remains													
Buds										3			
Non-Carbonised Remains													
Non-marine mollusc shell		5+		1			1		2				30+
Earthworm egg capsules													
Modern seeds				1									

Darrington Northern Quarry Ext.	Sample	30	33	37	42	43	45	47	50	53	59	60	62	66
	Context	170	204	199	215	224	216	228	231	241	255	257	251	287
	Total CV	<2.5ml	<2.5ml	0	5ml	<2.5ml	2.5ml	<2.5ml	<2.5ml	<2.5ml	<2.5ml	10ml	<2.5ml	0
	Modern	5ml	5ml	10ml	10ml	<2.5ml	2.5ml	5ml	5ml	<2.5ml	10ml	15ml	10ml	10ml
Carbonised Cereal Grain	Common Name													
<i>Triticum spelta</i>	spelt wheat													
<i>Triticum sp.</i>	wheat													
Indeterminate cereal grain (+embryo)					1									
Charcoal														
<i>Betula</i>	birch											3 (0.26g)		
<i>Corylus</i>	hazel													
Indet.														
Carbonised Weeds														
<i>Galium aparine</i>	cleavers											1		
Other Carbonised Remains														
Buds														
Non-Carbonised Remains														
Non-marine mollusc shell			20+		30+	5+	5+	20+	1	5+	100+		50+	
Earthworm egg capsules								1			1			3
Modern seeds														

Radiocarbon Dating

A single sample of human bone was submitted for radiocarbon dating at the Scottish Universities Environment Research Centre (SUERC). The sample was submitted in order to provide a secure date for the inhumation identified in pit 246, at the northern end of Trench 22. The result is presented in Table 9.

Table 9. Radiocarbon dating results

Lab. Code	Context	Material	Radiocarbon Age BP	Cal. Age d1 (68.2%)	Cal. Age d2 (95.4%)	Delta ¹³ C rel. VPDB (‰)
SUERC-20318 (GU-17508)	251	Human bone	2200±30	360-280 BC 260-200 BC	380-180 BC	-20.3

8 Discussion and Conclusions

Feature Visibility, Reliability and Preservation

With a few exceptions there was a good correlation between the results of the geophysical survey and the features identified during the evaluation. No archaeological features and deposits were identified in Trench 3 which targeted weaker anomalies, and the northern boundary of the possible enclosure targeted by Trenches 5 and 6 was not found. Neither the linear anomaly targeted by the south eastern end of Trench 16, and the crop mark targeted by Trench 20, were revealed.

Throughout the evaluation numerous potential archaeological features were identified, but under excavation were found to be irregular and probably of natural origin. Solution holes and channels were common across the site, and silty deposits were identified overlying the limestone bedrock in many trenches. This corresponds with the conclusions drawn from the geophysical investigation which identified many large anomalies of probable geological origin across the site. The variable geology, and consequently soil conditions, is possibly responsible for the inconsistent preservation of bone across the site.

Nevertheless, the results of the evaluation have confirmed the interpretation of the geophysical survey in most areas. The series of field boundary ditches, orientated north-east to south-west and north-west to south-east, were positively identified. Although these geophysical anomalies were often fragmentary and intermittent, due almost certainly to a combination of differential agricultural truncation and geological variation, it is likely that the former regime of enclosures and fields extended across the entire proposal area, especially if the evidence revealed to the south of the M62 is also taken into account (Heapy 2008; Williams in prep.). Despite the evident truncation by ploughing a number of small discrete features, such as pits and post-holes which are too small to be detected by the geophysical survey, were identified in many trenches.

The Enclosure and Field System

The only definite pre-Roman Iron Age feature is the large pit in Trench 22 (249), the human burial in which is dated in the range 380-180 cal. BC. Given the position of this pit, just outside the entrance of the trapezoidal enclosure, it is tempting to relate the two. In fact however, the pottery evidence suggests that the earliest fills within this enclosure ditch originated in the late Roman period. Thus, in order to equate the pit and burial with the enclosure, we must entertain the notion that the enclosure ditch was re-cut and/or totally scoured of Iron Age deposits as part of a redefinition and reoccupation in the later Roman period. Such an event is not impossible, but the evidence does not directly support it and it could well be that the pit's juxtaposition to the enclosure entrance was purely coincidental. Isolated Iron Age pit burials are quite common in the area, especially on the Magnesian Limestone. The plan and orientation of the enclosure is generally in accord with the rest of the field system as it is presently perceived. However, the fact that it is trapezoidal, rather than rectangular, and that Ditch 288 (Trench 21) seems to be respectful of a pre-existing enclosure, might give grounds to suppose that the enclosure has earlier origins than the contents of its ditch fill indicate.

Generally, the dating evidence (principally pottery) points to two peaks of settlement activity in the late 2nd to mid 3rd centuries and the 4th century, centred upon the enclosures investigated in Trenches 4-7 and 22 respectively. This should not necessarily exclude any earlier Late Iron Age or earlier Roman period settlement in this landscape, as the evidence for these periods has rarely produced much artefactual evidence, as attested by the two sherds of prehistoric pottery from Trench 4. Moreover, land division generally has been demonstrated to be incremental over the whole of this period and not the product of the imposition of one regime (Roberts *et al.* 2008).

The focus of the late 2nd to mid 3rd century seems to be the enclosure complex in the western part of the site targeted by Trenches 4-7. The geophysical survey suggests that this could be a subdivided enclosure, but the differences in the ditch profiles and fills (cf 106 and 115 in Figs 4 and 7) might suggest that they are not the result of incremental development rather than the product of one phase of construction. This enclosure complex appears to have been appended to a major double-ditched field boundary or trackway which terminated at the enclosure, although the field boundary continued to the north-east as a single ditch. Although evidence of structures within the enclosure is limited, the presence of food preparation vessels such as mortaria, and high status samian ware would suggest that this was a rural settlement of medium to high status.

The 4th century activity focused around the trapezoidal enclosure in the south-western part of the site. All the pottery recovered from this area was exclusively late Roman and although no internal structural features were positively identified, the evidence of burnt rubbish deposits from the ditch are indicative of domestic activity, which from the evidence of the crucible fragments, probably involved small-scale metalworking.

The Iron Age Burial

Pre-Roman Iron Age pit burials are well known in the region, examples including those investigated at Ledston (Roberts 2005), Ferrybridge (Richardson 2005), Wattle Syke (Turner 1991) and Micklefield (Brown *et al.* 2007). The Darrington example is unusual in that the body has been laid in the pit in a semi-supine extended position, propped up against the wall of the pit, whereas in all other examples the body laid on its side in a crouched or flexed position. Extended burials proper, which strictly this is not, are usually associated with Roman period inhumations.

The pit itself is of a form that have often been interpreted as storage pits, although the excavations of the pit groups at Ledston and Micklefield have failed to find any evidence for such a use. It is possible that large pits of this nature, where single or in large groups, were imbued with ritual significance, perhaps relating to Celtic fertility rites relating to the earth and the cycle of life. Many of those pits at Ferrybridge and Ledston that did not contain human burials, did contain a range of structured depositions that might be construed as votive. These included querns stones, animal burials, pots and joints of meat. Therefore, it is reasonable to view inhumation as just one form of ritual associated with pits.

The Darrington burial is similar to a number of the larger pit burials, particularly at Micklefield (Brown *et al.* 2007, figs 65-67) in that the body is positioned off centre. There is no obvious reason for this but, with no full understanding of ritual practice involved here, it might be supposed that it was a consequence of partitioning the pit in order to accommodate organic grave goods which have not survived.

9 Further Work

The time-scale for report production has precluded the full analysis of some of the elements due to the unavailability, or limited availability, of the finds specialists, although the greatest endeavour has been made to ensure that the most important diagnostic artefacts and finds have been addressed. Those elements that remain to be completed are the few sherds of samian pottery, a final report on the metalwork that to date has only been X-rayed, a full report on the human skeletal remains and an assessment and analysis of the snails in order to try and obtain comparative information about the environment and level of forest clearance in the Iron Age and Romano-British period.

It is anticipated that this work will be addressed as part of a Phase 2 post-determination evaluation phase. In the event that there is no such further work, then the outstanding elements of this report work will need to be carried out to complete this report.

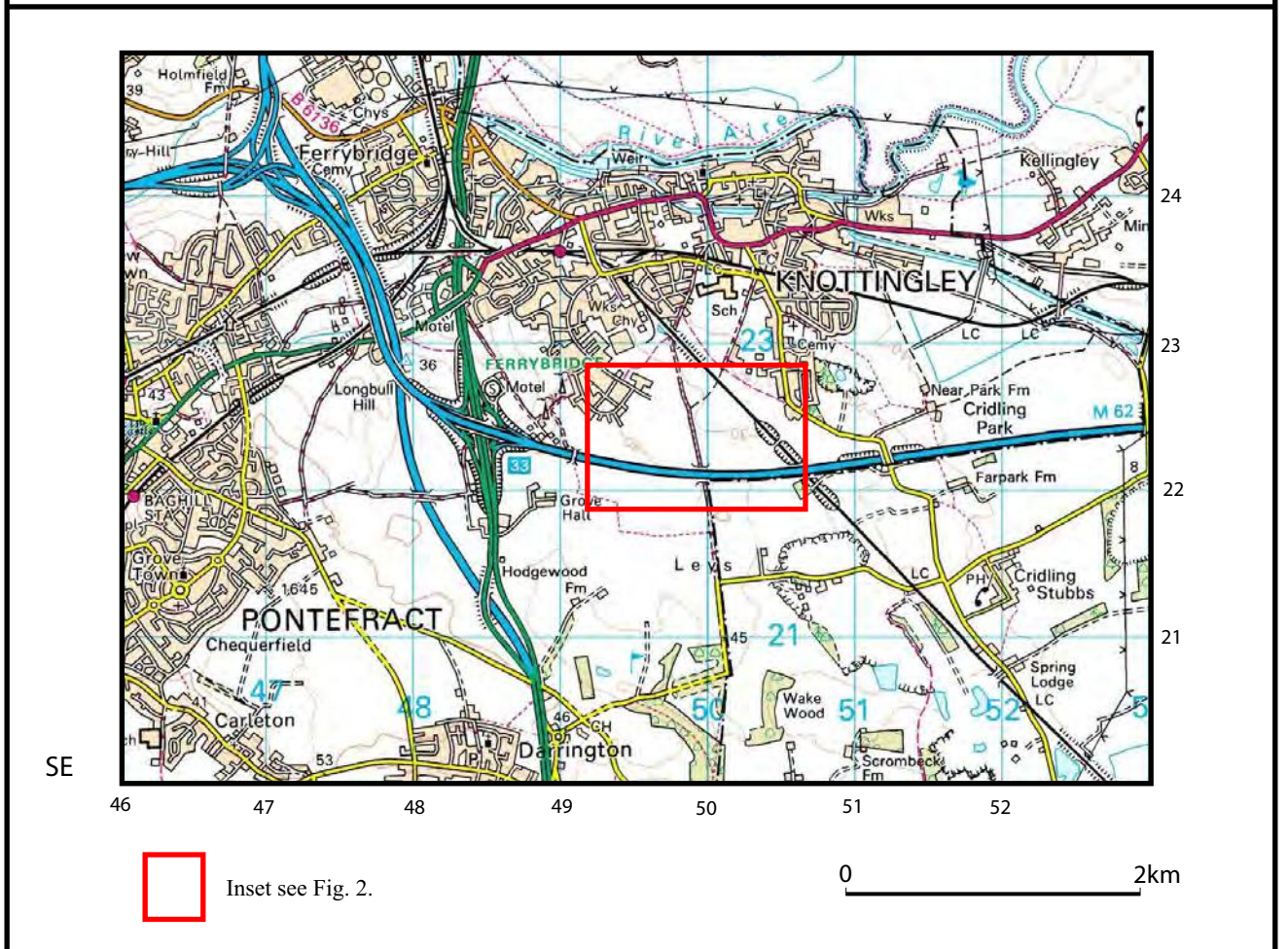
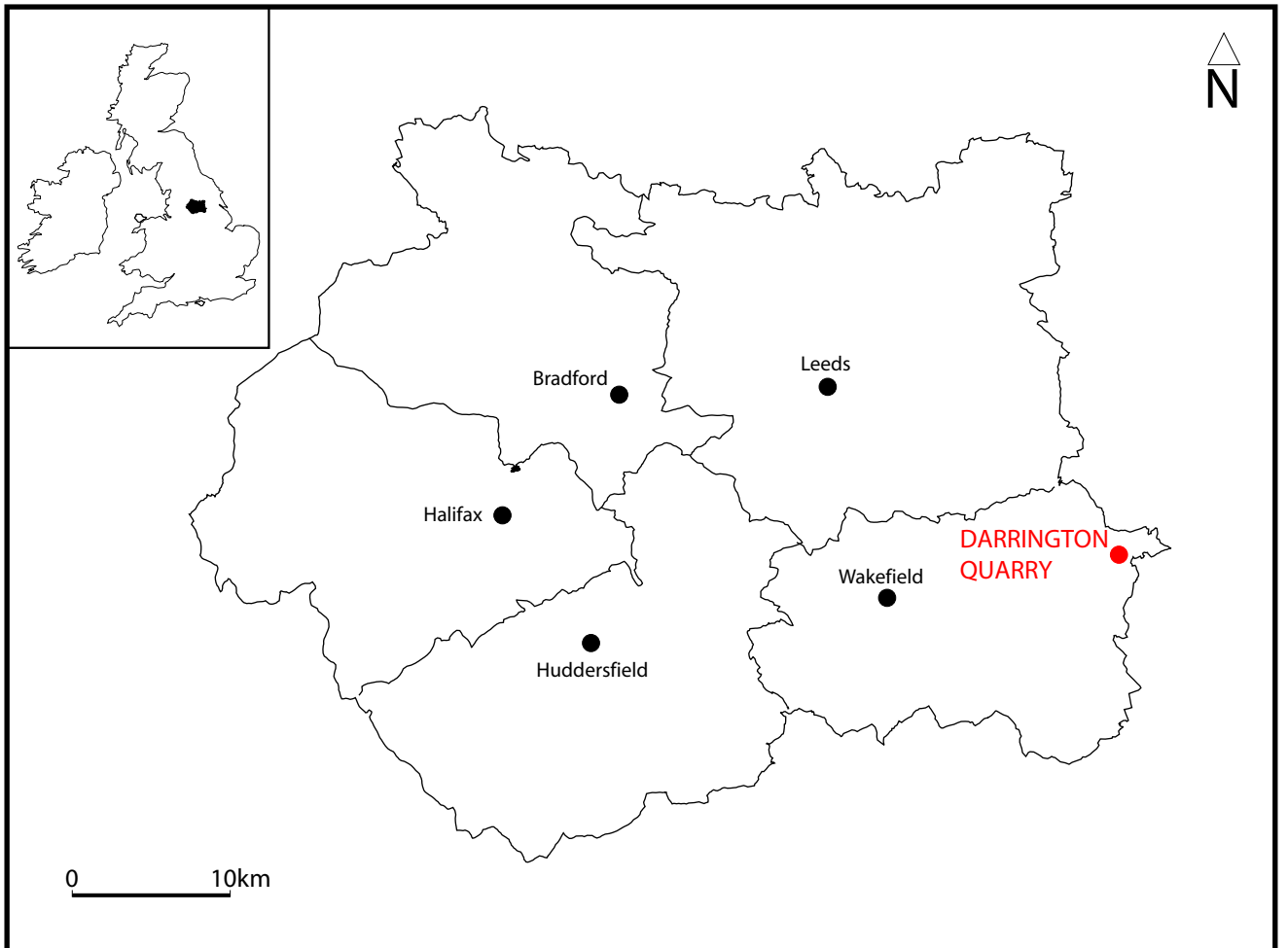


Fig. 1. Site location

Reproduced with the permission of the controller of Her Majesty's Stationery Office © Crown Copyright. Archaeological Services WYAS: licence LA076406, 2008.

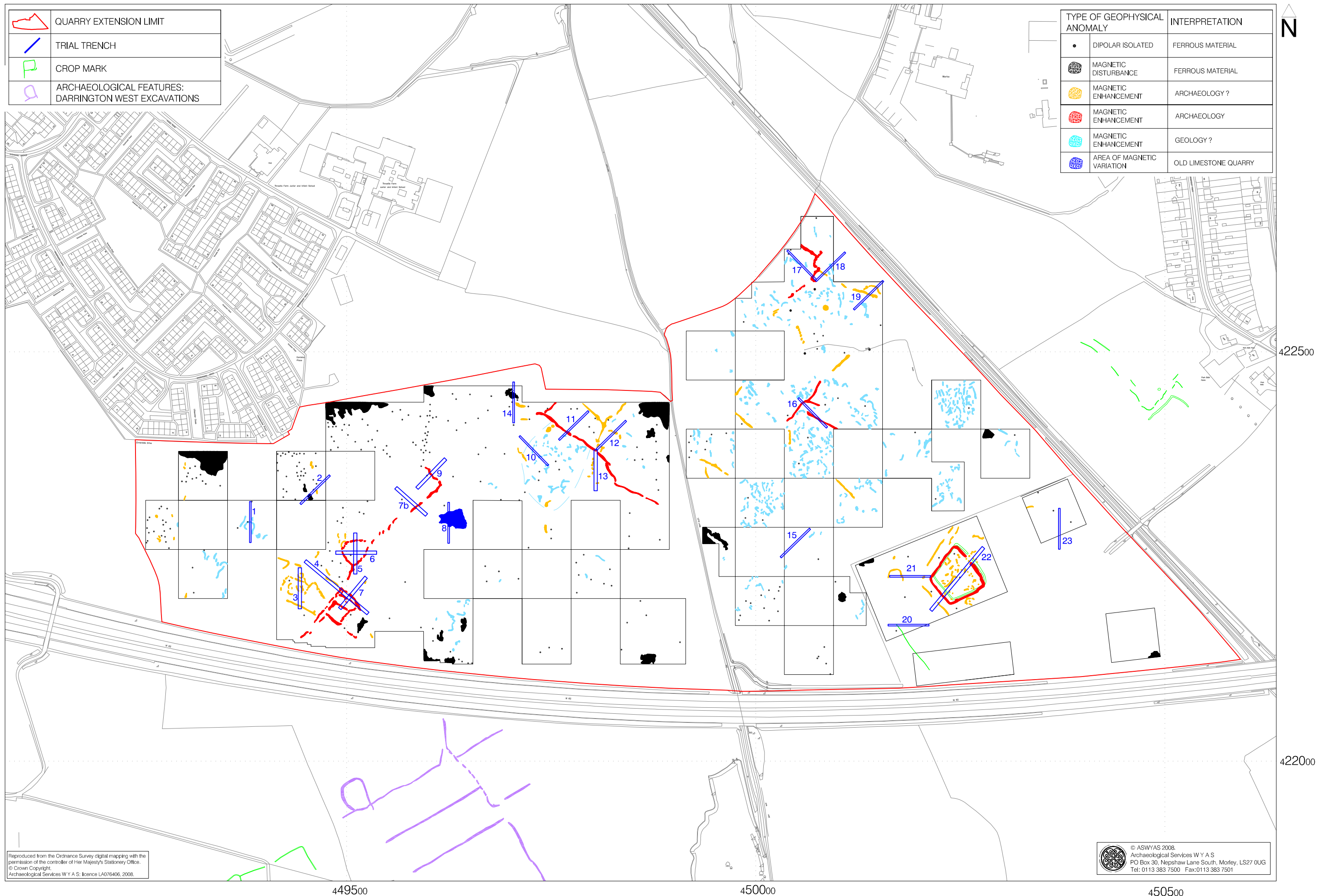


Fig. 2. Site plan showing location of trenches, with respect to crop marks, geophysical survey data and earlier excavations (1:4000 @ A3)

Trench 1

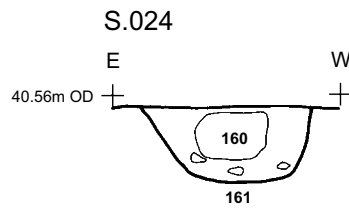


Fig. 3. Trench 1, plan and section

Trench 4

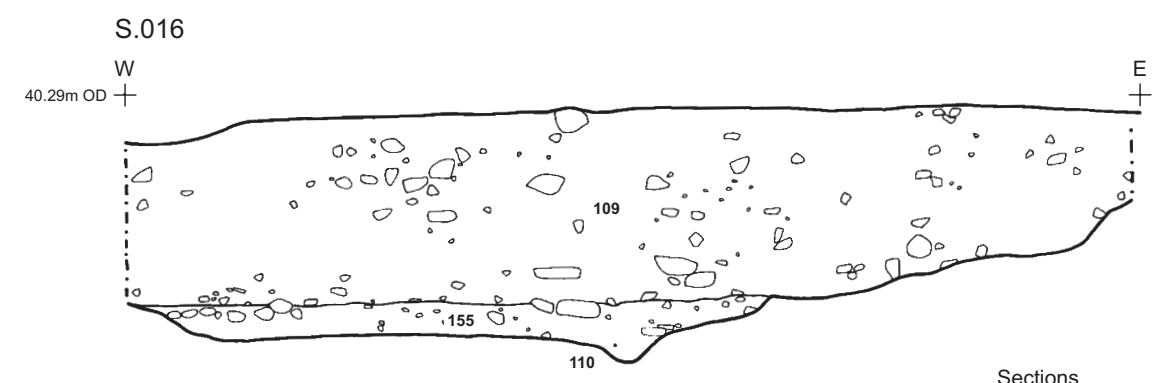
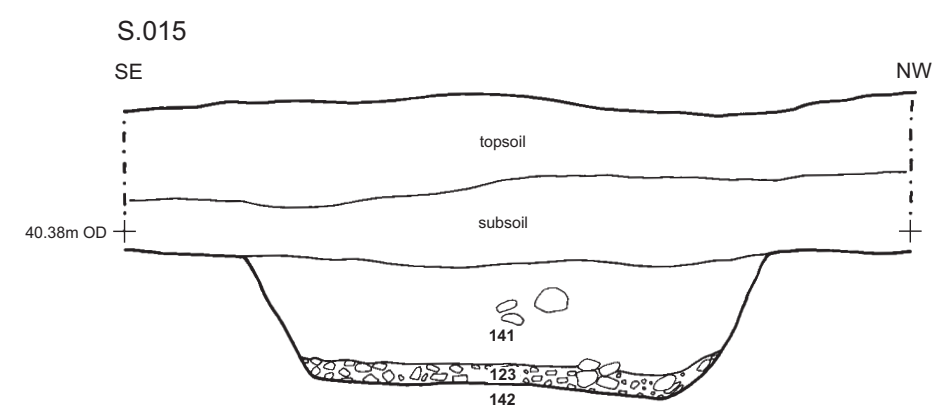
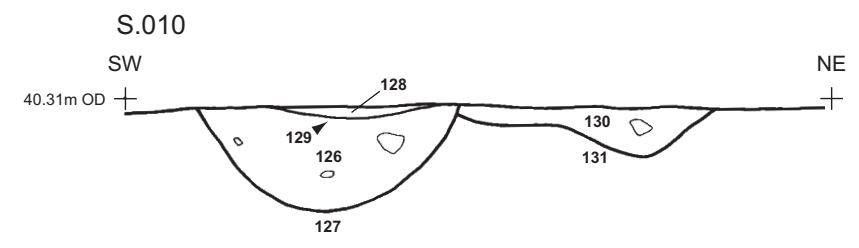
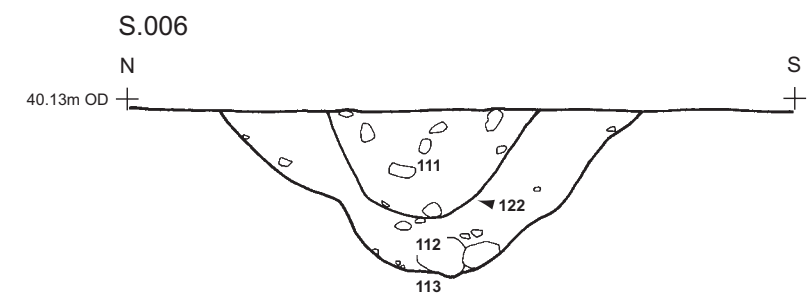
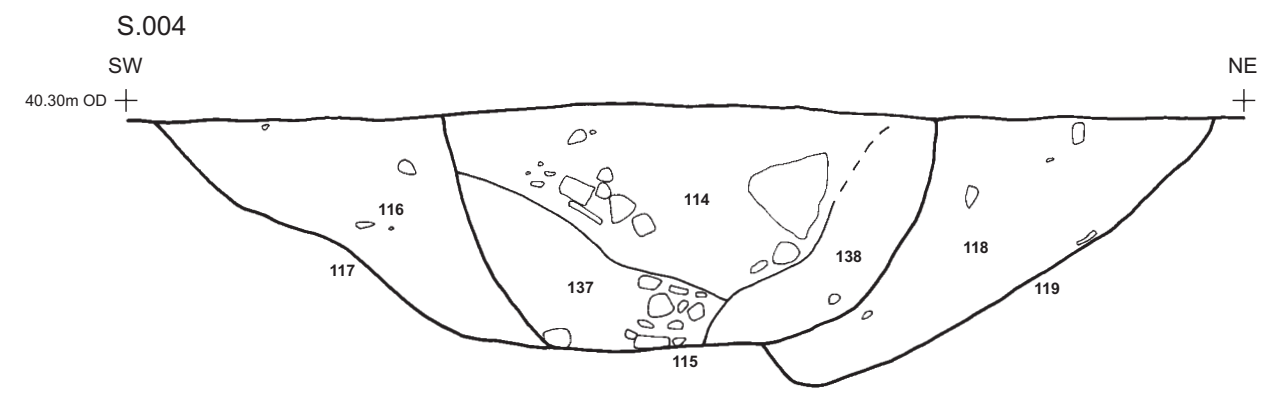
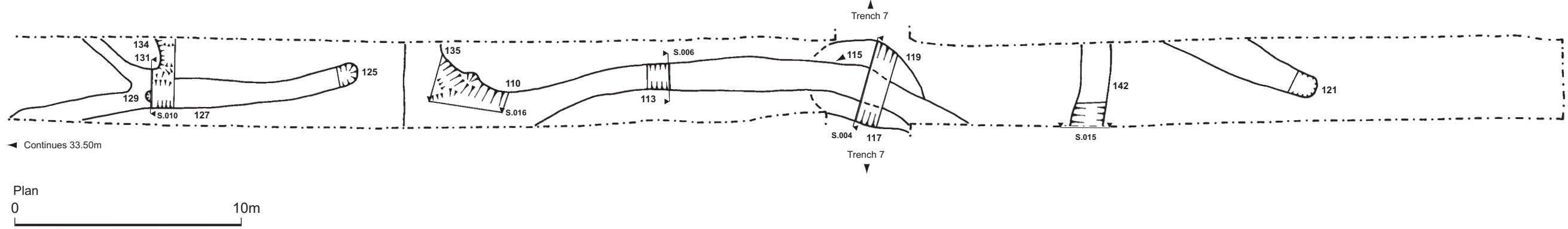


Fig. 4. Trench 4, plan and sections

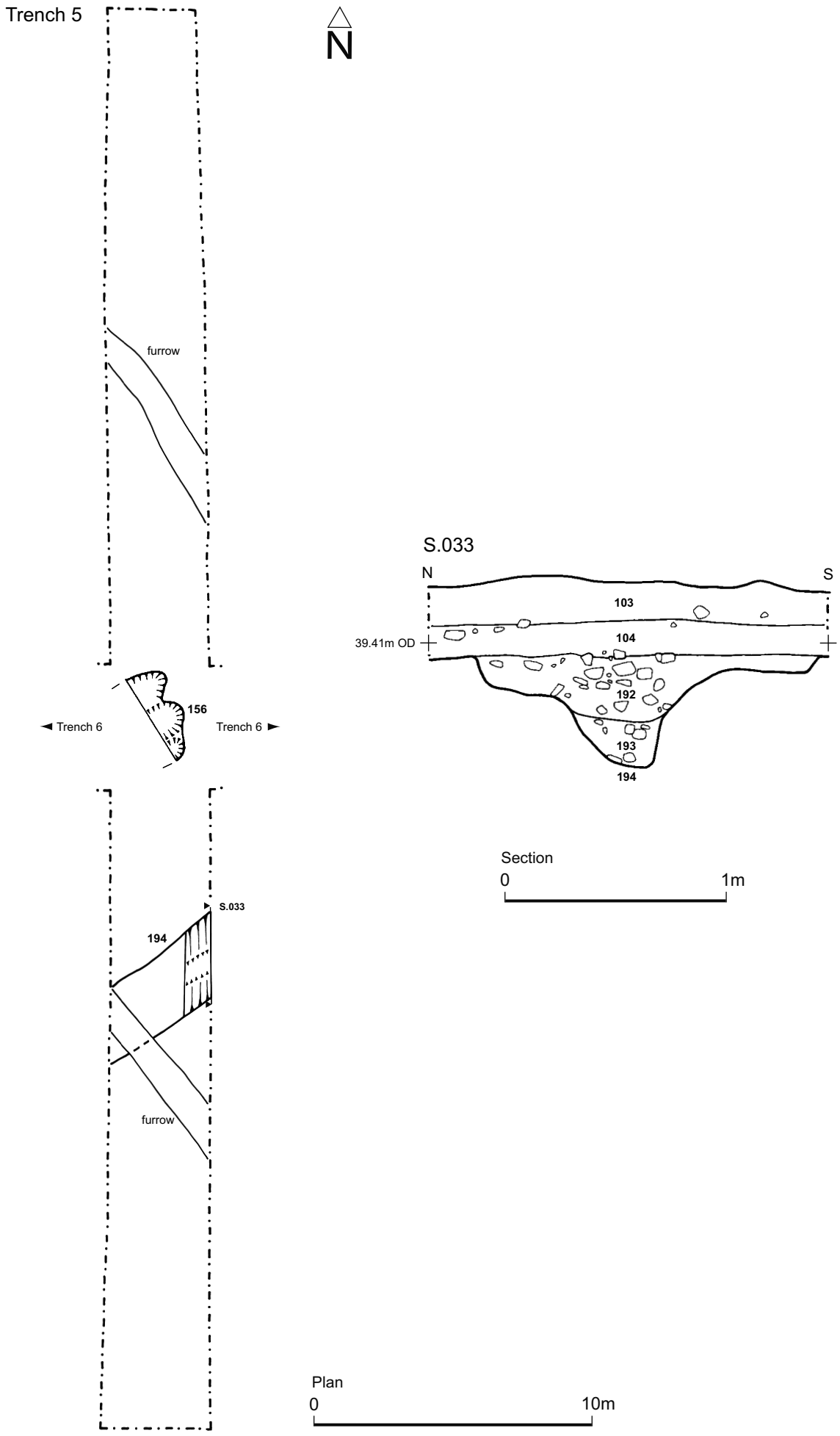


Fig. 5. Trench 5, plan and section



Trench 6

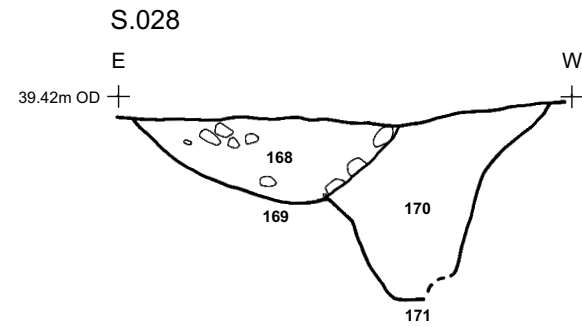
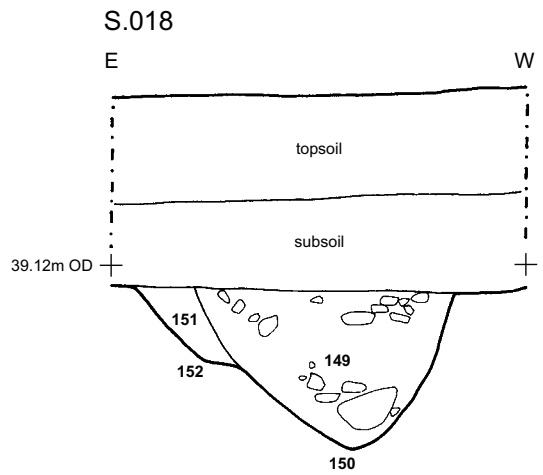
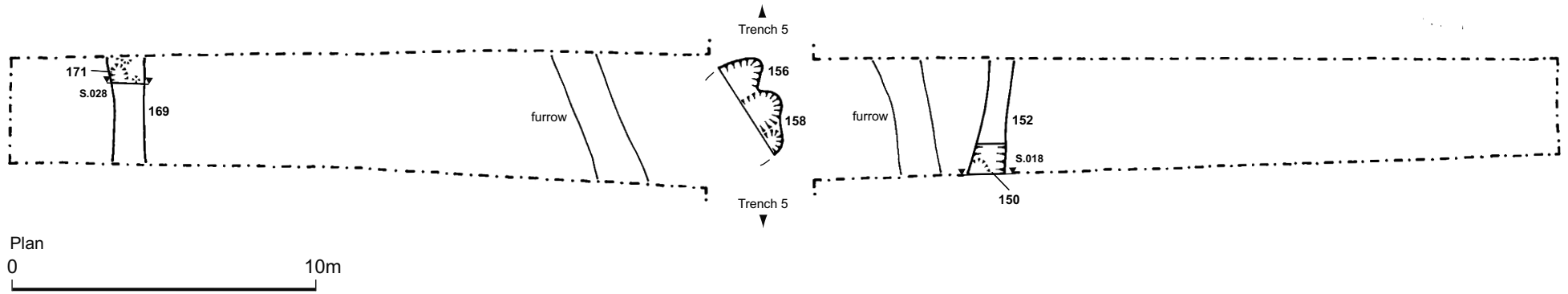


Fig. 6. Trench 6, plan and sections

Trench 7

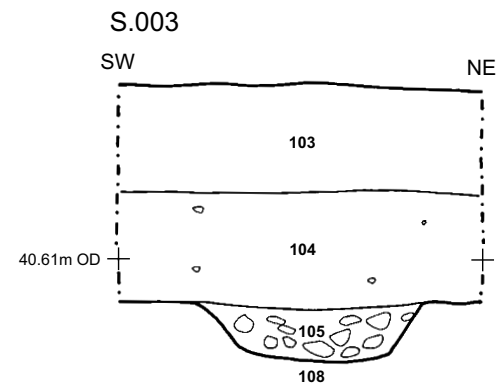
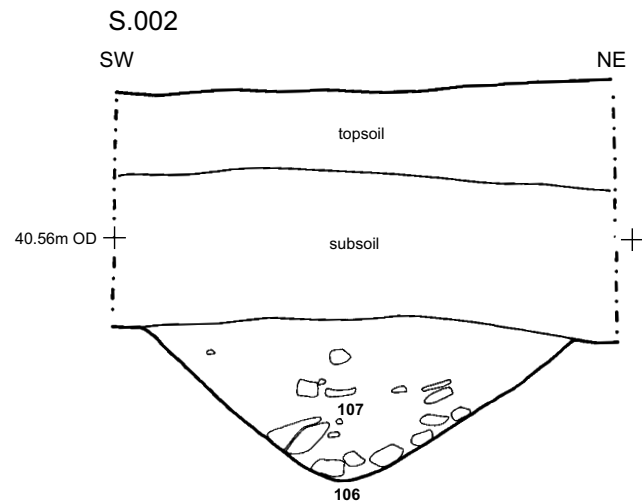
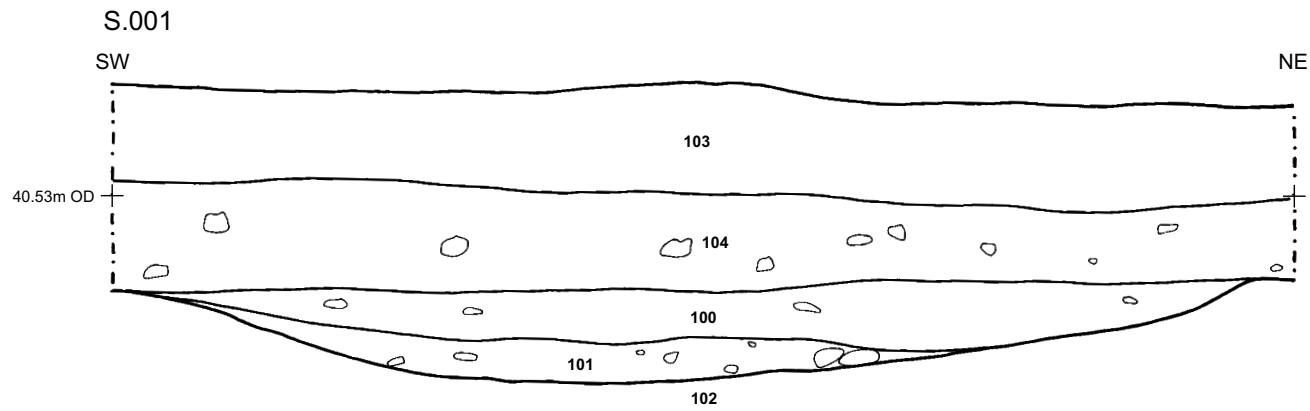
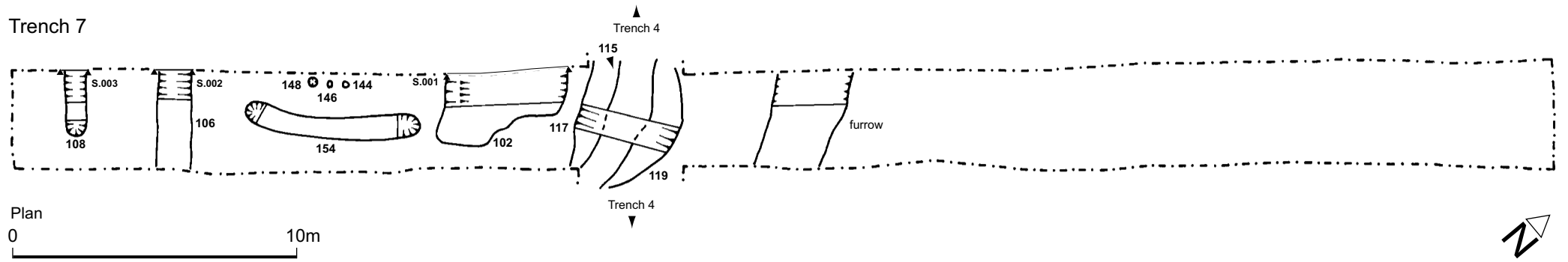


Fig. 7. Trench 7, plan and sections





Trench 7b

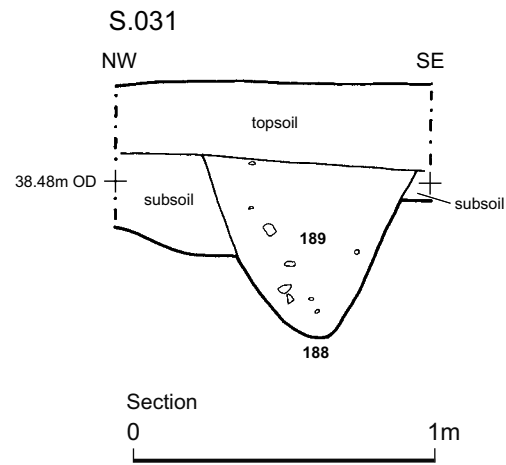


Fig. 8. Trench 7b, plan and section

Trench 8

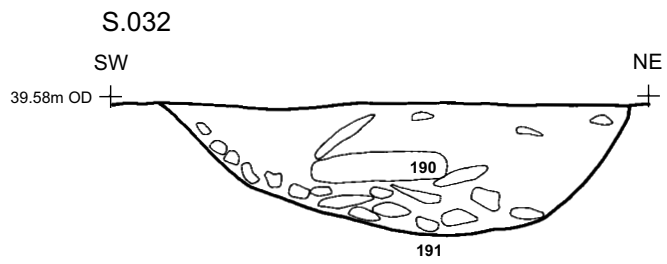
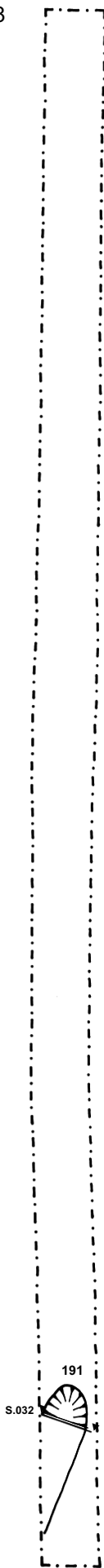


Fig. 9. Trench 8, plan and section



Trench 9

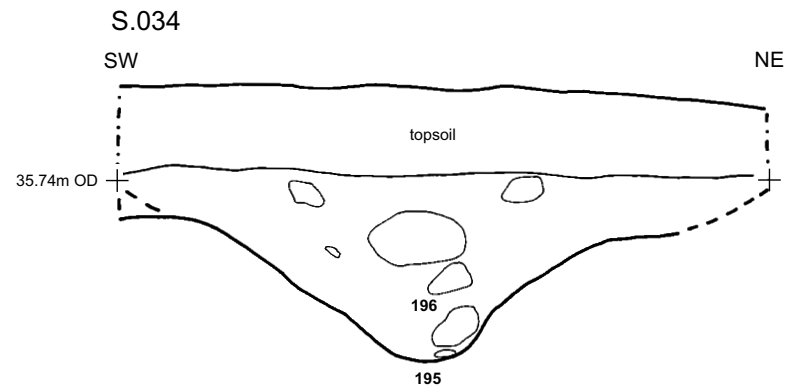
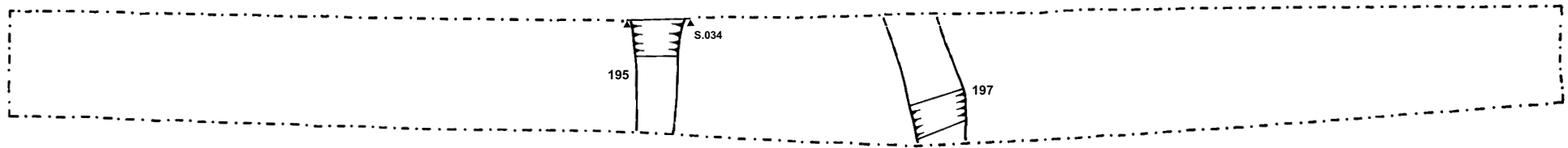


Fig. 10. Trench 9, plan and section



Trench 11

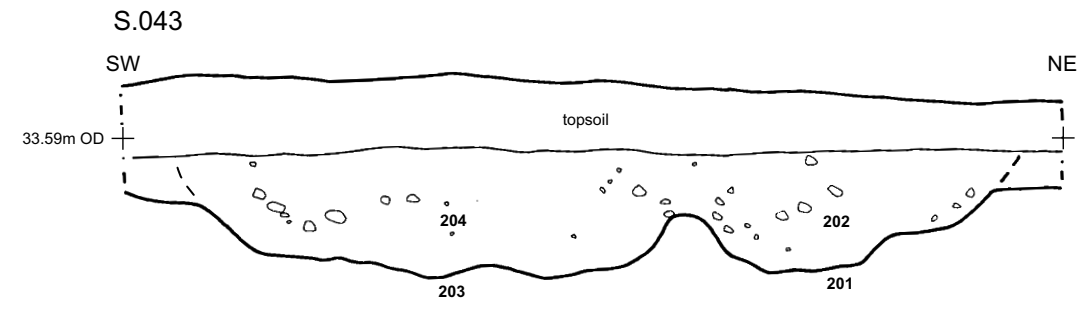
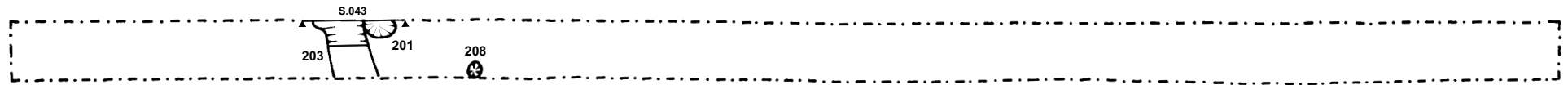


Fig. 11. Trench 11, plan and section

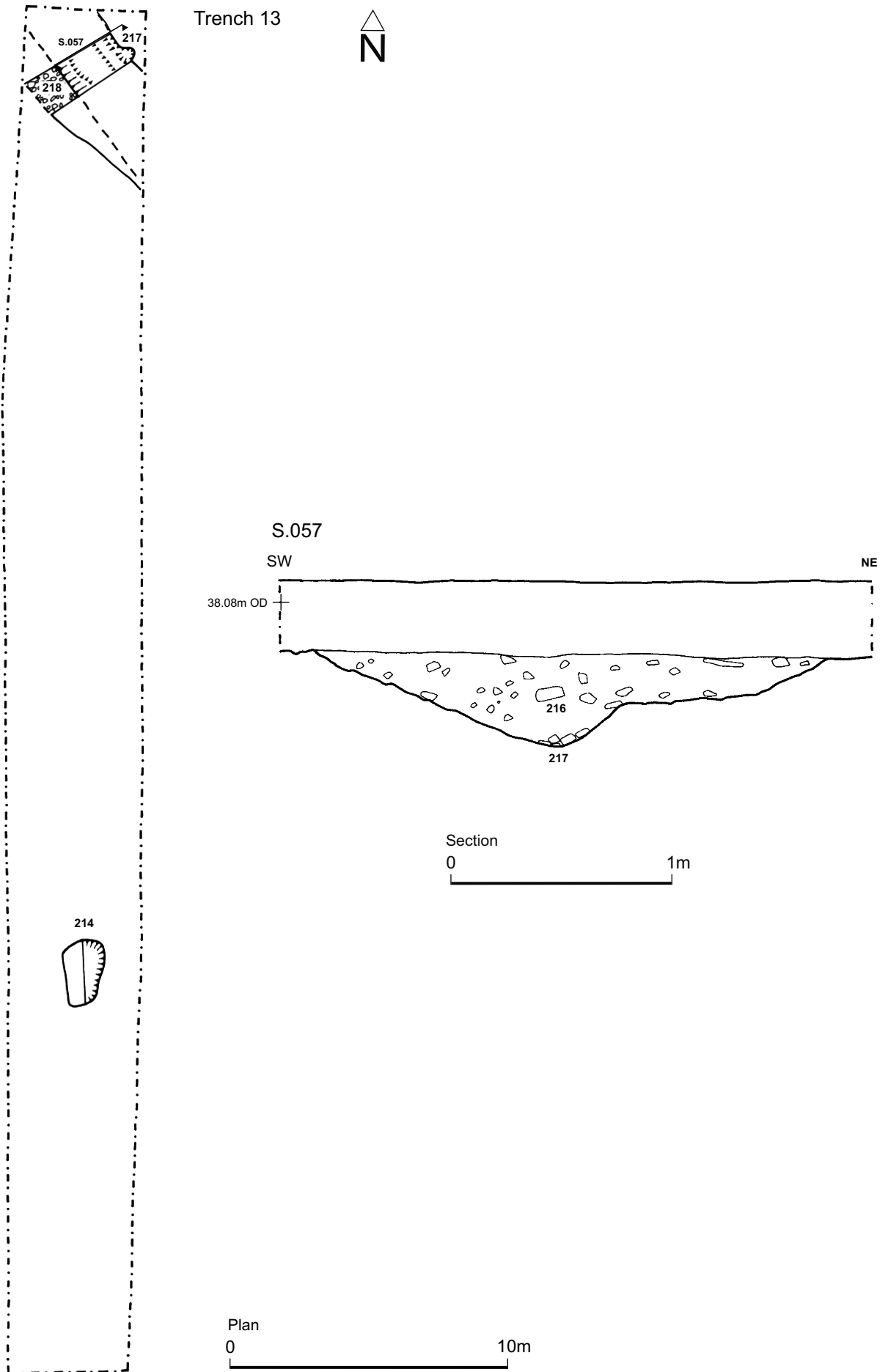


Fig. 12. Trench 13, plan and section

Trench 14

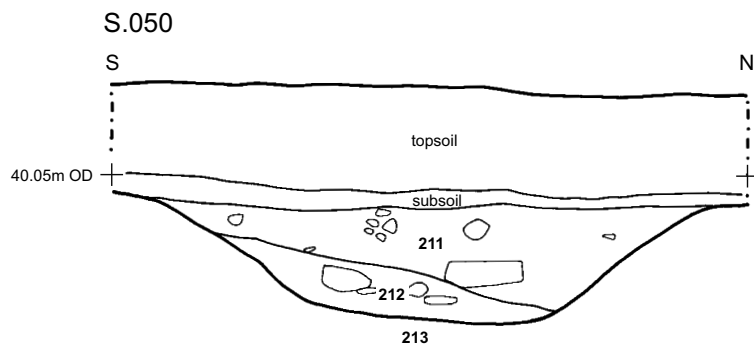
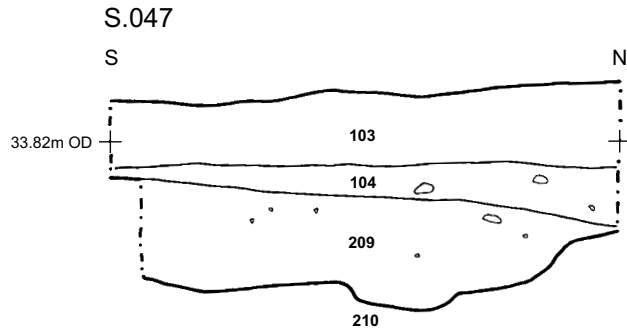
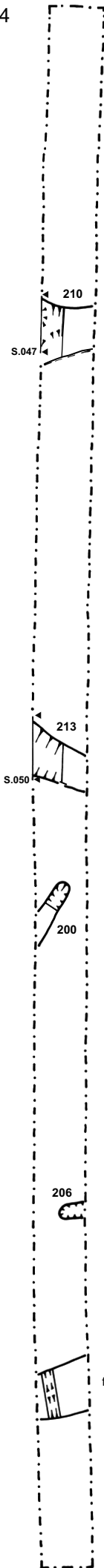


Fig. 13. Trench 14, plan and sections



Trench 15

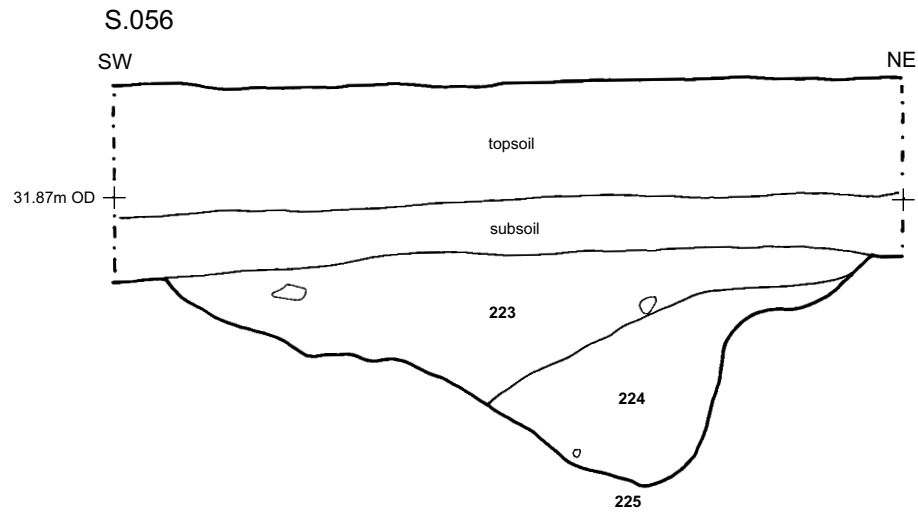
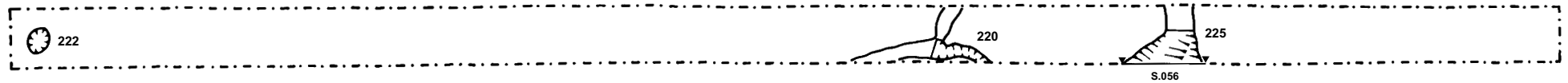


Fig. 14. Trench 15, plan and section

Trench 16

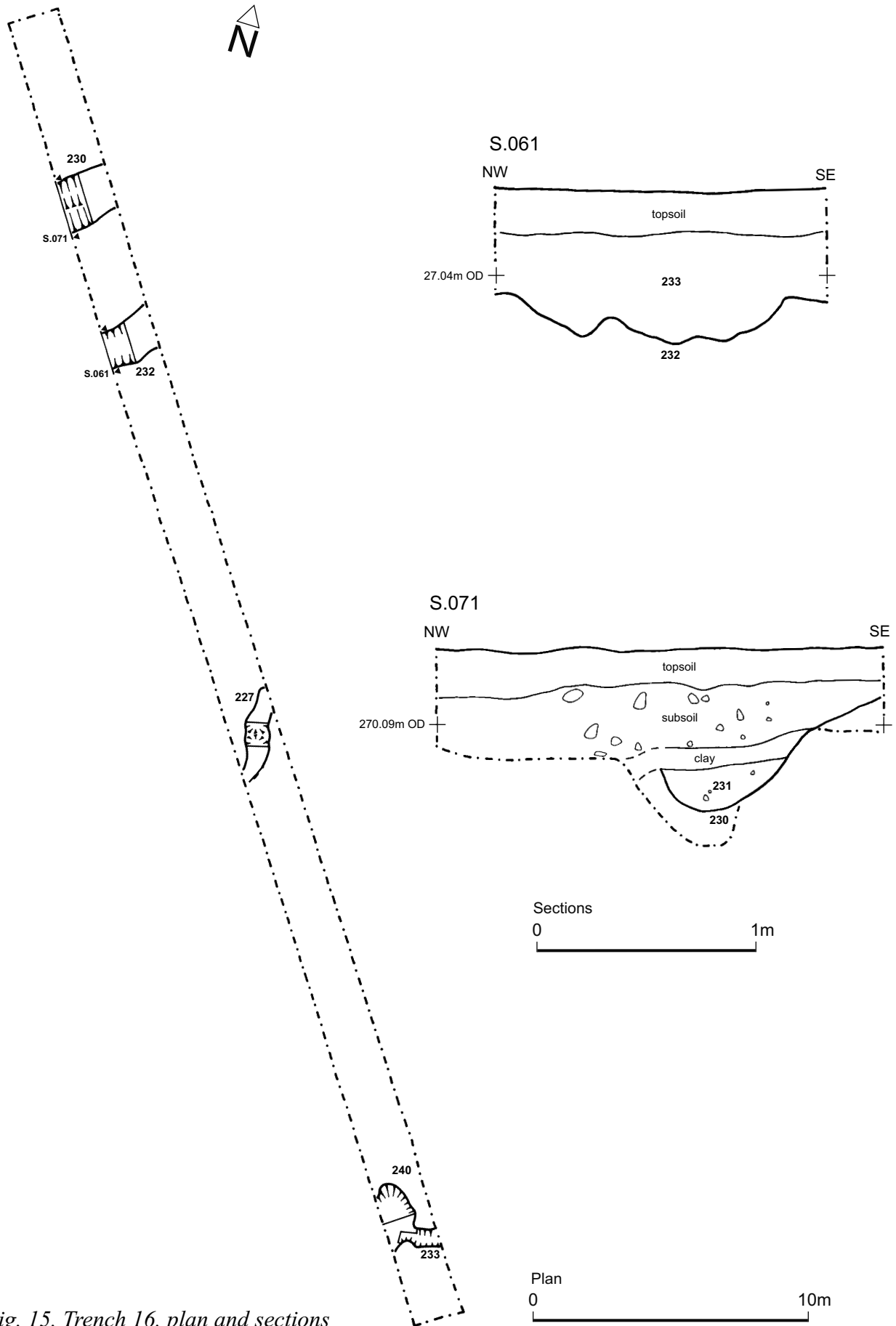


Fig. 15. Trench 16, plan and sections



Trench 17

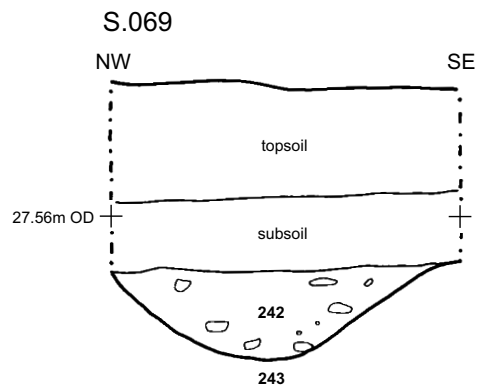
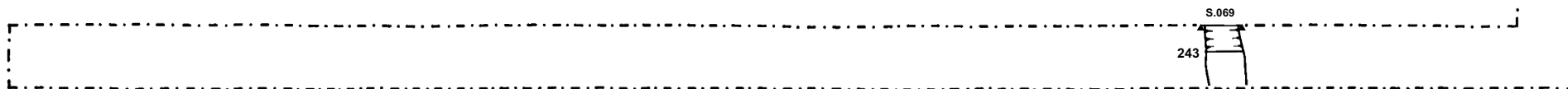


Fig. 16. Trench 17, plan and section



Trench 18

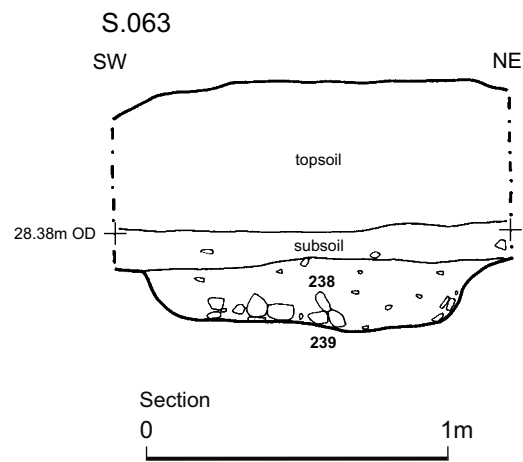
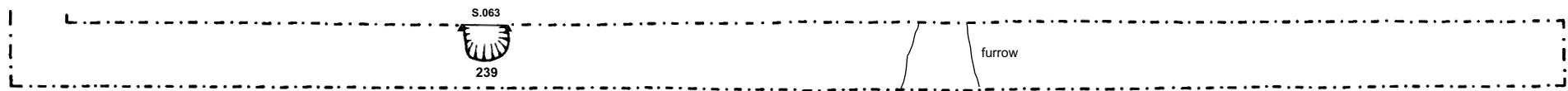


Fig. 17. Trench 18, plan and section



Trench 19

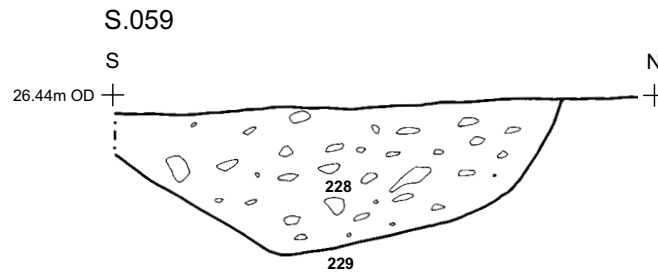
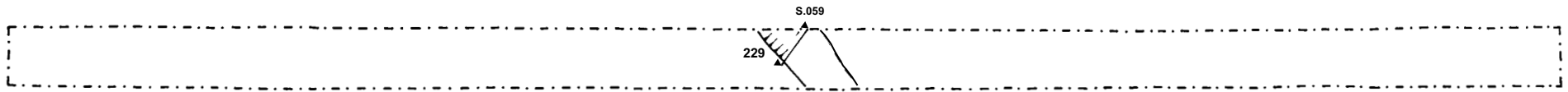


Fig. 18. Trench 19, plan and section



Trench 20

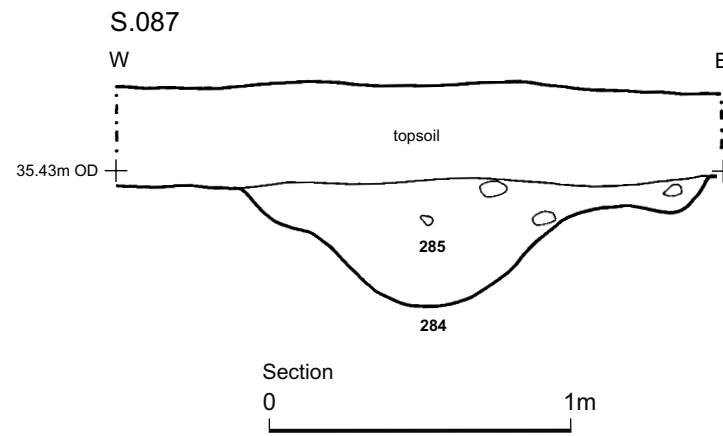
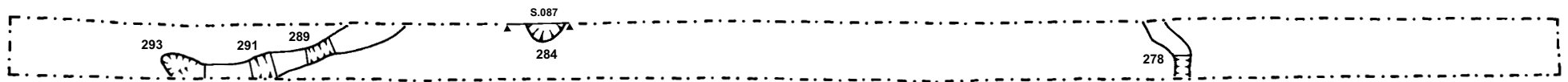


Fig. 19. Trench 20, plan and section

Trench 21



◀ continues 25.00m

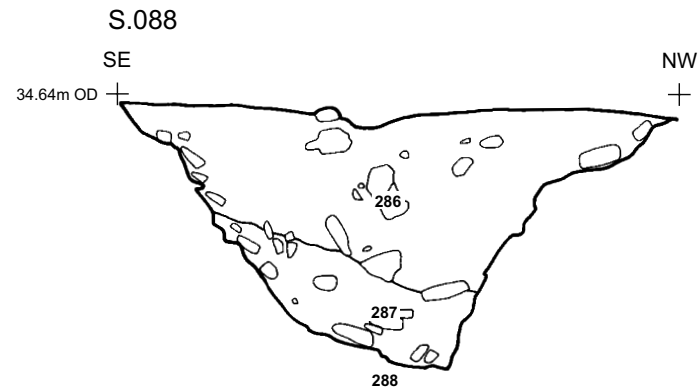
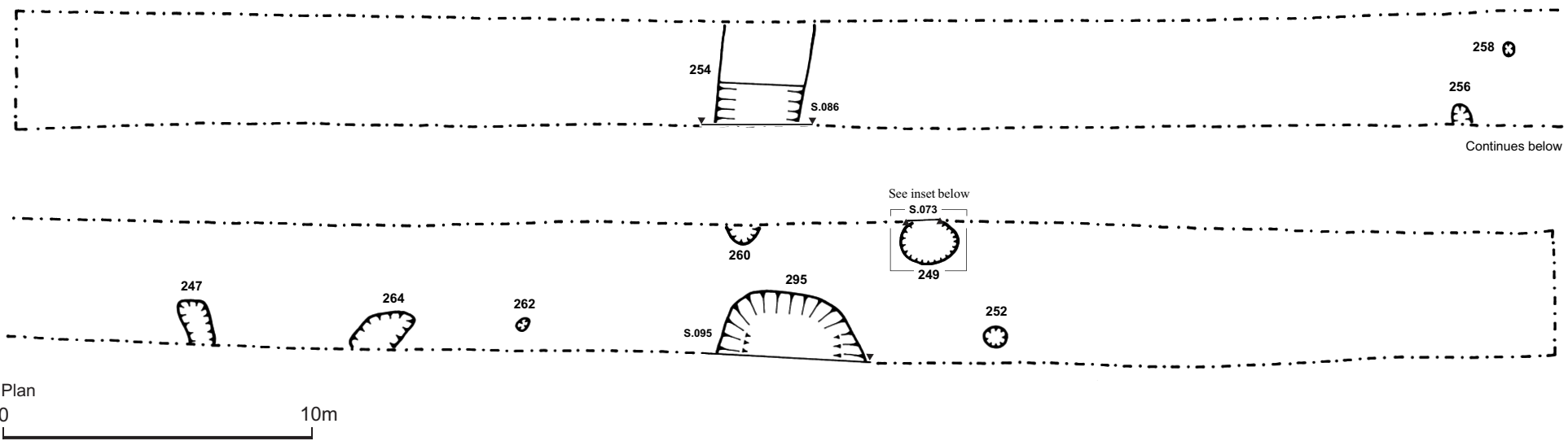


Fig. 20. Trench 21, plan and section

Trench 22



Plan and section
0 1m

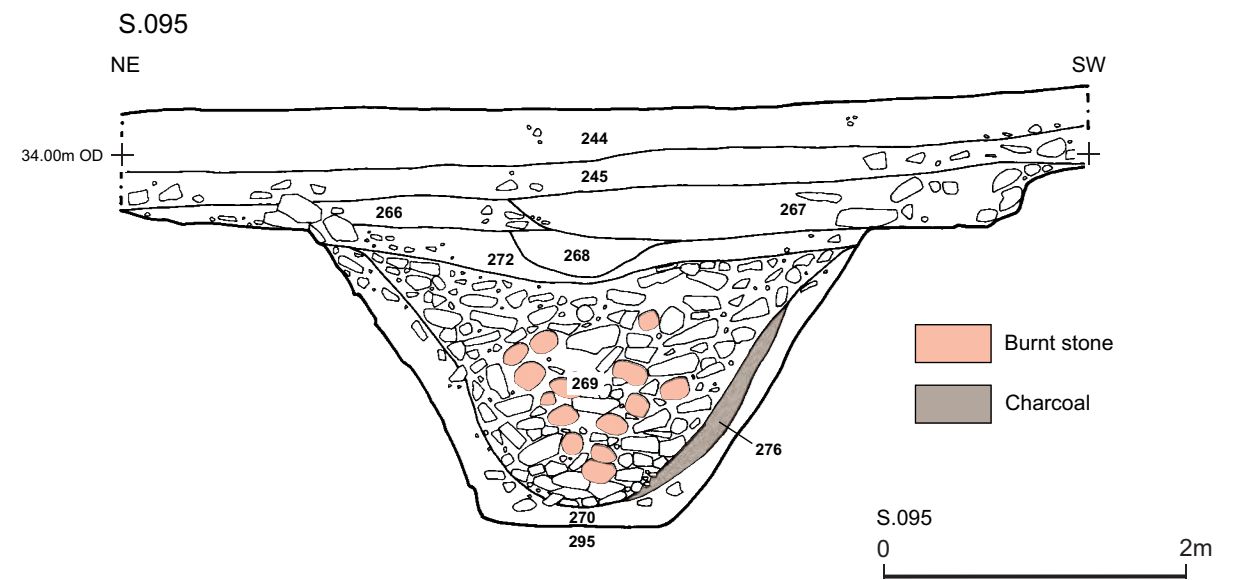
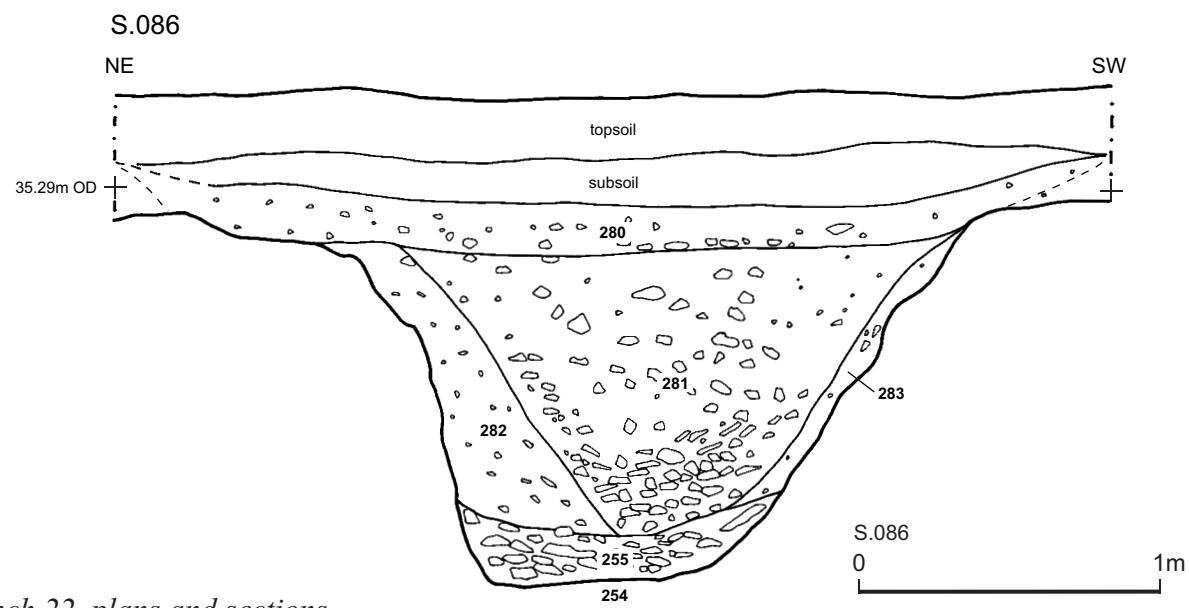
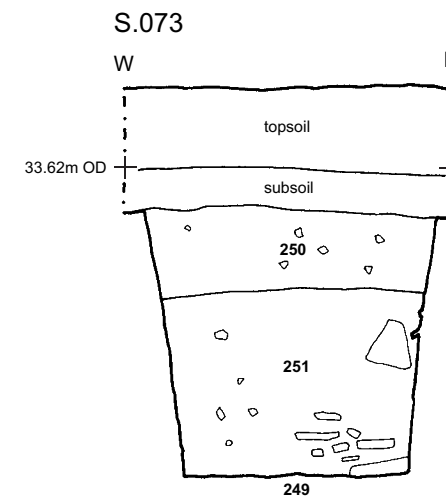
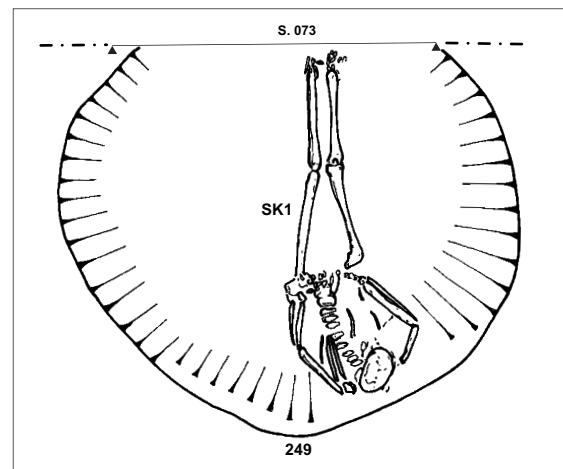


Fig. 21. Trench 22, plans and sections



Plate 1. Trench 1, looking north



Plate 2. Trench 2, looking north-east



Plate 3. Trench 3, looking south



Plate 4. Trench 4 showing stoney layer 123 in ditch 142, looking south



Plate 5. Trench 5, looking north



Plate 6. Trench 6, looking west



Plate 7. Trench 7, looking south-west



Plate 8. Pit 102 in Trench 7, looking north-west



Plate 9. Trench 7b, looking north-west



Plate 10. Trench 8, looking north



Plate 11. Trench 9, looking north-east



Plate 12. Trench 10, looking north-west



Plate 13. Trench 11 showing ditch 203 and pit 201, looking south-east



Plate 14. Trench 13 showing ditch 217



Plate 15. Trench 14, looking north



Plate 16. Trench 15, looking north-east



Plate 17. Trench 16, looking south-east



Plate 18. Trench 17, looking north-west



Plate 19. Trench 18, looking north-east



Plate 20. Trench 19, looking north-east



Plate 21. Trench 20, looking east



Plate 22. Trench 21, looking west



Plate 23. Trench 22, looking south-west



Plate 24. Trench 22 showing Enclosure ditch terminus 295, looking south-east



Plate 25. Trench 22 showing Enclosure ditch 254, looking south-east



Plate 26. Trench 22, Skeleton 1 during excavation



Plate 27. Trench 22, Skeleton 1 in the base of pit 249



Plate 28. Trench 23, looking south



*Plate 29. The two annular rings found with Skeleton 1, before and after conservation
(Photo: K. Barker)*

Appendix 1: Inventory of primary archive

Phase	File No.	Description	Quantity
Evaluation	1	Context register sheets	9
		Drawing register sheets	5
		Sheet number register	2
		Sample register sheets	3
		Small Finds register sheets	2
		Skeleton register	1
		Skeleton sheet	1
		Trench record sheets	23
		Photo register sheets	19
		Photo ID sheets	9
		Daily record sheets	29
Evaluation	2	Permatrace drawing sheets	14
Evaluation	3	Context sheets (nos. 100-295)	196
Evaluation	4	Written Scheme of investigation	1
		Risk assessment	1
		Site plans	5
Evaluation	Loose	Large permatrace sheets	11

Appendix 2: Concordance of contexts

Abbreviations

Bone	Animal bone
Cruc.	Crucible
Cu. A.	Copper alloy object
Fe. O.	Iron object
GBA	General biological analysis soil sample
Hum.	Human bone
Med. pot	Medieval pottery
P. Med. pot	Post-medieval pottery
RB pot	Romano-British pottery

Context	Trench	Description	Artefacts and environmental samples
100	7	Fill of pit 102	RB pot (32); Bone (11)
101	7	Charcoal rich fill of pit 102	RB pot (80); Samian (11); Bone (17); GBA 1
102	7	Cut of pit	
103	ALL	Topsoil	
104	ALL	Subsoil	
105	7	Fill of ditch 108	RB pot (69); Bone (13); GBA 2
106	7	Cut of ditch	
107	7	Single fill of ditch 106	RB pot (3); Bone (5); GBA 3
108	7	Cut of ditch	
109	4	Fill of ditch 110	RB pot (4); Samian (1); Cu. O. (1); Bone (25); GBA 20
110	4	Cut of ditch	
111	4	Fill of ditch 122	RB pot (91); Mortaria (7); Fired Clay (1); Bone (12); GBA 5
112	4	Fill of ditch 113	Bone (4); GBA 6
113	4	Cut of ditch	
114	7	Fill of ditch 115	RB pot (13); Mortaria (2); Bone (55)
115	7	Cut of ditch	
116	7	Fill of ditch 117	RB pot (23); Fired Clay (1); Bone (12); GBA 7
117	7	Cut of ditch	
118	7	Fill of pit 119	Flint (1); GBA 9
119	7	Cut of pit	
120	4	Fill of ditch 121	GBA 4
121	4	Cut of ditch	
122	4	Cut of ditch recut? of 113	
123	4	Stony deposit in base of 142	Bone (14)

Context	Trench	Description	Artefacts and environmental samples
124	4	Fill of ditch terminal 125	
125	4	Cut of ditch terminal	
126	4	Fill of ditch 127	GBA 11
127	4	Cut of ditch	
128	4	Fill of shallow pit 129	GBA 10
129	4	Cut of shallow pit	
130	4	Fill of shallow ditch 131	GBA 12
131	4	Cut of shallow ditch	
132	4	Upper fill of curvilinear ditch 134	
133	4	Primary fill of Curvilinear ditch 134	GBA 13
134	4	Cut of curvilinear ditch	
135	4	Cut of ditch	
136	4	Fill of ditch 135	RB pot (2); Fe. O. (2); Bone (15); GBA 22
137	7	Fill of 115	Bone (23)
138	7	Primary fill of 115	GBA 8
139	7	Fill of Furrow 140	
140	7	Cut of furrow	
141	4	Fill of ditch 142	GBA 17
142	4	Cut of ditch	
143	7	Fill of posthole 144	RB pot (1); ?Med. pot (2); Bone (3); GBA 14
144	7	Cut of posthole	
145	7	Fill of posthole 146	GBA 15
146	7	Cut of posthole	
147	7	Fill of posthole 148	GBA 16
148	7	Cut of posthole	
149	6	Fill of pit or terminal 150	GBA 18
150	6	Cut of pit or terminal	
151	6	Fill of ditch 152	GBA 19
152	6	Cut of ditch	
153	7	Fill of shallow gully 154	
154	7	Cut of shallow gully	
155	4	Stony layer at base of ditch 110	GBA 21
156	6	Cut of pit	
157	6	Fill of pit 156	
158	6	Cut of possible pit	
159	6	Fill of 158	
160	1	Fill of gully 161	GBA 39
161	1	Cut of gully	
162	1	Fill of gully 163	GBA 23
163	1	Cut of gully	
164	1	Fill of 165	GBA 40
165	1	Cut of gully	
166	1	Fill of 167	GBA 41
167	1	Cut of gully	

Context	Trench	Description	Artefacts and environmental samples
168	6	Fill of ditch 169	GBA 29
169	6	Cut of ditch	
170	6	Fill of ditch 171	GBA 30
171	6	Cut of ditch	
172	6	Fill of possible stake-hole 173	GBA 27
173	6	Cut of possible stake-hole	
174	6	Fill of possible stake-hole 175	GBA 28
175	6	Cut of possible stake-hole	
176	6	Fill of possible stake-hole 177	
177	6	Cut of possible stake-hole	
178	6	Fill of possible stake-hole 179	
179	6	Cut of possible stake-hole	
180	6	Fill of possible stake-hole 181	
181	6	Cut of possible stake-hole	
182	6	Fill of possible stake-hole 183	
183	6	Cut of possible stake-hole	
184	6	Group of three small possible stake-hole	
185	7b	Cut of linear	
186	7b	Fill of 185	
187	7b	Upper fill of 185	
188	7b	Cut of ditch	
189	7b	Fill of ditch	Flint (1); Bone (5); GBA 24
190	8	Fill of ditch terminal 191	GBA 26
191	8	Cut of ditch terminal	
192	5	Upper fill of ditch 194	RB pot (3); Bone (6)
193	5	Primary fill of ditch 194	Bone (2); GBA 26
194	5	Cut of ditch	
195	9	Cut of ditch	
196	9	Fill of ditch 195	GBA 31
197	9	Cut of ditch	
198	9	Fill of ditch 197	
199	14	Fill of terminal 200	GBA 37
200	14	Cut of terminal	
201	11	Cut of pit	
202	11	Fill of pit 201	GBA 32
203	11	Cut of ditch	
204	11	Fill of ditch 203	GBA 33
205	14	Fill of terminal 206	GBA 36
206	14	Cut of terminal	
207	11	Fill of posthole 208	GBA 34
208	11	Cut of posthole	
209	14	Fill of possible ditch 210	GBA 35
210	14	Cut of possible ditch	
211	14	Fill of ditch 213	
212	14	Primary fill of ditch 213	Flint (1); GBA 38
213	14	Cut of ditch	

Context	Trench	Description	Artefacts and environmental samples
214	13	Cut of pit	
215	13	Fill of pit 214	GBA 42
216	13	Fill of ditch 217	GBA 45
217	13	Cut of ditch	
218	13	Stone Deposit	
219	15	Fill of 220	
220	15	Cut of natural feature	
221	15	Fill of pit 222	GBA 44
222	15	Cut of pit	
223	15	Fill of ditch 225	
224	15	Primary fill of ditch 225	GBA 43
225	15	Cut of ditch	
226	16	Fill of gully 227	GBA 46
227	16	Cut of gully	
228	19	Fill of ditch 229	GBA 47
229	19	Cut of ditch	
230	16	Cut of ditch	
231	16	Fill of ditch 230	GBA 50
232	16	Cut of ditch	
233	16	Fill of ditch 232	GBA 51
234	16	Fill of gully 235	GBA 52
235	16	Cut of gully	
236	18	Fill of furrow 237	P. Med. Pot (1)
237	18	Cut of furrow	
238	18	Fill of terminal 239	GBA 48
239	18	Cut of terminal	
240	16	Cut of pit 240	
241	16	Fill of pit 240	GBA 53
242	17	Fill of ditch 243	GBA 54
243	17	Cut of ditch 243	
244	20-23	Topsoil (Same as 103)	
245	20-23	Subsoil (Same as 104)	
246	ALL	Natural	
247	22	Cut of gully terminal	
248	22	Single fill of 247	
249	22	Cut of pit containing SK1	
250	22	Upper fill of pit 249	GBA55, GBA 56
251	22	Lower fill of pit 249	Hum.; Jet O. (1); ?Glass O. (1); Bone (1); sample 58, sample 62
252	22	Cut of pit	
253	22	Single fill of pit 253	GBA 57
254	22	Cut of enclosure ditch	
255	22	Primary fill of enclosure ditch 255	RB pot (7); Bone (71); GBA 59
256	22	Cut of possible post-hole	
257	22	Fill of 256	GBA 60
258	22	Cut of possible post-hole	

Context	Trench	Description	Artefacts and environmental samples
259	22	Fill of 258	GBA61
260	22	Cut of post-hole	
261	22	Fill of post-hole 260	GBA 63
262	22	Cut of small post-hole	
263	22	Single fill of post-hole 262	Bone (1); GBA 64
264	22	Cut of shallow feature	
265	22	Fill of 264	Slag (2)
266	22	Dark top fill of ditch terminal 295	RB pot (16); Mortaria (1); Cu. O. (1); Fe. O. (1); ?Worked stone (1); Bone (27)
267	22	Mid brown fill of ditch terminal 295	RB pot (8); Bone (46)
268	22	Red clayey fill of ditch terminal 295	RB pot (3); GBA 68
269	22	Rubble fill of ditch terminal 295	RB pot (5); Cruc. (43); Fe. O. (1); Bone (392)
270	22	Light brown fill of ditch terminal 295	RB pot (6); Fired Clay (15); Bone (41)
271	-	VOID	
272	22	Orange fill of ditch terminal 295	RB pot (6); Bone (8)
273	-	VOID	
274	21	Cut of linear terminal	
275	21	Fill of 274	
276	22	Charcoal rich fill in ditch terminal 295	Bone (2); GBA 65
277	-	VOID	-
278	20	Cut of gully or water channel	
279	20	Fill of 278	
280	22	Upper fill of enclosure ditch 254	
281	22	Main bulk fill of enclosure ditch 254	
282	22	Side silting of enclosure ditch 254	
283	22	Side silting of enclosure ditch 254	
284	20	Cut of pit or solution hole	
285	20	Fill of 284	GBA 67
286	21	Primary fill of 288	
287	21	Secondary fill of 288	GBA 66
288	21	Cut of ditch	
289	20	Cut of gully or water channel same as 291 and 293	
290	20	Fill of 284	
291	20	Cut of gully or water channel same as 289 and 293	
292	20	Fill of 291	
293	20	Cut of gully or water channel same as 289 and 291	
294	20	Fill of 293	
295	22	Cut of ditch terminal	-

Appendix 3: Written Scheme of Investigation

Appendix 4: Detailed archive catalogue of the pottery

***Darrington Quarry Northern Extension,
Leys Lane (North of the M62),
West Yorkshire***

*Written Scheme of Investigation for
Archaeological Evaluation by Trial Trenching*

Phase 1: Pre-determination Trial Trenching

1. Introduction

- 1.1 An archaeological evaluation is required as part of a pre-determination evaluation of an area of proposed limestone extraction by Darrington Quarries Ltd., just north of the M62, south of Knottingley (NGR SE 497 222). The site covers an area of approximately 45 hectares and is the subject of an Environmental Impact Assessment (EIA) produced by RPS Consultants to accompany a planning application to extend the quarry. The EIA has been informed by an archaeological desk-based assessment and a geophysical (magnetometer) survey.
- 1.2 This document is prepared to clarify the scope of the pre-determination archaeological trial trenching that is required by the West Yorkshire Archaeological Advisory Service (WYAAS) in order to inform the planning decision.

2. Archaeological Background

- 2.1 The desk-based assessment (Ford 2007) revealed that there was, at that time, very relatively little known archaeological potential within the proposed extraction area. Fragmented cropmarks, however, pointed to the existence of former field systems and enclosures in the surrounding landscape, there being a well defined cropmark of a trapezoidal enclosure in the south-eastern part of the site.
- 2.2 The potential for invisible remains has been borne out by the discoveries made through geophysical survey, trial trenching and excavation on the Darrington Quarry West site, immediately to the south of the M62 (Webb forthcoming; Williams in prep.). Consequently, the site has been subject to a 56% (25.25ha) geophysical (magnetometer) survey (Harrison in prep.). As well as enhancing the plan of the trapezoidal cropmark enclosure, the survey results have revealed fragments of a former regime of ditched land division and associated enclosures, that do not coincide with previously mapped land allotment. Many of the boundaries are erratic and generally the enclosures are appended to the main boundaries. The arrangement is typical of Late Iron Age or Romano-British agricultural settlements found elsewhere on the Magnesian Limestone in this region.

3. Aims and Objectives

- 3.1 The principal aim of this pre-determination phase of trial trenching will be to establish whether any of the potential archaeological features known from the geophysical survey warrants preservation *in situ*.
- 3.2 The objectives of this trenching otherwise will be to characterise the archaeology and to try and confirm its date and, if possible, its function, and ascertain its potential for further investigation.

4. Evaluation Methodology

- 4.1 The pre-extraction evaluation strategy required by WYAAS calls for 4% of the site to be subject to trial trenching, a total of 18,000m². The proposed pre-determination element focuses upon the anomalies revealed in the geophysical survey data and comes to a total of 3,700m² (<1%) of the site. The remaining 3.1% of the evaluation trenching will be carried out post-determination if planning permission is granted.
- 4.2 The evaluation takes the form of 23 trenches of either 50m or 100m in length (see figs). Generally the trenches will be 2m wide, although those targeted upon what are potentially enclosures will be 4m wide, in order that any internal structures are more easily identified. The proposed trench locations are shown on the attached figure. Four of these trenches, to the east of Leys Lane (Trenches 20-23) cannot be excavated until after the crop is harvested in mid August.
- 4.3 All topsoil and/or modern deposits will be removed in level spits (not more than 0.2m) using a 360⁰ excavator equipped with a smooth bladed ditching bucket under archaeological supervision. Machining will stop at the first identifiable archaeological horizon or natural, whichever is the shallower. Thereafter all further investigation will be manual. The stripped surface will be inspected for archaeological remains and where these require clarification the relevant area will be cleaned by hand.
- 4.4 All identified archaeological features will be accurately recorded in plan at scales of either 1:20 or 1:50 as appropriate. If excavated feature sections will be drawn at scales of either 1:10 or 1:20 as appropriate. All plans and sections will include spot heights related to Ordnance Datum in metres. One representative long section of each trench will be produced, at an appropriate scale.
- 4.5 Unless otherwise determined, all linear features will be subject to a manual sampling regime of 10% of their length within the designated area of investigation. An appropriate sample of each feature will be excavated, to its full depth. No section will be less than 1m in length. Where possible one section will be located and excavated adjacent to a trench edge and particular attention will be paid to terminal-ends, corners and intersections.

- 4.6 Discrete features, such as pits, post-holes, kilns, hearths and graves, will be subject to a 50-100% manual excavation sample as determined by WYAAS.
- 4.7 A full written, drawn and photographic record will be made of all material revealed during the course of the excavation.
- 4.8 All artefacts recovered will be recorded and removed from the site for appropriate storage in controlled environments. All artefacts recovered will be retained, cleaned, labelled and stored as detailed in the guidelines laid out in the IFA Guidelines for Finds Work. Conservation, if required, will be undertaken by approved conservators. UKIC guidelines will also apply.
- 4.9 Context recording will be by Archaeological Services WYAS standard method. All contexts, and any small finds and samples from them will be given unique numbers. Bulk finds will be collected by context.
- 4.10 Colour digital, slide and monochrome negative photographs at a minimum format of 35mm will be taken.
- 4.11 Soil sampling will be undertaken where there is clear potential for environmental analysis. Where appropriate and practicable soil samples of up to 30-40 litres will be taken from excavated contexts, and larger samples will be taken of any rich carbonised deposits. Particular attention will be paid to the sampling of primary ditch fills, large discrete features (e.g. refuse pits), structural and occupational evidence, skeletal remains and any surviving buried soils. Further, the recovery of material suitable for radiocarbon, archaeomagnetic, thermoluminescence and/or dendrochronological determinations will be sought, as appropriate. If buried soils or other appropriate deposits are encountered, column samples may be taken for micromorphological and pollen analysis. Where appropriate environmental material will be stored in controlled environments. Appropriate environmental and soil specialists will be consulted during the course of the evaluation with regard to the implementation of the sampling programme.
- 4.12 Any human remains will be recorded on-site prior to removal and analysis by the project's assigned osteoarchaeologist. Disturbance of human remains will only take place under appropriate government and environmental health regulations, and in accordance with the requirements of the Ministry of Justice prior to the commencement of any formal exhumation work.
- 4.13 All finds of gold and silver and associated objects shall be reported to HM Coroner according to the procedures relating to the Treasure Act 1996, after discussion with the Darrington Quarries Ltd. and WYAAS.

5. Analysis and Reporting

- 5.1 The site archive will contain all the data collected during the excavation, including records, finds and environmental samples. It will be quantified, ordered, indexed and internally consistent. Adequate resources will be

provided during fieldwork to ensure that all records are checked and internally consistent. Archive consolidation will be undertaken immediately following the conclusion of fieldwork:

- the site record will be checked, cross-referenced and indexed as necessary;
- all retained finds will be cleaned, conserved, marked and packaged in accordance with the requirements of the recipient museum;
- all retained finds will be assessed and recorded using pro forma recording sheets, by suitably qualified and experienced staff. Initial artefact dating will be integrated within the site matrix;
- all retained environmental samples will be processed by suitably experienced and qualified staff and recorded using pro forma recording sheets.

5.2 The archive will be assembled in accordance with the specification set out in English Heritage's *Management of Archaeological Projects* (English Heritage 1991; Appendix 3). In addition to the site records, artefacts, ecofacts and other sample residues, the archive shall contain:

- site matrices where appropriate;
- a summary report synthesising the context record;
- a summary of the artefact record;
- a summary of the environment record.

5.3 The integrity of the primary field record will be preserved. Security copies will be maintained where appropriate.

5.4 Provision will be made for the deposition of the archive, artefacts and environmental material, subject to the permission of the relevant landowner (and if no further archaeological work is to be initiated), in the appropriate recipient museum, in this instance Wakefield Museum. The museum will be advised of the timetable of the proposed investigation prior to excavation commencing. The archive will be prepared in accordance with the guidelines published in "*Guidelines for the preparation of Excavation Archives for long-term storage*" (United Kingdom Institute for Conservation, 1990) and *Standards in the Museum care of archaeological collections* (Museums and Galleries Commission 1994). Provision will be made for the stable storage of paper records and their long-term storage.

5.5 Upon completion of the investigations, the artefacts, ecofacts and stratigraphic information shall be assessed as to their potential and significance for further analysis.

5.6 An interim report will be prepared within three weeks of completion of on-site archaeological investigations and include the following:

- a non-technical summary of the results of the work;
- a summary of the project's background;
- the site location;
- an account of the method;

- the results of the excavation, including phasing and interpretation of the site sequence and spot-dating of artefacts, if recovered;
 - an assessment of the stratigraphic and other written, drawn and photographic records;
 - a catalogue of the archaeological material recovered during the excavation
 - a summary of the contents of the project archive and its location.
- 5.7 The report will produced within an agreed timetable. It will be supported by an overall plan of the site, accurately identifying the location of the trial excavations.
- 5.8 Finally, the report will outline the archaeological significance of the deposits identified, and provide an interpretation of the results in relation to other sites in the town.
- 5.9 A final report, including all finds analysis and scientific dating results, shall be produced and copies supplied to Darrington Quarries Ltd. and WYAAS.
- 5.10 In the event that artefact assemblages cannot be analysed within the timescale available for this pre-determination element of the work, WYAAS will accept an interim report containing spot dating and identification of the finds. Any radiocarbon dates will be fast-tracked and a higher premium paid in order to make the results available to inform the planning decision.
- 5.11 The pre-determination results and any subsequent post-determination investigation will be combined to provide one coherent report. Should planning permission not be granted, then any outstanding work on the pre-determination trenches will still need to be completed.

6 Copyright, Confidentiality and Publicity

- 6.1 Unless the Darrington Quarries wish to state otherwise, the copyright of any written, graphic or photographic record and reports will rest with the originating body (Archaeological Services WYAS and their sub-contracted specialists).
- 6.2 Archaeological Services WYAS will respect any requirements regarding confidentiality, but will endeavour to emphasise the company's professional obligation to make the results of archaeological work known to the wider archaeological community within a reasonable time.
- 6.3 If appropriate, a summary of the findings may be submitted to WYAAS's newssheet and/or appropriate archaeological journals and magazines, with Darrington Quarries prior permission.

7 Health and Safety

- 7.1 Archaeological Services WYAS has its own Health and Safety policy which has been compiled using national guidelines such as SCAUM. These guidelines conform to all relevant Health and Safety legislation.
- 7.2 In addition each project undergoes a 'Risk Assessment' which sets project specific Health and Safety requirements to which all members of staff are made aware of prior to on-site work commencing. Health and safety will take priority over archaeological matters. Necessary precautions will be taken over underground services and overhead lines at the outset of the project.

8 Insurance

- 8.1 Archaeological Services WYAS is covered by the insurance and indemnities of the City of Wakefield Metropolitan District Council. Insurance has been effected with: Zurich Municipal Insurance, Park House, 57–59 Well Street, Bradford, BD1 5SN (policy number RMP 03GO39–0143). Any further enquiries should be directed to: The Chief Financial Officer, Insurance Section, Wakefield MDC, PO Box 55, Newton Bar, Wakefield WF1 2TT.

9 Monitoring

- 9.1 WYAAS will be responsible for monitoring the project, acting on behalf of the local planning authority, and their officers will be afforded the opportunity to inspect the site and the records at any stage of the work.

10 Resources and Programming

10.1 Project personnel :

Project Management:	I. Roberts/A. Webb
Project Supervision:	D. Williams/D. Moretti

10.2 Post-excavation specialists :

Prehistoric pottery specialists:	Dr C. Cumberpatch or B. Vyner
Roman pottery specialist:	Dr R. Leary
Medieval pottery specialist:	Dr C. Cumberpatch
Flint specialist:	Dr I.P. Brooks or
Environmental:	Dr J. Richardson
Faunal analyst:	Dr J. Richardson
Human bone specialist:	M. Holst MA
Metalwork specialist:	Dr H. Cool
Artefact conservationist:	K. Barker

- 10.3 The list of Archaeological Services WYAS project personnel may be subject to change.

References

Ford, L.A., 2007, 'Darrington Quarry Northern Extension, Darrington, West Yorkshire: Archaeological Desk-based Assessment', ASWYAS Report 1703

Harrison, T.S., in prep. 'Darrington Quarry Northern Extension, Darrington, West Yorkshire: Geophysical Survey', ASWYAS Report

Webb, A., forthcoming, 'Darrington Quarry West, Darrington, West Yorkshire: Geophysical Survey', ASWYAS Report

Williams, D., in prep. 'Darrington Quarry West, Darrington, West Yorkshire: Archaeological Trial Trenching and Excavation', ASWYAS Report

Trench	Context	Fabric	Count	Abrasion type	Part of vessel	Form description	Condition	Spot date	Comments	Decoration			Tech	Motif	Pos
										Tech	Motif	Pos			
2	114	BB1	1	moderately abraded	bodysherd	jar		225+		burnished	obtuse lattice	outside body			
2	114	CTA2	1	very abraded	scraps			3-M4							
2	114	GRB1	3	moderately abraded	rim sherd	deep wide-mouthed bowl with flat rim		M2-4							
2	114	GRB1	6	moderately abraded	bodysherd			M2-M4							
2	114	MWH	2	moderately abraded	rim, body and spout fragment	collared	WRN	M2-M3, prob 3	Upright collar with grooves at rim and distal end and inside rim. Need to check source with Kay. Part of spout	groove		inside the rim			
2	114	OAB1	1	very abraded	basal sherd?	footring base?		RB							
2	114	RBB1?	1	very abraded	bodysherd	jar		2							
4	109	BB1	1	moderately abraded	neck sherd	jar		120-200							
4	109	BB1	1	moderately abraded	simple base sherd	dish or bowl		120-200		burnished	lattice	outside body			
4	109	GRB1	1	moderately abraded	rim sherd	narrow-necked vessel with slightly rebated rounded rim, possibly handled jug		RB							
4	109	GRB1	1	moderately abraded	bodysherd			M2+							
4	109	TS	1	moderately abraded	rim sherd	37 or 30									
4	111	BB1	2	moderately abraded	rim, body and base sherds	bowl with incipient bead and flange rim		L2-M3		burnished	oblique	outside body	burnished		all over inside
4	111	BB1	55	abraded	rim sherd	jar with everted/cavetto rim	BR	M3	2 sherds BR. Possibly more than one jar	burnished	obtuse lattice	outside the middle body			
4	111	BB1/R BB1	1	abraded	simple base sherd	simple base		120+							

Trench	Context	Fabric	Count	Abrasion type	Part of vessel	Form description	Condition	Spot date	Comments	Decoration					
										Tech	Motif	Pos	Tech	Motif	Pos
4	111	FC	1	abraded	bodysherd										
4	111	GRB1	2	abraded	rim sherd	wide-mouthed jar with bead rim		M2-4							
4	111	GRB1	11	moderately abraded	bodysherd	wide-mouthed, deep jar		M2-4		groove	double	outside body			
4	111	GRB1	12	moderately abraded	bodysherd	closed vessel		M2-4							
4	111	GRB1	2	moderately abraded	simple base sherd	simple base		M2-4							
4	111	GRB1	1	moderately abraded	rim sherd	deep wide-mouthed bowl with flat rim		M2-4		groove	double	outside the upper body			
4	111	GRB1	1	moderately abraded	rim sherd	everted		M2-3							
4	111	GRB1	1	abraded	rim sherd	dish or bowl with flat rim		M2-3							
4	111	GRB1	1	moderately abraded	simple base sherd	angle base		M2-4							
4	111	MH2	7	moderately abraded	profile		BR BA	180-230							
4	111	NV1	1	very abraded	bodysherd	closed vessel		L2-3	Probably an indented beaker L2-3						
4	123	PQ	2	very abraded	bodysherd			PRIA							
4	136	GRB1	1	very abraded	simple base sherd	simple base		RB							
4	136	GRB1	1	moderately abraded	rim sherd	deep wide-mouthed bowl with hammerhead rim		M2-4, opt 2							
5	192	OAB1	3	abraded	handle	two ribbed handle		RB							
7	100	BB1	7	abraded	bodysherd	closed vessel		120+							
7	100	CTA2	6	very abraded	rim sherd	flat rim jar		3-M4							
7	100	GRB1	2	moderately abraded	bodysherd	closed vessel		M2+							
7	100	GRB1	2	abraded	bodysherd	jar		120+		burnished	lattice	outside body			
7	100	GRB1	1	moderately abraded	simple base sherd	simple base		M2+							

Trench	Context	Fabric	Count	Abrasion type	Part of vessel	Form description	Condition	Spot date	Comments	Decoration					
										Tech	Motif	Pos	Tech	Motif	Pos
7	100	GRB1	12	moderately abraded	bodysherd	closed vessel		2-3		groove	single	outside body			
7	100	GRB1	2	moderately abraded	rim sherd	bowl with incipient bead and flange rim		L2-M3							
7	101	BB1	11	abraded	rim sherd	splayed rim jar	BM OS	225+, opt M/L3							
7	101	BB1	1	moderately abraded	rim sherd	bowl with incipient bead and flange rim		L2-M3		burnished	intersecting arcs	outside body			
7	101	BB1	14	moderately abraded	profile	plain rimmed dish		M2-4		burnished		all over outside			
7	101	BB1	1	moderately abraded	rim sherd	plain rimmed lid		120+		burnished	intersecting arcs	outside body			
7	101	CT	1	very abraded	scraps			3-4	SF 1						
7	101	CTA2	6	very abraded	rim sherd	flat rim jar		3-M4							
7	101	GRB1	1	moderately abraded	rim sherd	jar with lipped, everted rim		L2-3							
7	101	GRB1	1	moderately abraded	rim sherd	cupped-rim jar		M2-M3							
7	101	GRB1	1	moderately abraded	rim sherd	plain rimmed dish		M2-4							
7	101	GRB1	3	moderately abraded	profile	grooved rim dish		L2-E3							
7	101	GRB1	2	abraded	rim sherd	jar with smoothly everted rim, almost cavetto		3							
7	101	GRB1	1	moderately abraded	rim sherd	bowl with incipient bead and flange rim		L2-M3							
7	101	GRB1	1	moderately abraded	simple base sherd	simple base		M2-4							
7	101	GRB1	32	moderately abraded	bodysherd	closed vessel		M2-4							
7	101	GRB1	4	moderately abraded	rim sherd	jar with everted, almost horizontal rim		RB. ? L2-3							
7	101	TS	1	moderately abraded	bodysherd	31		M/L2							

Trench	Context	Fabric	Count	Abrasion type	Part of vessel	Form description	Condition	Spot date	Comments	Decoration					
										Tech	Motif	Pos	Tech	Motif	Pos
7	101	TS	1	moderately abraded	bodysherd	18/31 or 31		2							
7	101	TS	1	moderately abraded	bodysherd		BR								
7	101	TS	1	moderately abraded	rim sherd	31		M/L2							
7	101	TS	1	abraded	bodysherd										
7	101	TS	6	moderately abraded	simple base sherd	31R		M/L2		rouletted		inside base			
7	105	BB1	1	abraded	bodysherd	jar		3-M4							
7	105	BB1	1	abraded	rim sherd	splayed rim jar		225+, opt M/L3							
7	105	BB1	1	moderately abraded	rim sherd	bowl with incipient bead and flange rim		L2-M3		burnished	intersecting arcs	outside body			
7	105	CTA2	10	abraded	rim, body and base sherds	flat rim jar		3-M4							
7	105	CTA2	5	abraded	rim sherd	flat rim jar	BM IS	3-M4							
7	105	GRB1	39	moderately abraded	rim, body and base sherds			E3?	CF Oswald 1937 nos 25-8 dated E 3rd and Buckland and Dolby 1980 type Da no. 48 dated AD 140-300	handle		outside the upper body	burnished	acute lattice	outside middle body
7	105	GRB1	9	moderately abraded	profile	flat based colander with flanged rim grooved near body/rim junction		L2/3-4	Buckland type Ha						
7	105	GRB1	1	moderately abraded	bodysherd	closed vessel		M2+							
7	105	NP	2						STONE						
7	105	OAB1	2	very abraded	bodysherd			RB							
7	107	GRB1	1	abraded	bodysherd	jar		120-200		burnished	acute lattice	outside body			

Trench	Context	Fabric	Count	Abrasion type	Part of vessel	Form description	Condition	Spot date	Comments	Decoration					
										Tech	Motif	Pos	Tech	Motif	Pos
7	107	GTA	2	very abraded	profile	dish with flat rim		120+, E2	Unusual fabric with coarse angular grey grog. Unusual form for this fabric						
7	116	BB1	10	moderately abraded	rim sherd	necked jar with everting neck		L2							
7	116	FC	1	unabraded	bodysherd										
7	116	GRB?	4	moderately abraded	rim sherd	everted-rim beaker		RB							
7	116	GRB1	7	moderately abraded	bodysherd			M2+							
7	143	BB1	1	moderately abraded	rim sherd	bowl with incipient bead and flange rim		L2-M3							
7	143	MED?	1	moderately abraded	bodysherd			MED?							
7	143	OAB/ MED	1	very abraded	bodysherd			MED?							
18	236	PM	1	moderately abraded	bodysherd			PM							
22	255	GRB1	6	moderately abraded	simple base sherd	jar		120-200		burnished	acute lattice	outside body			
22	255	GRB1	1	abraded	bodysherd			M2-M4							
22	266	CRA RE	1	very abraded	bodysherd			280+							
22	266	CRA WH	1	very abraded	bodysherd			L3-5							
22	266	EYCT	4	abraded	simple base sherd	simple base		L3-5							
22	266	GRB	4	very abraded	rim sherd	bowl/dish with flat rim?		120-3rd							
22	266	GRB	1	very abraded	simple base sherd	dish or bowl		RB							
22	266	GRB1	1	very abraded	bodysherd	BB1 type jar		RB	Handmade						
22	266	GRB1	3	very abraded	simple base sherd	simple base		M2-M4							

Trench	Context	Fabric	Count	Abrasion type	Part of vessel	Form description	Condition	Spot date	Comments	Decoration					
										Tech	Motif	Pos	Tech	Motif	Pos
22	266	GRB1	1	very abraded	rim sherd	everted		M2-M4							
22	266	OAB	1	very abraded	bodysherd			L3-4?	Traces of colour coat?						
22	266	worked stone?	1												
22	267	CRA RE	1	abraded	bodysherd			280+							
22	267	EYCT	4	moderately abraded	rim, body and base sherds	hooked rim, proto-Huntcliff jar		4-E5							
22	267	GRB1	1	moderately abraded	bodysherd	spindle whorl		RB	SF 7	groove	double	outside body			
22	267	GRB1	2	abraded	bodysherd										
22	268	CRA RE	2	abraded	bodysherd			280+							
22	268	EYCT	1	abraded	bodysherd			L3-5 ot M-L4							
22	269	BB1	2	moderately abraded	bodysherd	dish or bowl		120+		burnished	acute lattice	outside body			
22	269	CRUC	43	moderately abraded	rim, body and base sherds				unusual open vessel with rounded tapering rim. One base and body sherd of handmade vessel with slightly splayed base - no trace of metallurgical deposits so not clear if this is part of metal working vessel.						
22	269	GRB1	1	moderately abraded	bodysherd	jar or wide-mouthed shouldered jar		M2-M4							
22	269	NV1	1	moderately abraded	simple base sherd	dish or bowl		L3-4							

Trench	Context	Fabric	Count	Abrasion type	Part of vessel	Form description	Condition	Spot date	Comments	Decoration					
										Tech	Motif	Pos	Tech	Motif	Pos
22	269	OAB	1	very abraded	scraps										
22	270	CRA RE	3	abraded	bodysherd			280+							
22	270	GRA7	1	abraded	bodysherd	closed vessel									
22	270	GRB1	1	abraded	scraps										
22	270	GRB1?	1	abraded	rim sherd	everted-rim beaker		RB							
22	272	CRA RE	4	abraded	bodysherd	closed vessel									
22	272	GRB1	1	moderately abraded	bodysherd	closed vessel					burnished			outside body	
22	272	RBB1/ GRB1	1	moderately abraded	bodysherd	jar		120-200	Handmade		burnished	acute lattice		outside body	

Fabric codes for Appendix 4

Fabric	Total	Ware name
BB1	110	Black burnished ware 1
BB1/RBB1	1	Dorset or Doncaster black burnished ware 1
CRA RE	11	Crambeck grey ware
CRA WH	1	Crambeck white mortarium
CRUC	43	crucible or mould?
CT	1	calcareous tempered
CTA2	28	Dales ware
EYCT	9	East Yorkshire calcite-gritted ware
FC	2	Fired clay
GRA7	1	Parisian ware
GRB	5	Grey ware
GRB?	4	Grey ware
GRB1	184	Grey ware, probably South Yorkshire
GRB1?	1	Grey ware, probably South Yorkshire
GTA	2	Grog-tempered ware
MED?	1	Medieval?
MH2	7	Mancetter-Hartshill mortarium
MWH	2	White ware mortarium
NP	2	not pottery
NV1	2	Nene valley colour-coated ware
OAB	2	Medium-quartz tempered oxidised ware
OAB/MED	1	Medium-quartz tempered oxidised ware, possibly Medieval
OAB1	6	Medium-quartz tempered oxidised ware
PM	1	Post-Medieval
PQ	2	Handmade quartz-tempered ware, prehistoric?
RBB1?	1	Doncaster black burnished ware 1?
TS	12	Samian
worked stone?	1	stone
RBB1/GRB1	1	Doncaster black burnished ware 1 or grey ware BB1 copy
Total	444	

Bibliography

- ASYWAS, 2003, 'Archaeological Recording Manual', unpubl.
- Boessneck, J., 1969, 'Osteological difference between sheep (*Ovis aries* Linne) and goats (*Capra hircus* Linne)', in Brothwell, D. and Higgs, E. (eds), *Science in Archaeology*, 331-358
- Brown, F., Howard-Davies, C. and Brennand, M., 2007, 'Iron Age and Romano-British Landscapes', in Brown, F., Howard-Davies, C., Brennand, M., Boyle, A., Evans, T., O'Connor, S., Spence, A., Heawood, R. and Lupton, A., *The Archaeology of the A1(M): Darrington to Dishforth DBFO Road Scheme*, Lancaster Imprints 12, 43-119
- Buckland, P.C., Dolby, M.J. and Magilton, J.R., 1980, 'The Romano-British pottery industries of South Yorkshire: a review', *Britannia* 11, 145-64
- Darling, M.J., 2004, Guidelines for the archiving of Roman pottery, *Journal of Roman Pottery Studies* 11, 67-75
- English Heritage, 2006, *Management of Research Projects in the Historic Environment: the MoRPHE Project Managers Guide*
- Evans, J., 1989, 'Aspect of later Roman pottery assemblages in Northern Britain', unpubl. Ph.D. Thesis, Univ. Bradford
- French, D.H., 1971, An Experiment in Water Sieving, *Anatolian Studies* 21, 59-64
- Ford, L., 2007, 'Darrington Quarry Northern Extension: Archaeological Desk-based Assessment', ASWYAS Rep. 1703, unpubl.
- Gaunt, G.D, Chase, B., Bateman, M.D., 2005, 'Appendix 2: The investigation of a Quaternary deposit associated with Lake Humber', in Roberts, I. (ed.), 2005, *Ferrybridge Henge: The Ritual Landscape*, Yorkshire Archaeol. 10
- Grant, A., 1982, 'The use of tooth wear as a guide to the age of domestic ungulates', in Wilson, B., Grigson, C. and Payne, S. (eds), *Ageing and Sexing Animal Bones from Archaeological Sites*, Br. Archaeol. Rep. Br. Ser. 109, 91-108
- Heapy, E., 2008, 'Darrington Quarry West: Geophysical Survey', ASWYAS Rep.1844, unpubl.
- Institute of Geological Sciences, 2001, *Solid Geology Map UK South Sheet*
- Institute of Field Archaeologists, 2001, *Standard and Guidance for archaeological field evaluation*
- Payne, S., 1969, 'A metrical distinction between sheep and goat metacarpals' in Ucko, P.J. and Dimbleby, D.W. (eds), *The Domestication and Exploitation of Plants and Animals*, 295-305
- Payne, S., 1985, 'Morphological distinctions between the mandibular teeth of young sheep, *Ovis* and goats, *Capra*', *J. Archaeol. Sci.* 12, 139-147
- Richardson, J., 2005, 'The Pit Alignment' in Roberts, I. (ed.) 2005, *Ferrybridge Henge: The Ritual Landscape*, *Yorkshire Archaeology*, 53-71, 207-9
- Robert, I., 2005, *The Iron Age Settlement at Ledston: A Report on the Excavations of 1976 and 1996*, Archaeol. Serv. WYAS Publ. 7

- Roberts, I., with Deegan, A. and Berg, D., 2008, 'Understanding the Cropmark Landscapes of the Magnesian Limestone', publication draft
- Rush, P., Dickinson, P. and Hartley, K.F., 2000, *Roman Castleford Excavations 1974-85 Vol. III The Pottery*. Yorkshire Archaeol.
- Schweingruber, F. H., 1990, *Anatomy of European Woods*
- Silver, I.A., 1969, 'The ageing of domestic animals', in Brothwell, D. and Higgs, E. (eds), *Science in Archaeology*, 283-302
- Soil Survey of England and Wales, 1980, *Soils of Northern England Sheet 1*
- Stace, C., 1997, *New Flora of the British Isles*
- Tomber, R. and Dore, J., 1998, *The National Roman Fabric Reference Collection. A Handbook*
- Turner, R., 1991, 'Wattle Syke, West Yorkshire: report synopsis', ASWYAS Rep. 31
- van der Veen, M. and Fieller, N., 1982, 'Sampling seeds', *J. Archaeol. Sci.* 9, 287-298
- Webb, A., 2008, 'Darrington Quarry Northern Extension: Geophysical Survey', ASWYAS Rep. 1868, unpubl.
- Williams, D., in prep, 'Darrington Quarry West: Archaeological Evaluation and Excavations', ASWYAS, unpubl.
- Willis, S., 1997, *Research Frameworks for the Study of Roman Pottery*
- Zohary, D. and Hopf, M., 2000, *Domestication of Plants in the Old World*