



**YORK ARCHAEOLOGICAL TRUST**



**THE UNIVERSITY OF YORK,  
HESLINGTON EAST, YORK**

**ASSESSMENT REPORT**

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## CONTENTS

	page
ABSTRACT	1
1. INTRODUCTION	2
2. METHODOLOGY	3
3. LOCATION, GEOLOGY AND TOPOGRAPHY	7
4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND	9
5. AREA A1 RESULTS	14
6. AREA A2 RESULTS	82
7. SITE-WIDE SUMMARY BY PERIOD	108
8. CARBON-14 DATA	119
9. ACKNOWLEDGEMENTS	119
10. BIBLIOGRAPHY	120

## Figures

1. Site location	3
2. Trench location	8
3–36. See 'Assessment Report Illustrations' volume	-
37. Evaluation trenches 1-11	101

## Plates

Cover: Excavation of early Iron Age features in Area A1

1. Pit 2406, looking north	17
2. Post 1531 (ST03)	19
3. Refitting alder cylinder fragments 2774 (ST01) and 2773 (ST02)	21
4. Skull 2617 (SK01)	22
5. Collapsed wicker 2828	23

6.	South-west quadrant of surface 2661	27
7.	Well-point integral with surface 2661	28
8.	General shot of part excavated ditches of Phases 9, 11 and 16	32
9.	Lead sheet (Sfs76–78) within pit 1608	40
10.	Jet rings (Sfs27–28)	47
11.	Sequence of ring-gullies of Groups 10–12, looking north-west	59
12.	Excavated ring-gully (Group 6 and arc of earlier unexcavated ring-gully 7)	62
13.	Ring-gullies of Groups 4, 5, 8/9 looking north	64
14.	Pit cut 1702 (Group 21) looking south	68
15.	Enclosure A2 facing north-east	87
16.	Group 528, facing south	95
17.	The sloping gravel surfaces of Set 598, facing south	96

## List of Abbreviations

Bf	Bulk find
CBM	Ceramic Building Material
GBA	General biological analysis
LBA	Late Bronze Age
OD	above Ordnance Datum
RCHME	Royal Commission on Historical Monuments England
SA	Timber
Sf	Small find
SK	Skull
SMR	Sites and monuments record
ST	Wood Cylinder Fragment
TST	Total station theodolite
YAT	York Archaeological Trust

## **ABSTRACT**

*From November 2007 to October 2008 York Archaeological Trust conducted an archaeological excavation at Heslington East, Heslington, York (Figure 1). The site lies 3km south-east of York city centre and 700m east of Heslington village, and incorporates areas of glacial moraine and parts of the Vale of York basin. The works involved the excavation of two large areas (A1 and A2), seven smaller trenches (Trenches L1–L7) and 17 evaluation trenches (Figure 2). The works were carried out on behalf of the University of York.*

*A naturally occurring kettle hole, containing peat deposits, was located in the area of Trenches L6–7, and a series of palaeochannels aligned broadly north–south flowed southwards from the moraine.*

*Neolithic activity is suggested by an isolated pit containing an axe in Area A2 and by residual flints from across the area. Bronze Age features were largely focused on a springhead in the north-western portion of A1 (termed ‘the waterhole’ from here on). Activity in this area comprised of a series of large pits, some with wicker revetments, which were sealed by cobble surfaces designed to give access to the water table. An Early Iron Age skull with preserved brain tissue was found nearby. In Area A2 there were three curvilinear ditches of pre-Iron Age date.*

*Iron Age activity comprised an extensive enclosure system with associated roundhouses, ring-gullies, pits and evidence for metalworking. The enclosure system underwent a series of alterations and continued in use into the early Roman period. Other Roman activity included a ditch in Area A1, a pit with gravel floors in Area A2 and a scattering of Roman artefacts from across the site, including two small coin hoards in the area of the waterhole.*

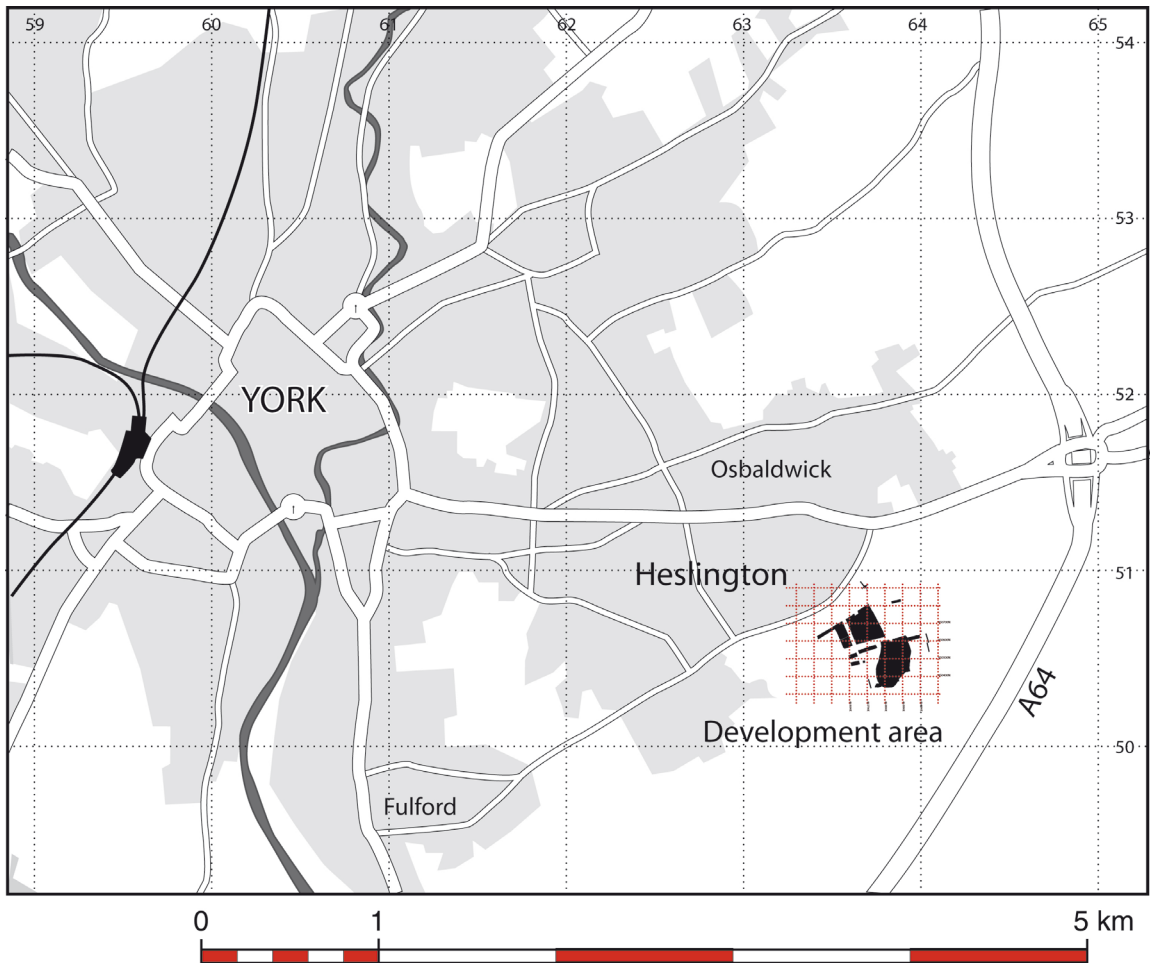
*No evidence of Anglian or Anglo-Scandinavian settlement was seen on the site. During the medieval, post-medieval and modern periods the site was used for agriculture which had truncated some of the earlier archaeological activity.*

## **1. INTRODUCTION**

From November 2007 to October 2008 archaeological excavations were undertaken at Heslington East, Heslington, York (centred on NGR SE 640506). Following the successful outcome of a public inquiry under the terms of the Town and Country Planning Act 1990, the University of York had received outline planning permission for the development of a new university campus at the Heslington East site. The excavations were designed to investigate areas which would be affected by this development. The work was undertaken on behalf of the University of York. The works were managed by the local authority (City of York Council) through the development control process, in line with guidance provided by Planning Policy Guidance Note 16: Archaeology and Planning (PPG16; DoE 1990). Archaeological planning advice was provided to the University by the City's Principal Archaeological Officer, Mr J. Oxley. The works were monitored by Dr P.J. Ottaway, archaeological consultant for the University of York.

In accordance with PPG16, several stages of archaeological work have already been undertaken at Heslington East: two desk-top studies (Evans 2002; Mason and McComish 2003), a campaign of field walking (Kendal 2003; Mason 2003), a series of geophysical surveys (Bartlett 2003; Bartlett and Noel 2003, 2004a and 2004b) and an archaeological evaluation (Macnab 2004). In addition, the archaeology and cultural heritage of Heslington East were covered as part of the Environmental Impact Assessment.

The location of the excavation areas was determined by the results of the previous works in conjunction with discussions with J. Oxley. The excavations comprised two main areas (A1 and A2), seven smaller trenches (Trenches L1–7) and 17 evaluation trenches. The total area excavated was 8.5620 hectares. Area A1 was supervised by B. Antoni, G. Dean and M. Johnson, Area A2 by G. Dean, J.M. McComish and M. Johnson, Trenches L1–7 by H. Pritchard, evaluation trenches 1–11 by M. Johnson and evaluation trenches 12–17 by J.M. McComish. The site archive is currently stored by YAT under the Yorkshire Museum accession code YORYM: 2007.6006 and YAT project number 5112. On completion of the project it is expected that the archive will be transferred to the Yorkshire Museum.



**Figure 1** Site location

## 2. METHODOLOGY

All archaeological recording was undertaken in accordance with the YAT Fieldwork Recording Manual, which is consistent with that adopted by the IFA. Many of the features, notably linear features, were planned using a TST rather than with hand-drawn plans. Appropriate photographs were taken. The sampling strategy was in accordance with the project design, *Environmental Archaeology: A Guide to the Theory and Practice of Methods from Sampling and Recovery to Post-Excavation* (English Heritage 2002). Buried soils and sediment sequences were inspected and recorded in collaboration with a specialist geoarchaeologist. All artefact conservation was undertaken in the YAT Conservation Laboratory. Finds were appropriately packaged and stored under optimum conditions, as detailed in the RESCUE/UKIC publication *First Aid for Finds*. In accordance with the procedures outlined in MAP2, all iron objects, a selection of non-ferrous artefacts (including

all coins), and a sample of any industrial debris relating to metallurgy were X-radiographed before assessment.

The 2003/2004 evaluation work identified three main areas of archaeological interest, Areas A1–A3 (Macnab 2004, fig 27, p183). The decision was taken that only the portions of Area A1 directly affected by the proposed building works would be investigated, while Area A2 would be fully excavated (Area A3 was to be investigated by The University of York as a training excavation). During the course of the excavations a number of extensions and additional trenches were requested by J. Oxley, Principal Archaeologist for City of York Council, in order to answer specific research objectives.

The eastern side of Area A1 was extended to determine the extent of a number of Iron Age enclosure boundaries.

Trenches L1–L2, and an extension to the south-west of Area A2 were excavated to see if the principal north–south ditch in Area A1 continued southwards and, if so, to determine its relationship to an Iron Age enclosure system seen in A2.

Trenches L3–L4 were excavated to see if an Iron Age enclosure complex was present. A north-eastern extension to Area A2 and Trench L5 were excavated to determine the level of activity in the area between the Iron Age enclosure system of Areas A1–A2 and a Roman settlement in Area A3.

Trenches L6–L7 were excavated to investigate peat deposits in a kettle hole (the results are given in Appendix 12).

Evaluation trenches 12–17 were excavated on the brow of the moraine (Kimberlow Hill) to enable the site contractors to quarry the area. These trenches aimed to investigate anomalies seen on the geophysical survey and to determine if the Roman settlement seen in Area A3 extended northwards.

Trenches 1–11 were excavated to examine features identified in Macnab's work of 2004.

## **2.1 TRENCH SIZES**

Area A1 was split into three separate parts. The main portion was a sub-rectangular trench measuring up to 169m east–west and 208m north–south; this was recorded as three separate zones (Zones 1–3), reflecting extensions to the original trench. Some 23m to the west of the main portion of A1 there were two further trenches, the southernmost of which



was 50m x 55m in size, while the northernmost was an L-shaped trench, the wider portion of which was 52m x 90m in size, while the narrower portion was 112m x 17m in size.

Area A2 was an irregularly shaped trench, which was up to 180m x 260m in size. There was a sub-rectangular extension at the south-western corner 27.23m x 19.4m in size, and a second rectangular extension 70.8m x 17.5m at the north-eastern corner. Two machine-cut trenches were excavated in Area A2 to examine palaeochannel deposits; the northernmost of these was 51m x 3m, and the southernmost was L-shaped, measuring 20m on the shorter side, 79m on the longer side; it was 3m wide.

Trenches L1–7 were all rectangular in shape, with the exception of L2 which was square and L6 which was cross-shaped. Trench L1 was 100m x 19m, Trench L2 was 9m<sup>2</sup>, Trench L3 measured 45m x 18m, Trench L4 was 45m x 20m, Trench L5 measured 50m x 10m and Trench L7 was 10m x 5m. Trench L6 was cross-shaped, the north-western arm being 34.7m long and up to 3.9m wide; the north-eastern arm was 20m long and up to 5.9m wide; the south-eastern was arm 24.5m long and 2.5m wide; and the south-western arm was 18.7m long and 3.8m wide.

Evaluation Trenches 1–11 varied in size, Trench 1 was 47m x 2m, Trench 2 was 22m x 2.5m, Trench 3 was 32m x 2.5m, Trench 4 was 49.5m x 2.2–2.5m, Trench 5 was 50m x 2.2m, Trench 7 was 44m x 2.3–2.65m, Trench 8 was 45m x 2m, Trench 10 was 20m x 7m and Trench 11 was 24m x 4.5–5.5m. Trenches 6 and 9 could not be excavated due to the presence of standing water.

Evaluation trenches 12–17 all measured 50m x 20m, with the exception of Trench 13 which was 70m x 20m.

## **2.2 EXCAVATION METHOD**

The overburden in all areas was removed by 360-degree mechanical excavators, using toothless ditching buckets, under close archaeological supervision. Where possible the overburden was loaded into dumper trucks and moved to designated stockpile areas. In some parts of the site the ground was so wet that dumper trucks could not be used; in such instances the overburden was double-handled by the mechanical excavators until it had been dragged clear of the excavation area.

In all cases, except for Trenches L6–7 (discussed below), the deposits were removed to the top of the first significant archaeological level or to the top of naturally occurring deposits, which was usually at a depth of 0.3–0.9m. The exposed surfaces were then cleaned by hand

to identify archaeological features, which were then excavated to determine their nature and extent. Linear features were excavated as a series of cross-sections, between 1m and 30m in width. Smaller features such as ring-gullies were sectioned, and features such as pits were half-sectioned, though where time permitted, these were fully excavated in order to increase finds recovery.

Trenches L6–L7 were entirely machine excavated; the instability of the sides of these trenches prevented any hand excavation beyond obtaining peat-samples.

### **2.3 POST-EXCAVATION METHOD**

During post-excavation the site records were checked, then added to the Integrated Archaeological Database (IADB). Within IADB records are organised in a hierarchy, with contexts being placed into sets, which are in-turn placed into groups, which are then placed into phases. The term phase does not necessarily imply a chronological period, merely a collection or related groups. Anyone interrogating IADB can search by context, set, group or phase, and within each category can search for associated artefacts, samples, images or plans. Site matrices, set, group and phase matrices were drawn; in the interest of clarity it was sometimes necessary to draw several matrices for the larger areas, for example there are two context matrices for Area A2. For clarity the set and group matrices for Area A2 do not include the ploughsoil and modern features.

In the interests of brevity no attempt has been made in the text below to mention each context excavated. In general, phase and group numbers are used and individual contexts are only mentioned where necessary. The 'results' section of the text is discussed area by area, within which the groups/contexts are described stratigraphically. Detailed information on the phasing and individual context descriptions can be obtained via the IADB.

## **3. LOCATION, GEOLOGY AND TOPOGRAPHY**

The development area is bordered to the north, east and south by Field Lane, the A64 ring-road and Low Lane respectively, while the western side of the site is bordered by fields that continue westwards to Heslington village. The highest point (Kimberlow Hill on the northern edge of the site) is at 32m OD. The land falls away steeply southwards from Kimberlow Hill to the Vale of York basin situated at approximately 11m OD, but falls more gradually to the north and north-west towards Hull Road and Field Lane.

The solid geology of the area is Bunter and Keuper sandstones (Geological Survey of England and Wales, Sheet 63). The Kimberlow Hill portion of the site is a glacial moraine composed of gravels, sands and boulder clay. A number of relict natural springheads and associated palaeochannels are located along the south-facing slope of Kimberlow Hill. An area of peat was also present on the south-western slopes of Kimberlow Hill which had accumulated within a naturally occurring hollow. The naturally occurring deposits to the south of the moraine were of variable composition.

A number of streams, which probably originally meandered across the Heslington East site, were present. These had been culverted or dyked to follow field boundaries, probably when the fields were enclosed in the post-medieval and modern periods. The Heslington East site was under arable cultivation prior to the commencement of excavation.

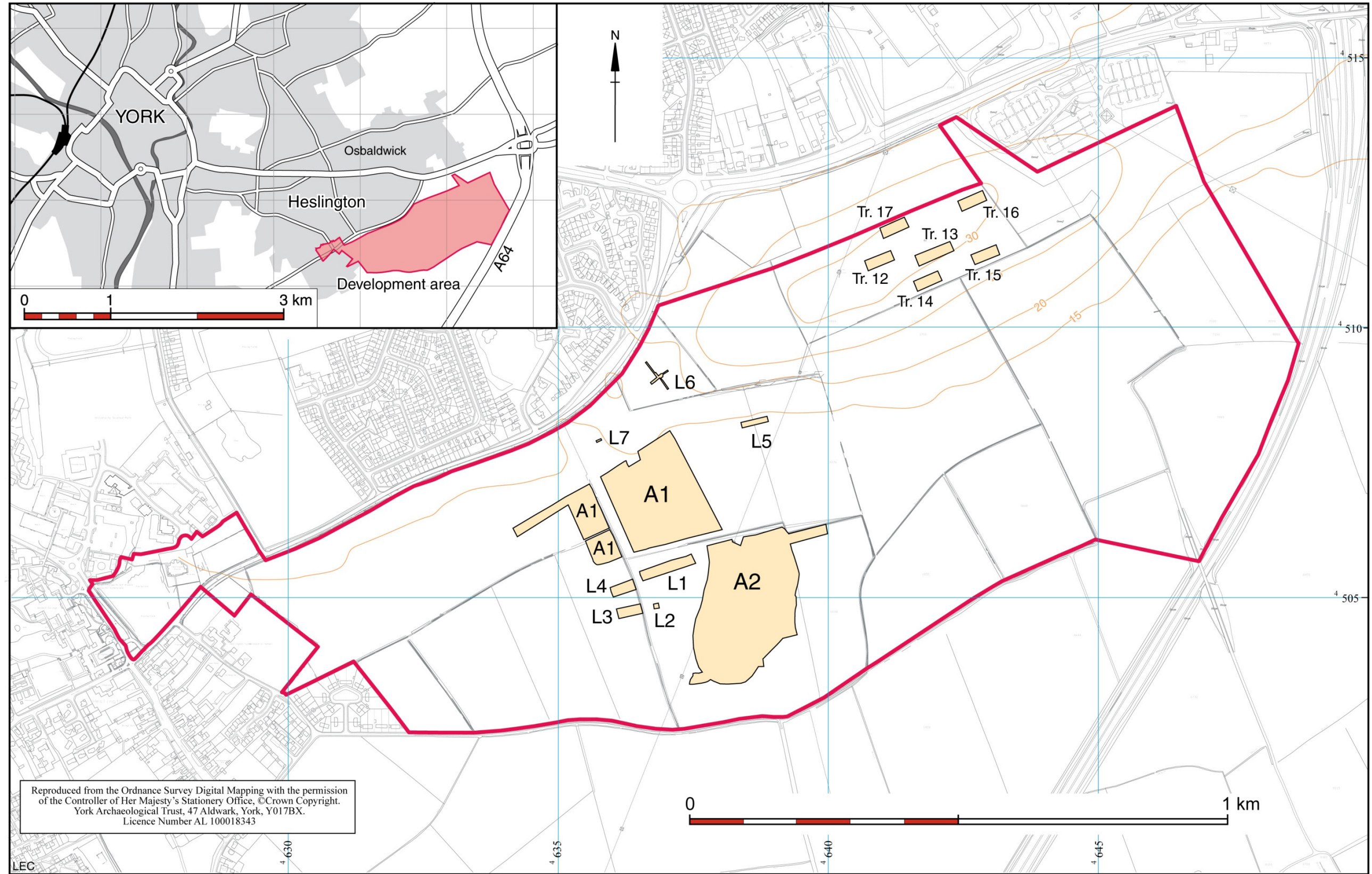


Figure 2 Trench location

## **4. ARCHAEOLOGICAL AND HISTORICAL BACKGROUND**

A detailed review of the archaeological and historical background for the site has already been undertaken (Macnab 2004, 12–21) and the following section represents an abbreviated version of Macnab's text. Unless stated the portion of text relating to the medieval, post-medieval and modern periods is based on the Victoria County History (VCH, 1976).

### **4.1 THE PREHISTORIC PERIOD (TO THE LATE 1ST CENTURY AD)**

There is little evidence for activity in the area dating to the Palaeolithic or Mesolithic periods. Evidence suggests that the earliest activity in the area, which was focused on the glacial moraine, was of late Neolithic and early Bronze Age date (c.3200 to 1500 BC). This activity may have taken the form of seasonal camps along the moraine which formed a route across the Vale of York. Archaeological investigations at Heslington Hill (FAS 2003) and at Germany Beck (MAP 1996), both within a 2km radius of the Heslington East site, produced sizeable quantities of flint of late Neolithic or Early Bronze Age date, as did a programme of field walking at Heslington East in 2003, which also yielded a late Neolithic or early Bronze Age polished stone axe. Evaluation excavations at Heslington East in 2003/2004 revealed peat deposits interpreted as being of prehistoric date, boundary ditches of probable late prehistoric date and a number of saddle quern fragments of late Neolithic to middle Iron Age date (Macnab 2004, 184–6). Stray finds of Neolithic date recorded in the City of York SMR include a flint axe found near Heslington Common and a flint scraper found in Fulford, while Bronze Age finds include two bronze socketed axes from the area of York Cemetery, some 2.5km to the west of the Heslington East site, a bronze palstave from Fulford (NGR SE 6100 4900) and a looped spearhead found in 1889 at Heslington Field.

Evaluation excavations at Heslington East undertaken in 2003/2004 showed that in the Iron Age (c.700 BC to AD 70), the area to the south of Kimberlow Hill was sub-divided into enclosures associated with a ring-gully (Macnab 2004, 184–6).

### **4.2 THE ROMAN PERIOD (LATE 1ST TO THE 5TH CENTURY AD)**

The site is located 3km to the east of the Roman fortress and civilian town of Eboracum. Two Roman roads are known in the area. The first, lying just to the north of the site, was the main approach road to York from the east originating in Brough-on-Humber (RCHMY 1, 1; Road 2); the line of this road is largely followed by the present-day A1079. Part of this road was recorded just south of Bingley House in 1975 (YAT 1997, 1975.17). The second Roman road (RCHMY 1, 1; Road 1) to the west of the present site, approached York from the south, and is preserved in the form of a straight parish boundary over two miles long between Pool Bridge and Germany Beck, Fulford.

Aerial photography revealed a possible Roman settlement comprising a ditched enclosure around a number of rectilinear features on the high ground close to Heslington Hill, to the north-west of the site (Perring 1999, 21). An excavation at the Heslington Hill site discovered pits of Roman date (FAS 2003). At Metcalfe Lane, Osbaldwick, 1km north of Heslington East, Roman post-holes and gullies were found (Macnab 2002). Evidence for a Roman field system possibly associated with a villa was present at Germany Beck, Fulford (MAP 1996). Evaluation excavations at Heslington East in 2003 revealed a Roman settlement to the immediate south of Kimberlow Hill, which included the remains of a hypocaust, a possible road and a stone building (Macnab 2004, 186–7). These remains have since been investigated by the University of York (<http://sites.google.com/a/field-archaeology.co.uk/heslington-east/Home>).

Stray Roman finds from the Heslington area include two stone coffins found in 1831, 250m east of Heslington parish church (Yorkshire Philosophical Society 1832); these suggest the presence of a Roman cemetery. A hoard of 2,800 late Roman coins in a pottery jar was found during the construction of Alcuin College in 1966, and fragments of amphora, a small bronze bird figurine and a Roman military strap-end have been found at unspecified locations in Heslington (Perring 1999, 20).

#### **4.3 ANGLIAN AND ANGLO-SCANDINAVIAN PERIODS (5TH–11TH CENTURIES AD)**

Little is understood of how the landscape changed in the York hinterland from the late Roman to the Anglian period (Ottaway 2003, 148). The place name Heslington has an Old English origin and can be interpreted as ‘farmstead near the hazel wood’, haesling meaning a place overgrown with hazels (Smith 1970, 274). It has been suggested, largely based on the place-name evidence, that Siward’s Howe is an early medieval burial mound (Thurnam 1849), though this interpretation is doubtful (Ramm 1965).

Various sites of Anglian and Anglo-Scandinavian date have been uncovered in the area. An inhumation cemetery was found at Lamel Hill, off Heslington Road, 1.4km to the west of the Heslington East site. Further Anglian inhumations found in 1983 at Belle Vue House, Heslington, were presumably associated with the Lamel Hill cemetery (YAT 1997, Site 1983.31). Disturbed cremation vessels and pottery which may date to the 5th or 6th century were found during works at the new University Medical School (FAS 2003). Evidence of Anglian settlement was seen in a watching brief on Heslington Hill in 2002 (FAS 2003), and a possible toft enclosure (i.e. dwelling and yard) was found at Osbaldwick (Macnab 2002). Some pottery and backfills possibly relating to this period were present on the evaluation excavations at Heslington East (Macnab 2004, 187–8).

#### **4.4 THE MEDIEVAL PERIOD (11TH TO THE MID-16TH CENTURIES AD)**

The village is named as Eslinton in the Domesday Book of 1086 (Smith 1970, 274) when it was split between three estates held by Count Alan of Brittany, Hugh son of Baldric and the Archbishopric of York. It is possible that the principal residence on the Archbishop's land was the site of the present Manor House on Main Street (VCH 1976, 70). During the 12th and 13th centuries the spelling of the village name varied (Heselingtuna, Heslingetun, Eselington and Hesslington) but Heslington was in use from 1438 onwards (Smith 1970, 273).

In terms of religious administration, the village was split between two parishes, St Lawrence's (the church of which was located just outside Walmgate Bar, York) and St Paul's, situated within the village. St Paul's church and graveyard are first referred to in 1299. It had been thought that the graveyard might have extended further north than at present, but construction of the Science Park failed to provide any evidence for this (Perring 1999, 23).

A tithe barn is known to have existed on a plot of land adjacent to St Paul's churchyard. Windmills are recorded in the parish at various times. St Mary's Abbey in York owned a windmill at 'Siward Mill Hill' in Heslington (VCHY 1961, 507), and a windmill is mentioned in the village in 1503. The landscape feature to the west of the site known as the Green Dykes was clearly in use in medieval times; the first reference to it is in 1374, and by 1484 it was functioning as a droveway (Perring 1999, 21).

Ridge and furrow is visible on aerial photographs to the south of Prospect Farm, close to Murton and Osbaldwick, and on the site of the present University of York (codes for YAT collection: AP 7 SE622 505, PVA 77:1:3/36–38, AJC084/19, AJC035/24, AP15 SE629505, AJC092/3, AP 13 SE 635 501, AJC 035/23–5, AJC084/19 and AJC92/1, 2). Ridge and furrow has been excavated at Heslington Hill (FAS 1997) and Heslington East (Macnab 2004, 188).

#### **4.5 THE POST-MEDIEVAL PERIOD (MID-16TH TO 19TH CENTURY)**

A major change to the parish of Heslington occurred shortly after the dissolution of the monasteries when the property in the village owned by St Leonard's Hospital was let by the Crown to Thomas Eynns. Eynns built Heslington Hall between 1565 and 1568. Heslington Lane truncates medieval ridge and furrow in the area, but pre-dates Heslington Hall, suggesting that the lane was an early 16th-century addition to the landscape. Perring (1999, 24) suggests that the straight ridge and furrow system observed in the area where the University now stands is of early 16th-century date, relating to improvements to the agrarian landscape. By 1601 the hall and associated estate belonged to Thomas Hesketh; he

founded a hospital located on the north side of York (now University) Road in 1609. The hospital was later moved to a new location on Fulford Road and nothing remains at the original site.

During the early to mid-18th century the village population seems to have been reasonably stable; Heslington St Paul had 23 families in 1743 and 20 families by 1764. By the mid-18th century there were three alehouses in the village although this was later reduced to two. Enclosures within the parish in 1762 and 1857 gave rise to a more regular field pattern, though part of the original common land in the parish survived. Jeffrey's map of 1775 suggests that there were buildings between Heslington Hall and the church, flanking the eastern side of York (now University) Road. The first school in the village was built in 1795. A number of 18th-century buildings survive to the present time in Heslington village.

The village remained largely arable, with turnips, potatoes, mustard, flax and chicory being grown during the late 18th century. Archaeological evaluations showed that the Heslington East site was used for agricultural purposes throughout the post-medieval period (Macnab 2004, 190). Some industrial activity occurred in addition to farming. From the 18th century, or possibly earlier, gravel was extracted from the area to the east of Windmill Lane, which became known as 'gravel field'. In 1772 a windmill occupied the site of Siward's Howe and in 1787 two windmills were located to the north-east of the village. In 1794–95 a smock mill was opened.

Roads in the area were gradually improved during the 18th century; the main York to Hull road was made a turnpike in 1765 and remained in the hands of a turnpike trust until 1872. From 1793 onwards the manor was in the hands of the Yarburgh family who are known to have improved the road across their estate in 1798.

#### **4.6 THE MODERN PERIOD (19TH TO 21ST CENTURIES)**

From the 19th to mid-20th century Heslington village's population remained fairly constant, being 416 in 1801, 513 in 1821, 571 in 1861, 477 from 1881–91, 506 in 1901 and 477 in 1931. The economy of the village remained largely agricultural. Some industrial development took place, with the building of a bleach works to the north-west of the village in 1804, but this only lasted until c.1857. A gravel dealer was present in the village in 1840.

During the 19th century the Yarburgh family purchased the Ampleforth prebendal lands in the village. They then demolished the tithe barn adjacent to St Paul's churchyard, realigned and straightened Windmill Lane, extensively remodelled Heslington Hall and gardens (Pevsner and Neave 1995, 463) and rebuilt the parish church between 1857 and 1858 (*ibid.*,



461). In 1869 the portion of Heslington that belonged to the parish of St Lawrence was unified with St Paul's parish and in 1871 a parsonage was provided by the Yarburgh family. In 1892 the lord of the manor became the 2nd Baron Deramore.

A number of 19th- to early 20th-century buildings are present in Heslington village, including the Wesleyan chapel of 1844, a new village school built in 1856 and the Lady Deramore Memorial Cottages almshouses of 1903 (Pevsner and Neave 1995, 462). Enclosure of the open fields was completed in 1857. The electricity pylons that traverse the Heslington East site were installed in 1938. A sewage works was constructed to the east of the village in the late 1940s; this was superseded by the sewage works at Naburn by 1964.

Post-war development within the parish led to a steady growth in population, reaching 2,029 in 1971. Suburbs in the area have also grown massively during the 20th century. In 1957 the York Waterworks Company built a water tower at Heslington Hill. In the 1960s the Deramore estate was sold and broken up. Shortly after, portions of the estate, including Heslington Hall, became the site of the newly created University of York. The campus occupied most of the land between the village and the city boundary. Field Lane was improved and given a new junction to the main York–Hull road. A Conservation Area centred on Heslington Hall, 17.5ha in extent, was created for Heslington in 1969. Many of the buildings within the Conservation Area are listed (mainly Grade II listings). The parish church was extended in 1971–73 (Pevsner and Neave 1995, 461). In the early 1970s the York outer ring road (A64) was constructed to the east and south of the development area. A large borrow-pit, for the extraction of material to construct the road, was dug in the north-eastern corner of the development area, and this was later used as a municipal landfill site, which was closed in the mid-1990s.

## 5. AREA A1 RESULTS

The results of Area A1 are presented chronologically with reference to the two areas of excavation. These areas are, firstly, the area of the waterhole complex in the north-western corner part of the larger component of A1, and secondly, all those remaining parts of A1. Where the few points of stratigraphic connection exist between these two areas this is commented on within the main bodies of text and is noted at the end of each chronological section.

### 5.1 NATURAL DEPOSITS AND FEATURES

#### NORTH-WEST A1

##### 5.1.1 PHASES 1, 2

Initially this comprised Group 583 boulder clay deposits. These constituted the glacial drift of the area and tended to out-crop towards the northern edge of the site, as the higher slopes of Kimberlow Hill were approached. Phase 1 boulder clays were cut into by Phase 2 Group 109–11 palaeochannels and Group 170 tree root. The tree root was only placed within this phase because it was natural in origin and had not been compromised by human activity.

Group 109 represented the onset of a palaeochannel cut-down sequence, followed by a secondary incision by Group 110 channels which were then cut by those in Group 111, the latest in the series. Features in Group 109 and Group 111 were truncated by human activity.

Animal bone (specialist assessment pending) and/or charcoal within some of the Group 111 deposits were the earliest indicators of human interaction with the palaeochannels, albeit when they were almost completely dried out and silted. The presence of the articulated torso of a sheep/goat/deer (Group 109, context 1509) would, however, suggest that some of the bone was deliberately placed, rather than being discarded in an arbitrary manner or washed in from elsewhere.

#### **Dating evidence for Phase 2**

A sample (348) of root material from Group 109 context 1491 was submitted for carbon-14 analysis and it returned a date of Cal. 1300–1020 BC, or the middle to late Bronze Age, for the onset of the silting of the initial cut-down sequence.

#### REMAINDER OF A1

##### 5.1.2 PHASES 101 AND 116

Phase 101 incorporates all the natural deposits observed to the east of Phase 1 and 2 features in Area A1 (Groups 16 and 106). They covered the majority of the site, were quite

variable and ranged from yellow sands to light yellowish-brown clayey-sands relating to the natural drift. Also incorporated are a number of features of non-human origin. These include probable tree throws (formed either by the long-term presence and growth of tree roots or when a tree falls over and tears out a quantity of soil along with the roots) and animal burrows. A piece of pottery and a fragment of CBM listed as originating in context 1003 within this group represents either incorrect bagging of finds or contamination.

Phase 116 comprised three sub-rectangular features, together with four associated features interpreted at the time of excavation as stake-holes, which were located in the south-central part of A1. All three features were roughly sub-rectangular in shape, aligned at a variety of angles and generally in the region of around 2m long. The northern two, which in plan-form were 'grave shaped' were both shallow (maximum 0.12m deep). The southern feature was less rectangular in shape, considerably deeper, had a fill very close in texture, colour and consistency to the surrounding 'natural' material and an irregular profile. No artefacts were recovered from any of these features and the southernmost of the three appears very likely to be of natural origin. The two northern 'grave-like' features may also be of natural origin though the grave hypothesis might be testable by phosphate analysis of the sample taken from one of them. The origin and function of all three features has yet to be settled, though there is a distinct possibility that they are of natural origin.

Two 'pit-sized' features in the north-central part of Area A1, Group 106, are again believed to be of natural origin. Both contained 'clean' fills that had characteristics common with elements of the drift geology and produced no artefactual material.

## **5.2 EARLIEST BRONZE AGE?**

### **NORTH-WEST A1**

#### **5.2.1 PHASE 3 LEVELLING DEPOSITS AND FEATURES**

This phase (Figure 3) represents some of the earliest activity in Area A1 and comprises levelling deposits (Groups 164 and 166) which were truncated by a number of pits and post-holes (Groups 112, 114, 120, 163 and 167).

The earliest activity within this phase was a number of levelling deposits (Groups 166 and 164). The Group 166 deposits were used to prepare the ground for the excavation of a pair of pits and a pair of post-holes on a collective east-west alignment (Group 167); the pits were at the eastern end of the alignment with the post-holes located almost immediately to their west. This alignment may have continued further towards the east, but later truncation had removed any evidence for this. The arrangement of these features and the presence of

charcoal within some of the fills indicated that these features were of man-made origin. The date and function of these features is unclear.

Group 163 comprised a loose, north-north-west/south-south-east alignment of pits/post-holes, some 29m in length. One of them, pit 2797, was sealed by Group 164 levelling deposits. It also contained a single stake (2784, Sf672) whereas post-hole 2480 contained the remains of a substantial, 348mm diameter oak post-base (2473; Sf190).

Group 164 deposits were used to level and infill an earlier erosion-gully and marked the initial preparation of the ground prior to the excavation of a series of pits which were interpreted as the earliest phase of water extraction pits or well-points (Group 114). One of these pits (context 2842) contained a possible revetment/lining against its surviving northern edge and a second backfill (context 2857) incorporated a stake cluster that, in all probability, represented the remains of a pit lining. One of the Group 114 features was truncated by Group 112 pit 2824.

Group 112 pits were arranged parallel to those in Group 163 (on their south-west side) and terminated in the area used for the excavation of several phases of later well-points (the waterhole) in the north-west corner of A1. Three of them (2406, 2541 and 2518) are worthy of note as they were located directly beneath a later boundary/drainage ditch. Pit 2406 also contained a solitary forked roundwood stake (Sf167).

Group 120 post-hole 2398 may have a tentative relationship with Group 163 pit 2797, but was placed within its own group as it did not appear to belong to any particular alignment.

### **Dating evidence for Phase 3**

No dating evidence was recovered



**Plate 1** Pit 2406 looking north. Single stake (Sf167) supported on block of fill in bottom right of pit, with later Phase 11 east ditch at top centre. Scale unit 0.50m

### **REMAINDER OF A1**

#### 5.2.2 PHASE 102, EARLY PITS

Phase 102 is represented by two pits located in the north-eastern and north-central parts of A1 (Figure 18). The larger of these two was that of Group 20, a feature of approximately sub-rectangular plan-form with rounded corners and having a projection to the south-west corner. The feature measured up to 4m in length (north–south) by 2.72m (east–west) and had a depth of up to 1.1m. The presence of burnt cobbles, charcoal, a flint scraper and an unidentified fragment of tooth enamel within the fills suggests a non-natural origin. Burnt wood material was also recovered from this feature. The function of this pit is uncertain and fuller interpretation will be dependent upon further analysis. It may provisionally be suggested that this served as a small waterhole/well, with the south-westerly projection providing access and the timber perhaps originally being a revetment for the sides. It is likely that the sides would have needed revetting as the sub-strata in this area has a high sand content and is prone to collapse.

The smaller pit was that of Group 107. The cut of this feature, which measured 1.8m by 0.70m and 0.40m deep, was sub-rectangular in plan-form, steep sided and had a concave base. The feature had a sandy-silt fill and contained a number of cobbles and flecks of charcoal.

### **Dating evidence for Phase 102**

The pit of Group 20 contained a scraper likely to be of a Mesolithic–early Bronze Age date. A single core rejuvenation flake of late Neolithic–early Bronze Age date was recovered from that of Group 107. Whilst these finds may be indicative of dates of origin for the features, it is possible that they are residual.

## **5.3 LATER BRONZE AGE**

### **NORTH-WEST A1**

#### **5.3.1 PHASE 4 DEPOSITS AND FEATURES**

Phase 4 (Figure 3) comprised Groups 116–17, 121–5, 127, 168, 186 and 188 and commences after the Phase 3 pits and post-holes were backfilled and levelled.

The onset of Phase 4 is marked by levelling/consolidating the ground with Group 168 levelling deposits, some of which, 2561, 2573, 2577 and 2587, contained heat-shattered/reddened pebbles and animal bone. It was laid down prior to the insertion of Group 121 post-holes. Pit 2618 was placed in Group 121 as it was aligned with them. Post-hole 2702 contained a single stake (2691; Sf257) and the shattered remains of an oak post-base (2523; Sf215). Animal bone (2523) was recovered from cut 2531, and post-pipe 2418 (=1536) contained the stump of a 300mm diameter oak post (1531; ST03) with two opposing axe-hewn facets to its base. The lack of a defined post-hole cut suggested it had been driven into the ground (Plate 2). One of fills (2619) of pit 2618 contained animal bone and a single stake (SA 761) was hammered in hard against the side of the pit, in its east-north-east quadrant. Group 123 comprised post-holes 2809 and 2971. These were set 3.5m apart and were located parallel to the Group 121 alignment, on its eastern side. They may have been associated with the Group 121 alignment but were placed within a separate group due to ambiguity surrounding the relationship between them.



**Plate 2** Post 1531 (ST03) looking north. Note absence of post-hole cut at base, scale unit 0.20m

Group124 post-hole 2841 appeared to have been a direct replacement for Group121 post-hole 2821, although why this specific one was chosen to be replaced is, at the moment, unknown.

Group 188 comprised a series of post-holes; one of them was cut into the top of a Group 168 feature. When they are combined, a west-north-west/east-south-east-aligned rectilinear post-built structure some 2.5m long x 1.5m wide can be formed. It may be of some consequence that this structure was located at the southern end of Group 121 post-holes, on their eastern side, yet its alignment is at odds with the same. Any relationship between them is therefore somewhat tenuous and open to question. Cuts 2307 and 2309 were found in close association and may have been contemporary with each other as both of them were backfilled with a single deposit of burnt and/or heat-shattered pebbles (2308=2303).

Group 122 comprised pits 2690 and 2539. Pit 2539 had been cut into the of a Group 112 feature. A GBA sample (473) of deposit 2687 (pit 2690) was submitted for assessment. This showed that seeds/fruits of gypsywort, nettle, blackberry/raspberry and alder were present, along with charcoal and a fragment of hazelnut shell.

Group 127 pits were also cut into the top of features in Groups 122. Two of them, pits 2390 and 2705, were similar in size and shape and may have been paired. Pit 2708 was unusual as it contained a cow's split lower mandible placed on top of a layer of heat-shattered and/or reddened pebbles. This did not appear to have been random discard as the mandible had been halved down its length and the pieces placed on opposite sides of the pit. When combined, the pits in Groups 122 and 127 clustered in an area that appeared to have been favoured for the siting of features with unusual fills (Figure 3). Why this area was preferred is currently unknown. Group 188 pit 2725 may have been related to the Group 127 pits. It was placed in a group of its own purely because its organic fill (none retained) suggested it had a different function.

Group 117 comprised pits 2852, 2738 and the fills (2378 2390) of a further pit (Set 372; cut not recorded). Pit 2852 was cut into the top of Group 116 pit 2842. They formed a north-east/south-west alignment and contained timber artefacts. These included a fragment (approx. 50%) of a hollowed wooden cylinder carved from section of roundwood alder trunk (2850; Sf283) from pit 2825, two refitting fragments of a further alder cylinder section (2773–4; ST02 and ST01, Plate 3) as well as a substantial baulk of charred alder (Sf137) recovered from a fill (2378) of Set 372 pit.

#### **Dating evidence for Phase 4**

Dating evidence for this phase was provided by the carbon-14 date of Cal. 930–780 BC from Group 117 alder wood cylinder section (2774, ST01).





*Plate 3 Refitting alder cylinder fragments 2774 (ST01) and 2773 (ST02). ST01 directly above scale, unit 0.10m*

#### **5.4 LATE BRONZE AGE–EARLY IRON AGE FEATURES?**

##### **NORTH-WEST A1**

##### **5.4.1 PHASE 5 DEPOSITS AND FEATURES**

Phase 5 (Figure 5) comprised Groups 113, 118–19, 128, 131–2 and 187 and is characterised by, on the whole, a series of pits containing burnt pebbles. Phase 4 features, including the alignment of post-holes, were in filled prior to its commencement.

Group 132 and 113 pits were of particular note as they all contained, to a greater or lesser extent, deposits of burnt/heat-shattered pebbles and were almost entirely devoid of materials (pottery, bone, charcoal etc.) usually associated with ‘domestic discard’. The lack of heat reddening or scorching to sides and bases of all the Group 113 pits indicated that the pebbles were brought in from elsewhere, rather than being heated in-situ. Pits 1567 and 2716 also stood out from the rest. Pit 1567 was almost entirely filled with selected burnt quartz? pebbles whereas 2716 contained a very high percentage of burnt stone. Pit 1567 was only placed in this group because its fills shared similarities with those of pit 2716. It may, however, have had more of an association with Group 131 pit 2620 which was located some 6m to the east of it. Finds were recovered from pits 2351 (2345; horse tooth and painted stone Sf136), 2680 (2679; x2 flint flakes Sfs270–1) and 2716 (2720; cow

metatarsal). Burnt wood fragments were also recovered from a fill (2839) of pit 2804. None of the animal bone had been burnt.

The area was levelled with Group 187 deposit 2847 prior to the excavation of the next and ultimate sequence of burnt pits (Group 132). It produced a large amount of wood fragments and stakes (Sfs278–82 and 284–9).

Group 132 comprised pits 2778 and 2827. Pit 2778 contained heat-discoloured pebbles (2985) in its base, whereas pit 2827 contained calcined bone (2811). A GBA sample (511) of the bone was assessed and it showed that a little slag was also present. One of its upper fills (2669) also produced a forked section of roundwood (SA510), a fragmented wood board (Sf259), a flint object (Sf248) and bladelet (Sf250). Pit 2778 produced several fragments of an animal bone (2770). A GBA sample (482) was assessed; it attested to the presence of traces of coal and charcoal.

Group 131 pit 2620 was cut into the top of Group 121 pit 2618 and it contained an articulated human skull (with an intact but somewhat altered brain) and lower mandible (2617; SK01) which may have been deposited in a bag along with fragments of animal bone (unidentified and pig). Pit 2620 was placed within its own group due to the fact that there is some question as to its integrity within the stratigraphic sequence. It is postulated that the pit could quite easily have been cut from a higher level and may belong to a later phase. The skull was only noticed when the rear of the cranium was revealed; the upper elements of the burial pit had not been recognised when machine stripping was undertaken.



**Plate 4** *Skull 2617 in situ (SK01), scale unit 0.10m*

Group 128 was formed by well-point 2861. This had truncated the north-west edge of Group 117, Phase 4 pit 2852. It contained the remnants of a wicker lining (2828; SA513–15 and 519). The remains of a small wooden shovel were found in association with this wicker lining. The lining (Plate 5) had collapsed towards the north and was laid in the base of the pit, trapping sediment 2860 beneath. A single fragment of animal bone (red deer) was trapped within the weave of the lining.



**Plate 5** Collapsed wicker (2828) looking south-east, scale unit 0.10m

After the lining had collapsed, the pit was infilled with deposits 2804 and 2810. Deposit 2804 went on to produce animal bone and a fragment of haematite (Sf350), whereas further animal bone and 31 fragments of wood, the majority worked (SA503), were recovered from deposit 2810. A further section of wicker lining or revetment (1189) was located to the north-west of it. Attempts have been made to equate the two structures as parts of the same build but this would seem highly unlikely as wicker 1189 was constructed in a very crude manner and was aligned at odds to 2828.

Group 119 pits 2655 and 2529 were located some 7m to the north-east of well-point 2861, where they had been cut into the top of several Phase 4 features. Pit 2655 was cut into the centre of wood cylinder pit 2738 (Group 117) and pit 2529, the top of pit 2539 (Group 122). These features were placed within the same group because pit 2529 was located only 0.5m to the north of pit 2655 and may have been paired with it.

One of its fills (2594) produced two fresh or very fresh flint flakes, one an early Bronze Age edge utilised flake (Sf236), the other (Sf235) was undiagnostic. A total of 129 worked and unworked fragments of wood (SA769 and Sf229), including axe chippings, were also recovered. GBA sample 434 was assessed for its potential and it attested to the presence of a few fragments of charcoal, buds, seeds and fruits (mostly hazelnut shell fragments) pertaining to rough/disturbed ground, scrub and hedgerow. Group 118 post-pad 2595 was paired with post-pipe void 2593 and they may have acted as markers for pit 2655.

#### **Dating evidence for Phase 5**

Sherds of late Bronze Age/early Iron Age Staple Howe-type pottery and a flint implement were recovered from G119. A sample of bone taken from the Group 131 skull provided a carbon-14 date of 519 +/- 34 Cal. BC (early Iron Age). Flints were recovered from Group 132 but these are thought to be residual.

#### **5.4.2 PHASE 6, EARLY IRON AGE? SURFACES**

This phase (Figure 6) represents a major change in the use of the area. It comprises the make-up/levelling deposits (Groups 171–2) for a metalled surface (Group 126), as well as the formation of a causeway (Group 130) across the top of a naturally silted palaeochannel.

Group 171 levelling deposits were used to level the ground above slumped Phase 4, Group 122 and 127 pits prior to the formation of Group 126 metalled surface(s). A GBA sample (483) of one of the levelling deposits (2782) was assessed and, apart from attesting to the presence of a little red ochre and unidentified animal bone fragments, it was inconclusive. The Group 126 surfaces are currently thought to have provided a 25m x 6m north–south aligned track-way of rammed pebbles (some heat-reddened), used to access a water source from the higher ground in the north. Another patch of it (2767) produced four large unidentified mammal rib fragments. Group 172 (surface 2729) was integral but had been parted from it by later activity. A quantity of worked wood fragments, mostly chippings (SA768), animal bone and a solitary fragment of human bone (Bf504) were recovered. The wood chippings may have been added to the matrix of the deposit to consolidate it. At the same time, an east–west-aligned causeway (Group 130) was placed across the soft, marshy fills of a north–south-aligned palaeochannel (Group 111, Phase 2) or sink-hole formed within the same. Its surface was allocated two context numbers (2555/2592) as it had been severed by a much later north–south-aligned ditch. The causeway was located some 13.5m south of Group 126 and 172 surfaces and would have provided a 5.56m x 3m x 0.43m access to the area from the south. Surface 2555 produced animal bone (specialist assessment pending) and copper? slag (Sf355), whereas 2592 produced a discarded

wooden stake/pile tip (Sf227), bark chippings (SA779) and further animal bone. Both contained heat-hattered/reddened pebbles.

#### **Dating evidence for Phase 6**

Group 126 produced residual worked flint.

#### **5.4.3 PHASE 7, EARLY IRON AGE DITCHES AND OTHER FEATURES**

Phase 7 comprised Groups 133, 160, 129, 175 and 173. It represents the primary division of the land by the imposition of Groups 133 and 160 ditches. At the same time, Group 130, Phase 6 causeway is abandoned and levelled with Group 129 deposits. Group 175 features comprise pit/well-point? 2744 and its replacement, 2736. Group 173 was a scatter of pits (2508, 2701, 1986) and a post-hole (2566) which may or may not be associated with the above.

Group 133 ditch 2671 was cut into the top of Group 113 and 132, Phase 5 pits. It was east–west-aligned, 4.5m x 1.16m x 0.48m. At the eastern end of its northern side there was a slight but distinct out-turn which suggested that it had originally continued northwards. Its backfill (2662) produced animal bone fragments (one burnt) and three pieces of wood (SA792). Due to the organic nature of the deposit, two GBA samples (446 and 447) were retained. One of these (446) was assessed and it showed that seeds (mostly representative of plants growing in wetland areas, accompanied by some indicative of areas of waste/open ground, hedges and grassland) and a little charcoal were also present. Group 160 comprises parallel east–west-aligned ditches 2560 and 1625. They were set c.19m apart and are thought to be contemporary with ditch 2671.

Group 160 ditch 1625 was cut into the top of Group 126, Phase 6 surface 2582. It was located to the north of ditch 2560, was 3.8m x 0.75m x 0.47m and shared the same east–west alignment. The junction between its western end and the north–south-aligned Phase 11 ditch (2665) had been removed by an archaeological trial trench yet it was evident that it did not cut across the north–south ditch.

Group 175 pit/well-point 2744 was cut into the top of levelling/make-up deposit 2779 (Group172, Phase 6) and may have represented the replacement of well-point 2725 (Group 122, Phase 4) but this could not be proven as it had been truncated by pit 2736, which had removed a large part of the western edge. Group 175 pits may have been intended to replace the Group 128, Phase 5 wicker-lined well point (2861) after the Group 172 surfaces were laid. Pieces of roundwood, axe chippings and an oak peg (SA772) were recovered from the fill (2693) of pit 2736.

Group 129 deposits (Sets 382 and 391) comprised a sequence of build-up/dump/levelling deposits which were used to infill and level Group 130, Phase 6 causeway after it had slumped. Set 382 deposits were all alluvial in nature and appeared to have either settled during episodes of ponding and/or had been washed in at times of flood. Set 391 deposits appeared to have been deliberately dumped into the slump hollow as they were forming. Artefacts were recovered from deposits 2474 (flint scraper Sf196), 2549, (animal bone and a bone object Sf321), 2550 (animal bone), 2551 (animal bone and a stone object, Sf222), 2564 (flint blade; Sf221) and 2568 (flint object and arrowhead Sf225–6), suggesting deliberately introduced material intermixed with washed down residual objects.

Group 173 comprised pits 2508, 2701, 1986 and post-hole 2566. These were scattered around the north-west corner of Area A1 and, excepting cut 2508, did not appear to have a direct relationship with the other Phase 7 features.

Pit 2508 was cut into the top of Group 129 deposits (see above). As it was sandwiched between deposits in Phases 7 (Group 129) and 8 (Group 128, below) it appeared to have marked a hiatus in the infilling of the hollow formed above the slumping causeway. It is possible that the pit (2620) containing skull 2617 was also excavated at this time as it was also sealed by Group 128 deposits. If this were the case then the silting of the slump-hollow recommenced after both were backfilled.

Pit 2701 was cut into top of Group 126 Phase 6 surface 2767. It was a small shallow feature and had a pebble lining (planned but not recorded/numbered – see plan 2701) to the sides and base. Two forked wood fragments (Sfs266 (lost) and 267, both field maple; see plan 2701) had been inserted into the base. It appeared to have been non-utilitarian. Pit 1986 was a 0.64 x 0.56 x 0.15m linear pit of indeterminate use, located directly beneath the base of the later Phase 11 north–south-aligned ditch 1983. It was probable that it had originally been much deeper, but had been reduced in height by imposition of the ditch. Post-hole 2566 truncated the top of Group 126 Phase 6 surface 2582. It was shallow and had been reduced in height in antiquity. It seemed unlikely that the post was a structural element as it was the only feature of its type in Phase 7. As it was located directly above the Group 117 Phase 4 pit (2738) containing the wood cylinder sections, it is unlikely that its positioning had been arbitrary.

#### **Dating evidence for Phase 7**

Residual flint objects were recovered from Group 129 deposits, whereas Iron Age pottery was recovered from Groups 133 and 160.

#### 5.4.4 PHASE 8, EARLY IRON AGE WATERHOLE REMODELLING

Phase 8 (Figure 7) comprised Groups 115, 176–8 and 185 and involved yet another rearrangement of the waterhole and its environs. Primarily the area was levelled (Group 176) for a new surface (2661, Plate 6) incorporating a well-point or tank sparsely lined with stones (Group 115). The surface and tank were indistinguishable as they were integrated. The lack of an access ramp and/or erosion to the sides of the tank inferred that it was intended for domestic use, rather than for watering livestock (Plate 7). Group 177 surfaces extended the earlier Group 126, Phase 6 surface towards the south; at the same time Phase 7 Group 129 palaeochannel was levelled and the causeway reinstated. Group 178 comprised repairs to and/or relaying of Group 177 surfaces 2656 (above). Group 185 comprised features cut into the top of surface 2661, after the Group 115 stone tank had silted and become unusable.

Group 176 deposit 2807 contained wood fragments (SA502) and animal bone, whereas deposit 2684 consisted almost entirely of small diameter roundwood fragments, some worked (SA770).



**Plate 6** South-west quadrant of surface 2661, looking south-west, scale unit 0.5m

Surface 2661 sealed the top of well-point 2736 (Group 175, Phase 7) and it was roughly square in plan, 5.5m x 5.2m, and comprised small–large cobbles in a matrix of a grey-brown silt. It would have been more extensive had it not been truncated by a later north–south ditch on its eastern edge, a land-drain to the south and an exploratory quadrant on the west. The

tank element of it (Plate 7) was located approximately centrally on its western edge, where part of it had been removed by the exploratory quadrant. The tank was sub-circular in plan, north–south aligned, 3m x 2m x 0.55m. Three large blocks of millstone grit were incorporated (flat surfaces uppermost) at different heights on the southern, eastern and western side of the water tank. These may have functioned as rough surfaced steps providing access to the base of the tank. The base was unlined to facilitate entry for a spring, which was re-established once the tank was emptied of its fills. The supply must have been variable (or the area abandoned) as a deposit of organic, peaty material (2340) had built up within the base of the tank. A sample of wood from this deposit was submitted for carbon-14 dating and the result suggested that it had been formed around Cal. 160 BC to Cal. AD 60. The date given would, according to the stratigraphy, appear to be erroneous. When deposit 2340 was fully excavated, the sampled wood proved to be from a later tree root system which had grown down into the pit.



**Plate 7** *Well-point integral with surface 2661. Later well-point? (2644) bottom right, looking south, scale units 0.10m*

Group 177 deposits either represented disparate parts of surface 2661 or later additions to it, thus their placement in a new group. Some of these deposits (2806 and 2812–13) contained a large amount of heat-reddened/cracked pebbles, yet lacked traces of charcoal. As these deposits were found in the vicinity of the Group 113, Phase 5 'burnt pits' they may be the last



example of the same activity. Deposit 2674 also stood out because it was highly organic and despite containing a large amount of hazelnut shells, it did not appear to have been a domestic discard. The shells were found throughout the deposit and were introduced over the time it was forming, rather than in a single event. At the same time Set 390 levelling deposits (1586, 2384 and 2515) were used to infill and consolidate the top of the Group 129, Phase 7 palaeochannel. These comprised mostly pebble and/or gravel-rich dumps laid down to provide a second access to the waterhole from the south.

Deposit 2656 produced animal bone (some chopped), bark chippings (SA784), two flint objects and a flake (Sf245–7) whereas, from 2674, two wood posts (Sf275 and SA512), hazelnut shells and a flint flake (Sf249) were recovered. Further animal bone, bark chips and roundwood (SA764, some worked) were recovered from deposit 2689. Due to the high wood content of 2689 and the highly organic nature of deposit 2674, GBA samples were taken (474 and 449, respectively) and assessed for their potential. Apart from the possible presence of fire ash in deposit 2689, it was mostly inconclusive. Sample 449 (2674), however, attested to the presence of traces of charcoal and a small number of seeds and fruits, predominately hazelnut shell fragments.

Deposit 2384 went produced animal bone, wood fragments (SA287, some worked), antler fragments (Sf325), some worked (Sf323), and a flint knife (Sf148). Deposit 2515 produced further animal bone and a flint arrowhead (Sf220).

Group 178 levelling/make-up deposits (2632, 2641, interface 2642) include a possible repair/rebuild of Group 177 surface 2656. Deposit 2632 produced a core rejuvenation flake (Sf244). A GBA sample (441) was taken and assessed. It showed that animal bone, charcoal and red ochre were also present. A flint flake (Sf233) was recovered from surface 2604 and, from its equivalent (2459), animal bone fragments and further flint flakes or chippings (Sfs191–5).

Group 185 comprised pits 2644, 2563 and pit/post-hole 2572. Well-point/pit 2644 was cut into the top of the north-east quadrant of the water tank integral with surface 2661 (Group 115, above) and was thought to have been a replacement of the same. It was ovoid in plan, aligned east–west, 1.5m x 1.38m x 0.33m. Its basal fill (2643) was a 0.32m thick build-up of organic/humic silt which contained frequent wood fragments (SA773; includes axe chippings). A GBA sample (431) was assessed and it attested to the presence of the fruits and seeds of plants associated with wetlands or, to a much lesser extent, areas of waste/open ground, hedges and grassland. Its uppermost fill, 2580, was a 0.3m thick organic peaty deposit which appeared to have built up naturally. Inclusions of animal bone and wood

fragments (some axe chippings; SA773), did however suggest that material was being introduced throughout its formation. It originally covered a larger area than excavated but, due to the fact that it had been severely compromised by an earlier exploratory quadrant, little of it survived.

#### **Dating evidence for Phase 8**

Tree root fragments recovered from a Group 176 feature returned a carbon-14 date (erroneous) of Cal. 160 BC to Cal. AD 60 for its formation. Features in Group 177 produced worked antler and residual worked flint. Iron Age pottery was recovered from Group 178.

#### **REMAINDER OF A1**

##### 5.4.5 PHASE 103, EARLIEST DITCH ARRANGEMENT

This phase comprised a series of ditches (Groups 32, 49, 55, 57, 58) (Figure 4). No datable artefactual material was recovered from any of these features and their attribution to this phase is based on their early stratigraphy and spatial arrangements. All elements attributed to this phase appear likely to have remained in use until the laying out of the lattice-like arrangement of ditches of Phase 105. These ditches may be contemporary with elements of the ditched enclosure system of Phases 504–8 in Area A2.

One of the principal elements was the north–south ditch of Group 49 that extended down-slope from the north-western corner area of the site for a distance of over 130m. This represents an early course of a long-lived feature that was subsequently incorporated into a later lattice-like enclosure system and A1 enclosure (see 5.5.13) and probably survived into the Roman period. The cut of this feature was generally around 3m wide and nearly 0.7m deep and had moderate to steep sides and a rounded base. The fills ranged from silty-sands to clayey-silts whilst the degree of mineralisation within them suggests an origin in wet conditions.

A further north–south-aligned ditch in the western part of the A1 excavation, Group 55, may also relate to this phase. This ditch ran for around 86m. Its southern end extended beyond the limits of excavation, whilst its northern end appeared to fade out and could not be traced further. The ditch ranged in width from 0.59–0.94m, its depth from 0.24–0.42m, and it had profiles of moderate to steep sides and rounded or concave bases. The single fills were all silty-sands.

A further north–south-aligned ditch, Group 57, located some 17m to the north of Group 55, may be related. The southern end of this ditch also faded out, while its northern end was cut by the north-west/south-east-aligned ditch of Group 58. That the Group 57 ditch extends

from that of Group 58 implies that, for some time at least, the two ditches were almost certainly contemporaneous. Group 57 ranged in width from 0.4–0.66m and in depth from 0.16–0.26m. The profile was one of moderate sides and a rounded or concave base. The single fills were generally silty-sands.

The Group 58 ditch was aligned north-west/south-east and ran for approximately 18m across the north-east corner of the western part of A1 before extending beyond the trench. The ditch ranged in width from 0.35–0.76m and in depth from 0.18–0.21m. The profile was one of moderate to steep sides and a rounded to V-profiled base. The single fills were generally silty-sands. This ditch appears likely to equate to the ditch of Group 133 of Phase 7 revealed in the waterhole excavations.

The Phase 7 ditches of Group 160 seem very likely to equate to a stretch of shallow east-west-aligned ditch, Group 32, in the north-east central part of A1. Ditch 32 ranged from 0.37–0.80m in width, and in depth from 0.09–0.21m, whilst the observed profiles of the ditch had gentle to moderately steep sides with a base that was either concave or rounded. Only a single fill was recorded in any one of the excavated segments. This was almost exclusively of pale-coloured, silty-sand that contained occasional cobbles, stone and flecks of charcoal. Small quantities of cinder/slag were also present in this material. A single post-hole, context 1080, is included within this group. This was located a short distance from the west end of the ditch and fully along the axis of its alignment. Such a spatial relationship suggests the likelihood of association. The Group 32 ditch contained a flint flake of indeterminate date.

It may be that the ditched areas of Phase 103 represent elements of a field or enclosure system contemporary with that of Phases 504–8. However, it must be acknowledged that the areas enclosed are somewhat irregular in shape and contain what appear to be relatively large gaps in their circuit. Notwithstanding this, it is clear that the ditches of Phase 103 represent divisions, or boundaries, of some sort.

### **Dating evidence for Phase 103**

No readily datable finds material was recovered from deposits relating to this phase.

It is believed that the ditch of Group 40 (north-west A1) can be equated with the ditch of Group 32 (remainder of A1).

## 5.5 LATER IRON AGE

### NORTH-WEST A1

#### 5.5.1 PHASE 9, EXCAVATION OF FIRST MAJOR NORTH-SOUTH-ALIGNED DITCH

Phase 9 (Figure 8) comprises Groups 174 and 134 features and pertains to the levelling of slumped features in the general area of the waterhole and the excavation of a major north-south-aligned ditch.



**Plate 8** General shot of part-excavated major ditches showing waterhole (mid-right), Phase 9 west ditch (terminus bottom right), Phase 11 east ditch (mid-left), and Phase 16 mid-west ditch (bottom left corner), looking south, scale unit 0.5m

Group 174 comprised deposits of, on the whole, mixed, organic/humic matter which had built up and/or had been dumped within a slumped area in the vicinity of the infilled Group 115

Phase 8 stone-lined tank. Much of the southern, eastern and western extents of these deposits had been removed by the cutting of a later ditch and recent exploratory excavations. What remained was north–south aligned, 6m x 2m x 0.2m. Its formation may have been largely attributed to a natural build-up of plant material, originating from trees and/or shrubs growing around the fringes of the now redundant well-points. As it produced a large amount (certainly more than seen elsewhere) of animal bone, burnt stones, bark chippings (SA809 and 811) and a flint flake (Sf352) it would appear that material was being introduced as it was forming. The east side of Group 174 deposit 2519 was truncated by Group 134 ditch. This represents a major linear, slightly sinuous ditch (assigned the title of west ditch) which was excavated in several separate lengths (Plate 8) that, when combined, was 40.75m x 1.75m x 0.44m. It would most likely have continued for a further 88m towards the south-south-east, before continuing beyond the southern trench edge (this could not be tested as two later ditches had been cut along the same line, completely removing large parts of it). On its northern end, an irregular, pointed terminus was formed some 8.5m south of the northern edge of A1. It could be argued that this had been the southern side of an entrance, but it would seem unlikely as its width would have rendered the ditch ineffective as a barrier and/or drain. The profile of the ditch varied between a steep-sided ‘V’ to a wide, rounded ‘U’, and the base fell gently towards the south. The fills were mixed and varied with organic-rich deposits prevalent in the north and alluvial sands, silts and clays to the south. It was also evident that the ditch had been left to silt and was not cleaned out or maintained, suggesting a period of abandonment or the lack of sufficient workforce to undertake such a task. Of its fills, 2362 produced a flint piercer (Sf176) and a flint object (Sf313), whereas animal bone was recovered from deposits 1759, 2139 (some burnt), 2348, 2362 (some burnt), 2383 and 2452. Context 2426 stood out from the rest as all of the animal bone was burnt (calcined white) and had been placed in distinct patches within the ditch. Deposit 2466 comprised burnt animal bone (possibly the remains of complete animals), unburnt animal bone and wood (SA760 and 804), some worked and charred (SA492). Further worked wood fragments (SA800 and 806) and animal bone (some burnt) were recovered from deposit 2453. A GBA sample (398) of this was assessed and it showed the presence of a little more burnt bone and some red ochre. A distinct patch of burnt material at the southern end of deposit 2453 was also sampled (Spot 399), but has yet to be processed. The only other deposit containing wood fragments (SA785) and animal bone was context 2442. A GBA sample (393) was assessed and it attested to the presence of seeds and fruits of wetland plants, accompanied by some indicative of areas of waste/open ground, hedges and grassland. Deposit 2557 only produced animal bone, whereas deposit 2574 produced a section of root (SA490). Deposit 2403 contained further animal bone and worked wood (SA805 and 808; chippings).

### **Dating evidence for Phase 9**

Features in Group 174 produced fragments of Iron Age pottery (from six vessels) and residual worked flint.

#### **5.5.2 PHASE 10, WEST DITCH LEVELLING**

Phase 10 represents the final demise of the Phase 9 ditch and comprises Group 137 levelling deposits. With the exception of deposit 2434, these were predominately sand based and had been used to level the slump-hollow formed in the top of the ditch after its fills had settled.

Deposit 2434 was markedly different as it comprised a dump of organic dark brown silt which produced animal bone and two undiagnostic fragments of wood (SA288). Deposit 1547 produced further animal bone (not seen by specialist) and a single bark chipping (SA497).

### **Dating evidence for Phase 10**

Twenty sherds of Iron Age pottery (from two vessels) were recovered from Group 137.

#### **5.5.3 PHASE 11, RELAYING OF PHASE 8 SURFACE AND EXCAVATION OF EAST DITCH**

Phase 11 (Figure 9) sees the laying of a new surface (Group 158) over the southern half of the waterhole area and the cutting of a new drainage and/or boundary ditch (Group 135; designated 'east ditch').

Group 158 comprised deposit 2422 and surface 2396=2432. Deposit 2422 was used to level and consolidate irregularities in the south-east corner of Group 178, Phase 8 surface 2604=2459 before a new pebble surface was laid down. Surface 2396=2432 comprised elements of the same surface which had been split apart by later activity. Combined, they formed a metalled surface of some 7.5m x 7.8m x 0.14m. Deposit 2422 produced animal bone, bark chippings (SA495), as well as two flint objects in the form of a piercer (Sf177) and a flake (Sf178). Surface 2396 also produced animal bone (some burnt). Further animal bone, a flint end scraper (Sf179) and two flakes (Sf180 and 184) were recovered from 2432. Group 158 also includes a trample (deposits 2367 and 2409) which had built up over surface 2396=2432. It produced animal bone and a flint chipping (Sf80). A GBA sample (364) was assessed but it was inconclusive.

Group 135 ditch (designated 'east ditch') represented the replacement of Phase 9 west ditch (Plate 8). It was located some 2m to the east of it, had a wide inverted 'S' shape in plan and ran beyond the northern limit of excavation. The excavated length was approx. 59m x 2.5m x 0.74m and the profile varied between a steep-sided 'V' (where it ran into the band of boulder

clay against the northern trench edge) and a wide, rounded 'U' shape. The base fell gently towards the south. It was quite probable that this ditch continued southward for a further 88m before it ran beyond the southern trench edge but, as only the northern end was excavated, this could not be fully verified. Its fills (2165, 2192 and 2520) were predominately silt and/or sandy clays intermixed with, in rare instances, dumped material and organics.

Of its fills, deposit 1981 went on to produce a fragment of iron (Sf333) and animal bone (some burnt), and a flint scraper (Sf207) was recovered from deposit 2521. Deposit 2435 also produced animal bone, whereas 2451 produced a saddle quern or rubbing stone fragment (Sf182). More animal bone was recovered from deposit 2438. Deposit 1529 stood out as it was almost entirely organic in nature and it produced yet more animal bone, a stake tip (Sf20) and a flint flake (Sf71). Only two bark chippings (SA275) were recovered from deposit 1502. Context 2414 produced animal bone and a flint object (Sf166). Further animal bone and worked wood (SA289; roundwood and a stake tip) were recovered from deposit 2482, along with a dog canine tooth from deposit 2532. Deposits 2477 and 2532 produced worked wood (SA395; stake point) and halved roundwood (SA489), respectively. GBA samples from deposits 2428 (389) and 2465 (405) were submitted for assessment. Sample 389 showed that there was also charcoal, decayed seeds and fruits present whereas sample 405 attested to a fragment of worked wood and more decayed seeds and fruits.

#### **Dating evidence for Phase 11**

Group 158 deposits produced worked flint which is thought to be residual. Ditch fills in Group 135 produced Iron Age pottery. It is worthy of note that one of them (2455) also produced Roman Ebor Ware and 19th-century transfer-printed ware which was clearly intrusive/misnumbered and should be regarded as contaminants.

#### **5.5.4 PHASE 12, END OF USE/ABANDONMENT OF EAST DITCH**

Phase 12 comprised Sets 454–5 and 884, Group 179 deposits, and represented the end of use of Group 135, Phase 11 east ditch. Sets 454 and 884 deposits comprised clean silty sands and contained artefacts and/or charcoal flecks, suggesting that material was being introduced during their formation. Deposit 1629 produced animal bone and a flint object (Sf314), whereas fifteen fragments of animal bone were recovered from 1638. Set 455 deposits comprised a natural accumulation of sands/gravels, either washed down or blown in, with limited human interaction. Some either contained or were intermixed with a dump(s) containing burnt pebbles and charcoal. One of them, deposit 2365, produced a residual, burnt, Mesolithic crested flint bladelet (Sf319). The low incidence of human activity and make up of these deposits suggested that the ditch no longer functioned as a landmark and that the area was visited infrequently.

### **Dating evidence for Phase 12**

Group 179 deposits only produced residual worked flints.

#### **5.5.5 PHASE 13, EAST DITCH RECUT?**

Phase 13 comprises Group 136 features and represents a possible recut of the Phase 11 east ditch. This was evinced in three segments excavated along the length of the ditch. The recut probably ran the full length of it but had gone unrecognised elsewhere due to similarities in their respective fills. It was linear, north–south aligned, 31.76m x 1.08m x 0.4m and had an irregular U-shaped profile. Its fills comprised sands/silts, some of which contained small–medium pebble inclusions (some burnt) and sparse organic/humic rich sand/clay/silt patches/lenses. A flint object (Sf230) was recovered from deposit 2603, whereas context 2645 produced animal bone, iron concretion (Sf240) and two flint objects (Sf237 and 242), suggesting that a constituent of it was derived from dumped material.

### **Dating evidence for Phase 13**

Iron Age pottery was recovered from Group 136.

#### **5.5.6 PHASE 14, INCEPTION OF METALWORKING AREA AND EAST–WEST-ALIGNED DITCH**

Phase 14 (Figure 10) comprised Groups 147, 149, 151–2, 180 and 189. It represents the establishment of a new east–west-aligned gully (cut across the line of the Phase 11 east ditch) and the excavation of pits just to the north of it (Group 180). This phase also sees the excavation of the northern roundhouse enclosure ditch (Group 147) which probably equated to Group 52, Phase 106 roundhouse enclosure recorded in the Area A1 main excavations (see above, 5.5.13). At the same time, a possible metalworking area (Groups 149, 152 and 189) was established adjacent and to the west of it. Group 151 relates to features that may have been associated with the metalworking area, but had no direct relationship with it.

Group 180 comprised Sets 456–8, 469 and 867. Set 867 gully 2339 was an east–west-aligned linear feature, 8.54m x 0.73m x 0.28m, which had been cut across the full width of the Phase 11 east ditch 2436 (Group 135). Its base fell from east to west and it had a shallow, rounded terminus at its eastern end. As there were no associated ditches, it appeared to have been a singular feature in the landscape, inserted between two phases of much larger north–south-aligned drainage/boundary ditches. Its fills were, with the exception of occasional fire-cracked/reddened pebbles, ‘clean’ and appeared to have accumulated without human intervention, suggesting a period of abandonment and/or decreased occupation in the vicinity. Set 456 pit 2601 may have been excavated at the same time. It was located 1.78m north of gully 2339 and was cut into the top of the Phase 13 east ditch recut 2607. It was rectilinear in plan (with rounded ends), east–west aligned, 1.6m x 0.78m x



0.34m, and had a steep-sided U-shaped profile (the dimensions given don't reflect its original size as it had been much reduced by the imposition of the trial trench). Its basal fill (2579) stood out as it was highly organic/humic in nature. Pit 2601 was truncated by Set 457 pit 2576. This was ovoid in plan, aligned west-north-west/east-south-east, was 0.68m x 0.54m x 0.26m, and had a steep to vertical-sided U-shaped profile. Its fill (2509) consisted of an organic dark grey-brown clay silt and, because of this, a GBA sample (412) was taken and assessed. It attested to the presence of some twig fragments, a little charcoal, a few charred fragments of rhizome/root/rootlet (turf fuel?) and a small amount of decayed waterlogged seeds and fruits, including alder and/or hazel. Set 458 post-hole 2585, a small, isolated feature, may have been associated with it. This was located c.0.25m to the south-west of pit 2576 and was sub-circular in plan, east-west aligned, 0.18m x 0.15m x 0.13m, with a vertical-sided flat-bottomed profile. It contained the tip of a small boxed post or stake (2584; SA285). A second, much larger post-hole (2004), located some 7.4m to the north, may have a somewhat tenuous association with it. The southern half of cut 2004 had been removed by an archaeological trial trench yet what remained suggested an east-west-aligned ovoid plan, 0.36m x 0.22m x 0.17m deep, with a steep-sided U-shaped profile. Its backfill (2003), a dark brown-grey silt, may have been the almost completely rotted remains of a wood post.

Group 147 comprises Sets 469 and 497-8. Set 497 ditch 2530 was the continuation of the western end of the northernmost east-west-aligned roundhouse enclosure ditch (Group 52, Phase 106). It was cut into the top of the Phase 13 Group 136 east ditch, on its eastern side. It was east-west aligned, 2.75m x 1.03m x 0.49m, and had a rounded terminus at its western end. Originally it would have extended further to the east but was not excavated due to imposed restraints. At its western end, the terminus merged into part of a north-south-aligned ditch (probably Phase 16 mid-west). The relationship between them was not fully understood, so they have been associated and recorded as a single entity. Its fill (2140), a build up of pale grey alluvial sandy clay was truncated by post-hole 2158. This was ovoid in plan, east-west aligned, 0.36m x 0.22m x 0.17m, and had almost vertical sides. Its backfill (2150) was a mid-grey clay with large pebbles (collapsed packing?), wood and charcoal inclusions (a GBA sample, 309, was assessed to test for the remains of a rotted post but it was inconclusive). Cut 2158 was located at the junction of ditch 2530 and the recut east ditch (Group 136, Phase 13) and could have been associated with either of them.

#### METALWORKING AREA

Group 149 comprised Sets 840-1 and was associated with the establishment of a possible metalworking industry. Initially this was in the form of an isolated pit or post-hole (2476) cut into the top of natural 1003. Apart from its stratigraphic relationship being noted, there were no other records for it. Its fill was not recorded either. All that can be said is that it was sealed

by deposit 2373 (Set 841, below) and that it may have been related to a pre-metalworking structure (with other elements of it located beyond the western trench edge), or had been a pit related to an earlier phase of ironworking activity. As it did not contain any slag, the former would seem more likely.

Set 841 deposits comprised mostly clays/clay silts and were used to level the ground in advance of the formation of a putative metalworking area and associated features. Deposit 2516 was worthy of note as it contained copious amounts of slag, some of which was retained for analysis (Appendix 9; Sf199, 205 and 210–11) as well as a spot sample being taken (415; not seen by specialist). Deposit 2373 sealed the top of it and comprised several patches of iron slag with occasional fragments of stone, some burnt. The slag was retained as Sfs142–6 and 168–71 as well as a spot sample (381) of ‘burnt clay’ being submitted for analysis; it contained furnace lining. Set 841 also includes context 2361, which consisted of three separate deposits of compacted slag, with occasional charcoal flecks, that formed a distinctive arc around the south-east half of deposit 2373, with a space of 0.25–0.5m between them. A spot sample (357; four tubs) of the slag was retained. Two of the tubs were submitted for inspection by a specialist and they comprised medium-sized lumps of iron slag.

The top of Group 149 features was sealed beneath Group 189 make-up layers/levelling deposits for surface 2865. The surface was formed by levelling the irregularities with, on the whole, dumps of sand rich silts some of which had varying amounts of slag mixed in. The slag from one of them, context 2504, was retained under spot sample 413 (see specialist report). Animal teeth were also recovered. Further slag, some with vitrified furnace lining attached (Sf918 and spot sample 400), was recovered from deposits 2461 and 2440, which also contained animal bone and possible iron concretions (Sf403).

Surface 2865 sealed the top of Group 189 deposit 2478. It comprised a surface of small–large pebbles in a matrix of a plastic mid-grey-brown silty clay. The large amounts of iron slag etc. and the smattering of furnace lining recovered from features above and below it suggested that it was on the periphery of an of iron production centre located just outside the A1 western trench edge. A fragment of a saddle quern (Sf185) and a worked stone (Sf183) were recovered, along with a flint flake (Sf158), two flint objects (Sfs187 and 208) and a flint arrowhead (Sf204).

The top of surface 2865 was truncated by Group 152 features. These represented a sequence of intercutting pit-like features which are currently thought to have been the remnants of a later phase(s) of furnaces or, more likely, were related to the use of others situated outside the west trench edge (see Set 846, below).

Pit 2975 was cut into the top of surface 2865 and it was only seen in the section (No. 373) of A1 western trench edge. What was visible suggested that it had been north–south aligned, 0.94m x 0.08m, with almost vertical sides and a flat base. Its fill, 2973 (numbered incorrectly as deposit 2542) was a 0.08m thick deposit of orange-red burnt clay that may have represented an in situ collapsed furnace lining. A spot sample (419) was taken but it was not seen by the specialist. The northernmost edge was truncated by cut 2974, which had its western extents located beyond the A1 trench edge. The accessible eastern edge of it suggested it was east–west aligned, 0.9m x 0.7m x 0.13m, with a linear, irregular rounded shape in plan. Its fill (2542) comprised a dump of compacted slag in a silt clay matrix. Some of the slag was retained as Sf214 and a spot sample (420) was submitted for analysis. It suggested that the ‘slag’ could have been a furnace bottom formed as a by-product of iron smelting (see metallurgical specialist report). A stone fragment (Sf213), flint object (Sf217), flint core (Sf218), jet/shale offcut (Sf386) and a fragment of shale (Sf219) were also recovered. The surface of deposit 2542 was truncated by cut 2976. This could have been a clearance cut for breaking open a furnace after firing had taken place. It was only seen in section (373), where it appeared to have been north–south aligned, 0.88m x 0.3m wide. Its fill (2514) was a deposit of slag up to 0.09m thick. A fragment of probably iron-stained stone (Sf212) was recovered.

Group 151 comprises features that were cut into the top of surface 2865 but, due to the lack of slag in their fills, were thought to have post-dated the metalworking industry.

Pit 2369 was cut into the top of the north-east corner of surface 2865 (Group 189, above) and it was oval in plan, north–south aligned, 0.98m x 0.68m x 0.15m, with gently sloping sides and a slightly rounded base. Its backfill (2410) comprised a compact mid-grey-brown silt sand with frequent manganese flecks. Small stones lined the west side of the cut, whereas medium pebbles lined the base, which had two large, heat-crazed/shattered pebbles placed directly on top of it. Animal bone was also recovered. Pit 1608 was located 2m north-west of 2396 and was possibly paired with it. It was oval in plan, aligned north-north-east/south-south-west, 0.74m x 0.54m x 0.21m, with almost vertical sides and a flat base. Its backfill (1607), a mid-brown silt sand with occasional small–medium pebbles, sealed three large fragments of lead sheeting (Sfs76–8), one of which, Sf76, had been folded. It appeared that care had been taken in the burial of the sheets as they were placed separately on the base of the cut with, only minor overlapping being evident (Plate 9).



*Plate 9 Lead sheet (Sfs76–78) within pit 1608, scale unit 0.10m*

Cut 2456 was a small isolated post-hole which did not seem to have any association with the other Group 151 features, apart from being cut into the top of surface 2865.

#### **Dating evidence for Phase 14**

Residual flint implements were recovered from Group 189.

#### **5.5.7 PHASE 15, LEVELLING OF PHASE 14 FEATURES AND METALWORK AREA**

Phase 15 (Figure 11) comprises Group 140, 148 and 153 levelling deposits and represents the infilling of a slump-hollow (Group 148) formed over the infilled, Phase 14 roundhouse enclosure ditch and the top of the Phase 11 east ditch after further settling had occurred. The Phase 14 metalworking area was also levelled (Group 153). All these works were undertaken prior to the excavation of a third major boundary and/or drainage ditch (mid-west; see Phase 16).

Group 140 comprised Set 459 and Set 488 levelling and/or build-up deposits which were dumped or had built up within the slump-hollow formed above the Phase 11 east ditch. A fragment of roundwood (SA491) was recovered from deposit 2370, with two more fragments and an offcut (SA284) from 2379. Set 488 deposits sealed the top of the Group 135, Phase

11 east ditch and comprised mid-grey-brown silt sands with frequent pebbles and cobbles. A residual flint core rejuvenation flake (Sf66) was recovered from 1468.

Group 148 comprises Set 499 and 839 levelling deposits which sealed the top of the Group 147, Phase 14 roundhouse enclosure ditch 2530. They comprised alluvial and/or wind-blown sands, interspersed with ponded clay silts. Organic matter (2433), wood (2408, 2415, 2425) and charcoal (2420 and 2425) were present. A single piece of slag (Sf141; smithing hearth bottom?) was recovered from context 2399. Set 839 deposits were very similar in composition and of these, context 2002, produced two residual flint objects, a flake (Sf151) and a scraper (Sf152).

Group 153 deposits were located directly above the Phase 14 metalwork area and they were similar in composition to those in Groups 140 and 148. They sealed the top of features in Groups 151 and 152, Phase 14. Two flint implements, an end scraper (Sf129) and a flake (Sf130), were recovered from 1721. Deposit 1670 was much more productive and contained animal bone, worked jet (Sf114), fired clay (Sf119) and several flint objects, including a serrated edge flake (Sf116), a flake (Sf119), a double-ended scraper (Sf123), an arrowhead fragment (Sf125) and an awl (Sf128). It was quite possible that the flints had been washed in from elsewhere but it was more likely that, as the majority of the flint was in a fresh condition, they had been introduced within dump(s) of redeposited natural and then quickly covered.

#### **Dating evidence for Phase 15**

Features in Groups 148 and 153 produced Iron Age pottery whereas an intrusive, small, heavily abraded sherd of samian was recovered from Group 140. Residual worked flints were recovered from all.

#### **5.5.8 PHASE 16, EXCAVATION OF MID-WEST DITCH AND OTHER ASSOCIATED FEATURES**

Phase 16 comprises Group 138 features and they represent the imposition of the last in the sequence of major north–south-aligned ditches (designated mid-west ditch), located down the western edge of Area A1. The base of the ditch was pierced by a row of stakes (Group 139), which are also included in this phase (Figure 11).

Group 138 mid-west ditch was located between the Phase 9 west ditch and the Phase 11 east ditch, replacing the latter (Plate 8). Although its northern extent was not excavated, it appeared to run towards the south-south-west from the base of the northern trench edge and it was therefore assumed to have truncated the Phase 11 east ditch (as it was observed to do so in the south). It had a slightly sinuous, linear shape in plan and the excavated part was 41m x 2.9m x 1.19m and had either a steep-sided V- or wide, rounded U-shaped profile. The

base fell gently towards the south. Most likely it would have continued for a further 88m towards the south-south-east, following the alignment of the Phase 9 and/or Phase 11 ditches, before it ran beyond the southern trench edge.

As the ditch was excavated in segments, each was allocated its own set number. The northernmost was allocated Set 451, and the rest were, following southwards, Sets 450, 438, 440, 441, 428, 895 and 452.

The backfills were similar in make-up and mostly comprised naturally formed sands or sand silts, some with organic material present. Large stone and/or pebble inclusions suggested that there was some human interaction as they were building up. This was most evident in Sets 451 and 450. Animal bone was recovered from deposit 2685. Deposits in Sets 438 and 440 contained evidence for limited human interaction as they were forming, evinced by the artefacts recovered from Set 438 deposits 2166 (animal bone and four pieces of worked flint; Sfs99–102), 2324 (animal bone and unidentifiable roundwood), 2301, 2328 and 2337 (animal bone). Environmental samples were taken from deposits 2324 (337) and 2328 (341) because of their organic content. When assessed, GBA sample 337 attested to the presence of plant remains associated with standing water. The plant remains from 2328 were indicative of marshy, boggy ground. Further animal bone was recovered from Set 440 deposit 2363.

The base of the Set 441 ditch was pierced by Group 139 stake-holes 2183–4, 2182 and 2181 (Sets 443–4 and 446–7 respectively). Stake-holes 2181–4 formed a north-north-west/south-south-east-aligned row. Sets 442 and 445 stake-holes 2185 and 2180 formed a pair and were located well to the north of those above. What these features represented is currently uncertain, but they could have been elements of a revetment to the ditch, the rest being too slight a build to have left a mark when it had rotted or been removed. Because of these uncertainties, they have been interpreted as a short structure of indeterminate use. The backfills of the stakes were sealed beneath the fills of the ditch. Animal bone was recovered from contexts 1772, 2011, 2016 and 2170. Deposit 2020 produced a flint flake (Sf131), a core rejuvenation flake (Sf132) and a fragment of worked stone (quern/rubber; Sf95). Because of its organic content, a GBA sample (298) of deposit 1772 was submitted for assessment. It was inconclusive.

A wicker lining may have been present elsewhere in the ditch. Set 895 included deposit 2146 and it contained a large amount of decayed worked wood (SA282, 305, 360, 488 and 783) which may have been attributable to a collapsed, well-rotted lining or revetment to the base or side of the ditch. Further wood was recovered from deposit 1977 (SA283; twigs and small

roundwood), as well as animal bone and a flint flake (Sf92). Animal bone and wood (SA279, mostly twigs) were also recovered from deposit 1857. In these two instances, it appeared that the wood inclusions had either been washed in or had fallen from trees and/or a shrubbery growing nearby. Set 452 deposits 2484 produced further animal bone whereas iron slag (Sf203) was recovered from 2439.

#### **Dating evidence for Phase 16**

Group 138 was dated by the presence of Iron Age pottery, whereas a small fragment of Roman tegula was thought to have been intrusive. Residual flint implements were also present

#### **5.5.9 PHASE 17, FEATURES CUT INTO TOP OF THE MID-WEST AND EAST DITCHES**

Phase 17 (Figure 12) includes Groups 141, 143 and 181 and it represents a series of features cut into the top of the east and/or mid-west ditches after they were infilled or, in the case of the east ditch, completely silted.

Group 143 comprised 3 post-holes pits. Pit 1734 was cut into the top of Phase 15 levelling deposit 2379 (Group 140). It had originally been ovoid in plan, west-south-west/east-north-east-aligned, 0.35m x 0.3m x 0.18m, with steep sides and a flat base. Its fills comprised grey-brown sand silts with some charcoal flecking. A cow mandible was recovered from 1732. The post-holes were tightly clustered on the north-west side of cut 1734 (above) and had been placed over the approximate mid-line of the now infilled Phase 13 Group 136 east ditch recut. They tended to be round or oval in plan, the smallest was 0.3m x 0.11m and the largest 0.36m x 0.24m x 0.14m. They pierced the top of Phase 15 deposits and contained organic brown backfills, one of which, 1741, contained a male pig canine tooth.

Pit 2333 had been cut into the top of the Phase 16 mid-west ditch 2364. It was ovoid in plan, north-west/south-east-aligned, 1.7m x 1.44m x 0.63m, and had steep, concave sides and a flat base. Its fills (2335 and 2334) were both humic/organic and contained a copious amount of decayed wood fragments. Animal bone (burnt) was also recovered from 2335. Because of the organic nature of these fills, a GBA sample (344) of deposit 2335 was submitted for assessment. It showed the presence of further small unidentifiable animal bone fragments (burnt) and some red ochre. Set 480 comprised pit 1853. It was only included in this group because it had also been cut into the top of Phase 16 mid-west ditch 2405. It had an irregular, north-south-aligned 'lozenge' shape in plan, 1.4m x 0.5m x 0.36m, with steep vertical sides and a flat uneven base. Its western edge was removed by ditch recut 1774 (see Phase 19). Its backfill, 1764, a pale yellow-grey sand with frequent small-large stone

inclusions was a dump of redeposited natural. It produced animal bone, a fragment of a small shale bead or ring (Sf81) and an unidentifiable bark chipping (SA798).

Group 141 comprises paired post-holes which were located at surface level between the Phase 11 east ditch and Phase 16 mid-west ditch. Post-hole 1659 was ovoid in plan, up to 0.7m x 0.39m deep, with steep sides and a rounded base. Its base was lined with a collapsed post-packing of large stones in a dark brown silt loam (1658). The top of it was pierced by post-pipe voids 1672 and 1674. Cut 1674 was sub-rectangular in plan, east–west aligned, 0.33m x 0.3m x 0.32m, and had steep sides and a flat, square base. It contained the remains of a badly decayed 0.30m wooden post base (1673). It was paired with post-pipe 1672, which was located almost immediately to the south-west of it. This was sub-circular in plan, 0.46m x 0.36m, with almost vertical sides and a flat, uneven base. It also contained a badly decayed c.0.46m post-base (1671). The lack of any associated packing or backfill suggested that this post had been driven into the ground.

Group 181 comprises features which had been cut into the top of Group 141 and 143 pits and/or post-holes.

Pit 1729 had truncated the east side of pit 1734 (above) and appeared to have been its replacement. It was rectilinear in plan (with a rounded end to the north), north–south aligned, 1.34m x 0.88m x 0.33m, and had steep sides and a flat base. Its backfill (1726), a firm blue-grey clay, gave no indication as to its use. Post-hole 1740 was located 0.72m to the west of it, where it was cut into the top of Group 143 post-hole 1744. It was sub-circular in plan, north-west/south-east aligned, 0.3m x 0.22m x 0.17m, and had steep sides and a gently rounded base. The compacted humic/organic nature of its fill, 1739, suggested the presence of a badly decayed wooden post. Pit 1657 truncated the top of Group 141 post-holes (above). It had an irregular L-shape plan, its longest axis aligned east–west, with variable sides and an uneven base. Its fill (1637), a dark grey-black silt sand, with occasional large stones and small pebbles, gave no indications as to its use. A pair of post-holes, 2311 and 2310, were cut into the top of pit 2333. Post-hole 2311 had an irregular ovoid plan, north–south aligned, 0.5m x 0.4m x 0.2m, with steep, slightly concave sides and a gently rounded base. Post-hole 2310 was located 0.08m south of it and was circular in plan, 0.3m x 0.09m, with steep sides and a flat base. The fills of both (2300 and 2302, respectively) were compacted dark brown organics though to be indicative of the presence of badly decayed posts.

#### **Dating evidence for Phase 17**

A post-hole in Group 141 contained a single sherd of Iron Age pottery.



#### 5.5.10 PHASE 18, LEVELLING OF MID-WEST DITCH AND FEATURES CUT INTO IT

Phase 18 (Figure 13) comprised deposits in Groups 142 and 161, which had built up and/or were dumped into a slump-hollow formed above the settled fills of the Phase 16 mid-west ditch, before it was recut. The combination of alluvial/wind-blown sands and/or silts interspersed with relatively small amounts of dumped material suggested that its infilling had been a protracted event.

Group 142 largely comprised dumps of redeposited natural. Deposit 1724 produced a residual flint scraper (Sf64), whereas as a fragment of vitrified furnace lining (Sf338) was recovered from deposit 1579. Animal bone and a small piece of mortar were also recovered from recovered from deposit 1752.

Group 161 comprised mainly dumped sand silts with inclusions of small to large pebbles. These were probably used to level Phase 17 post-holes 2310 and 2311 (Group 181) after they had either rotted down or been removed. Deposits 2169, 2187, 2152, and 2327 stood out from the rest because they comprised either either pebbles (2152), were humic and/or organic in nature (2169 and 2187) or contained frequent small wood fragments (2327). Animal bone (some burnt) was recovered from deposits 2152, 2190 and 2194.

#### **Dating evidence for Phase 18**

Group 142 produced Roman pottery and CBM (brick).

#### 5.5.11 PHASE 19, MID-WEST DITCH RECUT? AND ASSOCIATED FEATURES

Phase 19 (Figure 13) comprises Groups 144 and 182. Group 144 represents the recutting of the mid-west ditch and includes a naturally formed erosion gully. Group 182 comprises several features which may have been related to the recut ditch. As they were located to the north of the recut, in an area where it was not recognised, the relationship between them is somewhat tenuous. It was quite possible that the recut was partial and had not extended much further north than was observed but this cannot be verified (see Group 145, Phase 20). Group 144 ditch had been cut down the line of the original mid-west ditch and it was linear in plan, 23.5m x 2.62m x 0.68m, and had a wide U-shaped profile. The base fell gently towards the south. It was observed in several segments with each one being allocated their own set number. The northernmost, Set 485, was located 33.28m south of the northern trench edge and it was followed southwards by Sets 487, 484 and 486. The fills of the ditch comprised mostly dumps of stone-rich clay and silt sands or a build up of alluvial and/or wind-blown silt sand. The exception was Set 487 deposit 1466, which had an organic content. A GBA sample (228) of Set 484 deposit 1681 was assessed. It attested to the presence of decayed plant material, charcoal, a few bone fragments and a small amount of decayed fruits and

seeds associated mainly with areas of wetland as well as, to a lesser extent, rough ground and meadow. Set 486 also included a 0.3m x 0.1m deep erosion gully (2429), which had cut down into the top of deposit 2431. Its fill (2429) produced a single bark chipping (Sf175). Set 485 deposits 1872, 1866, 2005 and 1873 produced a late Neolithic/early Bronze Age flint flake (Sf133) and animal bone. Further animal bone (burnt) and a flint flake (Sf69) were recovered from Set 487 deposit 1464. Set 486 deposit 2355 also stood out as it produced animal bone, a possibly natural stone object (Sf147) and 21 fragments of iron slag (Sf334). Further iron slag (Sf160; includes smithing hearth bottoms) was recovered from 2377.

Group 182 comprises features in Sets 467–8 and 850–53. These were located to the north of the mid-west ditch recut and could not be properly associated with it. Set 850–3 pits may have been related to them.

Had mid-west ditch recut 2008 continued for a further 4.46m towards the north, then pit 1966 would have been cut into its approximate centre. It was ovoid in plan, north–south aligned, 0.86m x 0.5m x 0.11m, with steep sides and a rounded base. Its backfill (1995), a cobble-rich silt sand mixed with gravelly sands, was almost completely taken up by a large, 10kg lump of iron slag (Sf88). Pit 2133 was located 2m north-east of it, where it had also been cut into the top fill (2147) of the Phase 16 mid-west ditch. It was 0.88 x 0.72m x 0.19m, similar to 1966 but in this instance its sides were steep to vertical and the base was flat. Pit 1769 was located 0.99m to the south of 1996, where it was also cut into one of the upper fills (2163) of the Phase 16 mid-west ditch. Although only the northern edge of it survived, it could be ascertained that it had been ovoid in plan, north-east/south-west aligned, 0.73m x 0.7m (extrapolated) x 0.09m, with steep sides and a flat base. Its backfill (1768) was similar to the fill (1995) of pit 1966 but lacked the gravel inclusions. Pit 1553 was located some 2.5m due east of pit 1996. It had, except on its western edge, been heavily truncated on all sides yet the remainder suggested it had a round or sub-circular plan, approximately 2.48m (extrapolated) x 0.19m, with steep vertical sides and a flat base. Its basal fill (1546) was a humic/organic dark brown sandy clay with occasional charcoal flecks and small pieces of wood, including some charred (SA496), as well as two unidentifiable bark chippings (SA810). It also produced animal bone (burnt) and a pair of jet rings (Sfs27 and 28). The jet rings (Plate 10) were intact and in very good condition. As these objects would have had afforded some status to their owner, it would appear that their deposition may have had a ritual significance.



**Plate 10** *Jet rings (1546; Sfs27–28)*

Because of the presence of the rings and the organic/humic nature of deposit 1546, a GBA sample (194) was retained and submitted for assessment. It attested to the presence of further charcoal, some black possibly ash charred twigs and a wide variety of plant species, including grasses, possible heather, barley, emmer wheat, spelt wheat, brome, buttercup, cinquefoil, ribwort plantain, sedge, sloe, spike-rush and alder – all charred. It could be argued that some of the species were representative of weeds growing amongst a crop of wheat and/or barley and had been harvested along with it. If this were the case, then the charring would most likely have arisen from the processing and/or drying of the grains for storage or consumption. This does not, however, give any explanation for the presence of the wetland plant species, alder and twigs or the pair of jet rings. As this was the only feature that is known to contain such a variety of materials within the entirety of Area A1, it may suggest that it had a ritual function. Whether or not it was excavated with this purpose in mind, or had been latterly utilised as such, remains to be ascertained. The secondary (1542) and upper fills (1541) comprised a redeposited natural sand. Cut 1737 was most likely to have been associated with pit 1553. It was located 0.68m to the west of it and had been cut into the top of the Phase 17 post-holes 1740 and 1742. It was sub-circular in plan, 0.18m x 0.12m deep, with steep vertical sides and a gently rounded base. Its fill (1736), a firm, humic/organic, dark grey-brown silt sand, was thought to represent the remains of a badly decayed wooden post. Set 850 relates to an erosion gully (2145) located 0.80m west of pit 2133. Only a 2.74m length of the gully was excavated and it had a slightly sinuous, linear shape, was north–south aligned, 0.94m x 0.24m, with steep, concave sides. The base was flat and fell gently towards the south. Its basal fill (2141) was a dump of dark brown sandy silt with moderate pebbles, whereas the upper fill (2137) was part of a later pebble surface which had detached when it slumped into the top of the gully.

### **Dating evidence for Phase 19**

Group 144 produced Iron Age pottery and residual flint implements.

### **REMAINDER OF A1**

#### 5.5.12 PHASE 104, ADDITIONS TO THE EARLY DITCH ARRANGEMENT

This phase comprised a series of ditches (Groups 41, 45, 54, 56, 63, 64 and 65) (Figure 4) and formed additions to the framework of ditches of Phase 103. No readily datable artefactual material was recovered from any of these features and their attribution to this phase is based on their stratigraphy and spatial arrangement to elements of the existing Phase 103 ditches. Components of the network of ditches of Phases 103 and 104 sit somewhat at odds with the lattice-like ditch arrangement of Phases 105 onwards, and it is probable that many of these parts became entirely redundant at that time.

The ditches of Phases 103 and 104 are likely to be contemporary, and perhaps integral, with the enclosure system (enclosures A–H) of Phases 504–8 of Area A2. Within Area A1 at least six enclosed spaces can be identified; these are numbered 1–6.

Enclosure 1 was bounded by the ditches of Groups 32, 49, 45 and 41 on its northern, western and southern sides. It was roughly trapezoidal in plan-form, although any eastern ditch, or limit, appears to have lain eastwards of the edge of excavation. A gap to the north-east had a minimum width of 15m, the remainder lying beyond the limits of excavation. The apparent discontinuity to the west of ditch 32 appears certain to relate to later truncation. Enclosure 1 measured in excess of 152m east–west, whilst its north–south axis measured 88m at its western side and 120m at its eastern side.

Enclosure 2 was bounded by ditches of Groups 45, 41 and 49 to the northern and western sides and appears likely to have formed part of the same enclosed area as Enclosure B of Area A2. As such this enclosure would have been trapezoidal in plan-form and measured some 130m along its east–west axis, and 77m at the eastern side of its north–south axis and 105m at the western side.

Enclosure 3 – this narrow area was bounded by ditches of Groups 49, 54 and 55 to the eastern, northern and western sides respectively. Any southern limit to this area remains unknown. Its east–west axis measured c.30m, similar to the minimum length of its north–south axis.

Enclosure 4 was bounded by the ditches of Groups 54 and 55 on the northern and eastern sides respectively. Any western and southern boundaries lay beyond the limits of excavation. Minimum dimensions were 33m east–west and 17m north–south.

Enclosure 5 – this trapezoidal area was bounded by the ditches of Groups 58, 57/55, 54 and 49 to the northern, western, southern and eastern sides respectively. It measured between 96 and 119m north–south and 33–45m east–west axis. The gap in the western side is thought likely to relate to truncation. It is possible that a gap(s) may have been present in the northern and/or southern sides within areas that lay beyond the limits of excavation.

Enclosure 6 was bounded by ditches of Groups 58, 57/55 and 54 relating to the northern, eastern and southern sides respectively. Any limits to the western side remain unknown. North–south this area measured c.120m and was in excess of 47m on its east–west axis.

Groups 45 and 54 form two of the major elements of this phase and extend from similar locations on the south-central part of the Phase 103 Group 49 ditch, the former to the east, the latter to the west. The angle of the Group 45 and 54 ditches to that of the north–south element is identical and this regularity suggests both features may be contemporary.

The Group 45 ditch extended south-eastwards for around 120m and terminated. A later recutting of this ditch was subsequently cut through towards its eastern end by a later ditch (see Group 48, Phase 105). The width of this ditch ranged from 0.7–1.32m, the depth from 0.16–0.53m, whilst the profile varied from gentle to steep sides with a flattish to rounded base. The single fills of the excavated segments were essentially silty-sands and produced a small amount of cinder.

Group 54 extended into the western part of A1 and continued beyond the baulk at a distance of some 72m from its point of origin; it was between 0.64 and 1.09m wide and the depth varied from 0.36–0.42m. The profile was typically of moderate to steep sides and a base that ranged from rounded to V-shaped. Each of the excavated segments revealed only a single fill of sandy-silt or silty-sand. Several fragments of cow bone were recovered from one of these fills. The Group 54 ditch crossed the line of an earlier ditch (Phase 103, Group 55) though owing to later truncation the relationship between the two was not established. The fills of the Group 54 and 56 ditches were indistinguishable and whilst this could be used to argue for contemporaneous use (or more precisely disuse) the crossing of their courses may suggest otherwise.

Some 18m to the east of Group 45 lay another ditch, Group 41. Regularities of alignment of these ditches suggest that they were related. The width of the Group 41 ditch ranged from 0.98–1.15m, its depth from 0.34–0.45m, and it had a profile of moderately steep sides and a flattish to concave base. Each of the excavated segments showed evidence for single fills that were generally clayey-silts with some sand. A later recutting of Group 41 was subsequently cut through towards its eastern end by a later ditch (See Group 39, Phase 105).

In the north-central area of the western part of A1 a Y-shaped arrangement of ditches (Groups 63–5) was examined, though the relationships of these ditches to one another was not determined. Teeth and enamel fragments of cow were recovered from fills of Groups 63 and 65. The alignment of these was in reasonable accord with other ditches of Phase 104 and they may, therefore, relate to this phase.

#### **Dating evidence for Phase 104**

No readily datable finds material was recovered from deposits relating to this phase.

#### **5.5.13 PHASE 105, LATTICE-LIKE DITCH SYSTEM**

This phase marks the emergence of a lattice-like enclosure system. The enclosures numbered 7–19, were formed of a series of ditches laid out parallel and at 90 degrees to each other (Figure 18). Many of the enclosed rectangular spaces were of similar proportions. The elements attributed to this phase are Groups 26, 28, 31, 33–6, 39, 40, 42–3, 46, 48 and 59. The balance of the evidence, spatial and stratigraphic, suggests that these features post-date those of Phases 103 and 104, though elements of these earlier ditch systems clearly remained in use. In particular, the Phase 103 Group 49 ditch was fully integral to the new system, whilst spatial arguments for the continuance of the Phase 104 Group 45 and 41 ditches also apply.

Enclosure 7 – this sub-rectangular enclosure was bounded by the ditches of Groups 26, 49, 33–36, to the northern, western, southern and eastern sides. This area was some 62m north–south, and 51m east–west. An entrance in the north-east corner measured some 3m across whilst one in the central part of the southern side was around 2.5m across. The shallow gully of Group 33 towards the south-east corner may have formed a fence-line (see below).

Enclosure 8 was of similar shape and proportions to Enclosure 7, measuring 60m (north–south) by 50m (east–west). This enclosure was bounded by the ditches of Groups 31, 34, 36 and 48 to the north, west, south and east sides respectively.

Enclosure 9 was bounded by ditches of Groups 35/36, 49, 46 and 48 to the northern, western, southern and eastern sides respectively and formed a trapezoidal area that measured some 99m (east–west) and 26–53m (north–south).

Enclosures 19 and 10 – Enclosure 19 was bounded by the ditches of Groups 48, 36 and 39 to the west, south and east sides respectively. It was c.43m east–west and the north and north-western parts of this enclosure appear to have been open. Enclosure 10 lay immediately south of 19 and was bounded by ditches of Groups 36, 48, 46/42, and 39 to the north, west, south and east sides respectively. The area measured some 56m north–south by around 43m east–west. A large 18m wide gap was present between ditches 46 and 42 that served to connect Enclosure 10 to this southern part. The ditch of Group 36 that separated Enclosures 19 and 10 subsequently became redundant in this area (though it was recut and slightly realigned to the west) – see Phase 106.

Enclosure 11 was bounded by ditches of Groups 46, 49 and 48 to the north, west and east sides respectively. Any southern limit to this enclosure lay beyond the limits of excavation. This area measured approximately 98m east–west. An opening of c.3m across was evident towards the northern end of the eastern boundary.

Enclosures 12, 13, 14 – only the western parts of these enclosures, delimited by the Group 39 ditch, were present within the trench. The southernmost of these, Enclosure 12, seems likely to correspond to enclosure L of Phases 510–511 of Area A2. This area was bounded by the ditch of Group 42 to the north side and measured some 21m (east–west) by 12m (north–south). Enclosure 13 was bounded by ditches of Groups 42 and 40 to the southern and northern sides respectively. A narrow gap or opening of c.1m width was present between the western side of ditch 40 and the western boundary of ditch 39. Enclosure 13 measured only 15m north–south, though was in excess of 21m east–west. Enclosure 14 was bounded by ditch 40 on the southern side and by the ditch of Group 39 to the west and also to the north where this ditch turned sharply through 90 degrees to the east. Measuring around 65m north–south and in excess of 15m east–west, Enclosure 14 was connected to Enclosure 13 at its south-west corner by the 1m entranceway described above.

Enclosures 15/16, and 17/18 – these originally formed two divisions to the north of the ditches of Groups 26 and 31 respectively (both subsequently subdivided into four elements of 15, 16, 17 and 18 in Phase 106). Both enclosures had east–west widths of around 48m and extended to the north for distances that were clearly in excess of 16m. The eastern side of Enclosure 15/16 was defined by the ditch of Group 28, whilst an opening some 3m wide

provided access in the south-east corner to Enclosure 7. The western and eastern sides of Enclosure 17/18 were formed of the ditches of Groups 28 and 48.

The northern east–west-aligned components of this system comprised the Group 26 and 31 ditches. Group 26 extended from the waterhole area for a distance of around 45m, stopping some 3m short of Group 31, and had a width of between 0.3 and 0.7m and a depth of between 0.06 and 0.25m. The profile was typically one of gentle to moderate sides and a concave or slightly rounded base. The single fills of the excavated segments were all silty-sands and contained a small number of burnt cobbles and occasional flecks of charcoal, together with a small amount of artefactual material.

Group 31 was on broadly the same alignment as Group 26, and extended from its junction with the Group 34 ditch in an easterly direction as far as the Group 48 ditch, a distance of almost exactly 50m. The width of the ditch ranged from 0.56–1.3m, the depth from 0.16–0.43m, whilst the profile was seen to be quite variable. This variation of profile may hint at ditch cleanings and recuttings that were not evident in the fills. All but one of the segments contained single silty-sand fills, the exception containing two fills including a number of burnt cobbles. The sequential relationship with the north–south ditches of Groups 34 or 48 could not be determined. That these ditches were contemporary, for a while at least, is indicated by the fact that the Group 31 ditch extended as far as the north–south ditches, but no further. The ditch of Group 35 extended eastwards from the north–south line of the Group 49 ditch for a distance fractionally under 22m to the point where it terminated. From this point there was a gap of just over 2.5m before the commencement of the similarly aligned ditch of Group 36. This gap must originally have served to provide access between the enclosed spaces to north and south. The Group 35 ditch had a width of 0.72–1.12m and an observed depth of around 0.22m. The profile of the ditch was one of moderately steep sides and a flattish to concave base. The fill was generally a clayey-sand.

The narrow, shallow, gully of Group 33 was comprised of four short discontinuous stretches of gully and two stake-holes. This feature was cut at the west side by a later enclosure ditch (see 5.5.13). Although the gully also appeared to be cut by a ditch, that of Group 34 at its east end, it is entirely possible that both were contemporary and that the Group 33 gully simply became redundant at an earlier date than that of the Group 34 ditch. That the Group 33 gully extended from the line of the Group 34 ditch, parallel to the ditch of Group 36, and terminated almost exactly in line with the entranceway between the ditches of Groups 36 and 35, presents compelling spatial grounds for attributing the Group 33 gully to this phase. It is possible that this gully supported a fence-line. The narrow gap created between this feature and the Group 36 ditch, together with its spatial relationship to the adjacent opening, may



indicate that it functioned as some sort of stock-penning area. The gully was typically less than 0.2m wide and under 0.1m deep, whilst the profile was consistently one of gentle to moderately steep sides and a rounded base. The fills were silty-clays that contained occasional heat-cracked cobbles.

The largest of the east–west-aligned ditches of this phase was that of Group 36, which extended eastwards from a point just west of the south-east corner of a later enclosure (see 5.5.13) to join up with ditch 39, a distance of around 120m. A slight kink is evident in the eastern part of this ditch between the ditches of Groups 48 and 39, and it cannot be totally ruled out that this once formed an independent stretch of ditch. Any evidence for this had been removed by the late functioning of ditch 48. Group 36 was subsequently recut and slightly realigned on at least two occasions (Groups 37–8). The width of ditch 36 ranged from 0.55–0.9m and the depth from 0.23–0.32m. The profile was generally one of gentle to moderately steep sides and its base was concave or slightly rounded. Only single fills were observed in the excavated ditch segments and these varied in consistency, colour and texture. A few burnt cobbles and charcoal flecks were noted within the fills.

Groups 28 and 34 formed a continuous north–south-aligned stretch of ditch some 75m long that had stratigraphic relationships with the ditches of Groups 28, 33 and 36–8. The northern end of the ditch became shallower and faded out, though not so abruptly as might be expected in a proper ditch terminal. This coincided with a change in the geology from sandy materials to clay and cobbles and it may be that as the digging got tougher the ditch was dug more shallowly. This effect may have been heightened by increased levels of plough truncation in the northern up-slope parts of the site. Groups 28/34 and Group 31 shared a common fill. Group 34 cut through the Group 33 gully, and was itself cut by two episodes of the Group 36–8 ditch. Despite these observed relationships it seems clear that ditches 28/34 were original to this lattice arrangement. The evidence for this is spatial, as witnessed by the relationship of this feature to the ditches of Groups 26, 31 and the adjacent entranceway and the fact that the Group 33 gully extends as far as, but no further than, this north–south ditch. Whilst there was no clear-cut evidence for recutting of the Group 34 ditch (although variation in width, depth, profile and fills may hint at this) there was some evidence for the recutting of at least part of the Group 28 ditch, indicating that this ditch was maintained/cleaned out. Group 28 had a width that varied between 0.76 and 1.65m, a depth of between 0.28 and 0.4m, moderately steep sides and a base that ranged from concave to rounded. Only single sandy-silt fills were apparent in the excavated segments. Group 34 measured between 0.5m and over 1m wide and was 0.17–0.34m deep. Considerable variation was also apparent in the profile of this ditch and it had fills that were of varied consistency, colour and texture.

The major north–south-aligned ditch of Group 48 ran continuously from the northern part of the site for a distance of around 137m, terminating just beyond its intersection with the ditch of Groups 45–6. There was then a gap of a little over 3m before the ditch recommenced. This gap is assumed to have formed a deliberate access point. The southern part of the recommenced ditch comprised two almost parallel stretches of ditch that ran for around 5.5m before continuing beyond the limits of the A1 excavation. The western of these was of smaller and shallower proportions than that to the east. Artefactual material suggests that the Group 48 ditch was functioning in the Roman period, quite probably after a number of the prehistoric ditches had gone out of use. The spatial relationship of this ditch to other ditches of this phase suggests that it originated within the prehistoric period and remained in use with periodic recutting/cleaning out, into the Roman period. Whilst there was no obvious evidence for recutting of this ditch, the two short stretches of its southern part suggest that one was probably a replacement for the other. Towards its northern end Group 48 shared a fill with the Group 31 ditch, which extended up to, but not beyond, the line of ditch 48, and cut through the course of the early Group 32 ditch (phase 104). Group 48 also cut through the east–west ditches of Groups 36 and 45–6. The ditches of Groups 48 and 36 may originally have been contemporary, whilst the replacement ditches of Groups 37/38 (replacing/realigning ditch 36) were subsequently cut to a line that terminated just short of the west side of Group 48. The older Group 45 ditch (phase 104) was probably recut in this phase, as Group 46. The continued existence of this is attested by the spatial arrangement of the Group 48 ditch opening immediately to the south of this line; it was noted that nearly all openings in the ditch system occur at, or close to, the corners. The major, northern, part of the ditch varied in width between 0.48 and 1.08m and it had considerable variation in profile, whilst the fills were of variable consistency, colour and texture. To some degree the variation in fill reflects the variation in natural materials through which the ditch cut. The southern parts of the ditch(es) were of broadly similar widths but the western was shallower and of more gentle profile.

The easternmost north–south-aligned ditch, Group 39, extended from the southern limits of excavation northwards for a distance of 95m before turning through 90 degrees to the east to run beyond the limits of excavation. Ditch 39 cut through the two east–west ditches (Groups 36 and 41–2). That ditch 36 extends to, but not beyond, ditch 39 argues for their being, for some time at least, contemporaneous. Ditch 41 is believed to have originated in phase 104 but is likely to have continued in use for some time as it was subsequently recut (Group 42), possibly within this phase. The width of ditch 39 ranged between 0.78 and 1.2m, whilst the profile was seen to be variable. All but one of the excavated segments revealed only single fills of variable consistency, colour and texture. The fill characteristics appear to mirror the varying natural through which the ditch cut.

Group 40 was a 14m long stretch of east–west-aligned ditch located in the south-east area of the excavation, the eastern parts of which extended beyond the limits of excavation. At the west side the ditch terminated just short of Group 39. The gap between these ditches was a little over 1m, presumably provided access between ditched areas, and suggests that the ditches were related. The width of Group 40 ranged from 0.67–0.97m, its depth from 0.21–0.3m, whilst the sides were moderate to steep and the base was flat to slightly rounded. The fills, generally single, within the excavated segments were predominantly sandy-silts.

A north–south-aligned ditch, Group 59, in the western part of the western area of A1, may be of prehistoric origin. This ditch measured some 1.85m wide by 0.36m deep, had moderately steep sides, a concave base and a silty clay fill. The southern extent of the ditch was not traced. A piece of glass recovered from the fill would appear to be intrusive, possibly being derived from the backfill of a later furrow located directly above. This ditch may belong to the Phase 105 network of ditches, though the case cannot be proven.

The north–south ditch of Group 49 (Phase 103) remained integral to the Phase 105 lattice-like system. The presence of an opening in the southern part of the Group 48 ditch, detailed above, has been argued to suggest the continuance of the line of the Group 45 ditch, perhaps in its recut form as Group 46. The ditch of Group 41 (Phase 104) is known to have been recut and slightly realigned as Group 42, though only after a large cut feature had truncated its course in the area adjacent to the baulk of the trench. The recutting and realignment represented by Group 42 may belong to this, or conceivably a later, phase.

#### **Dating evidence for Phase 105**

Some pottery of Iron Age date was recovered from the Phase 105 ditches. Finds of Roman date were also recovered, these almost exclusively from the north–south ditches of Groups 39 and 48. This suggests the survival of at least certain elements of this lattice arrangement into the Roman period. Despite no conclusive evidence for recutting of the Group 39 and 48 ditches (presumably as any such recutting removed all earlier traces), these can, on spatial grounds, be seen as integral parts of the lattice system. Several pieces of worked flint of Mesolithic–Neolithic date were recovered from the fills and appear to be residual.

#### **5.5.14 PHASE 106, ELABORATION OF LATTICE, ENCLOSURE 20 AND SETTLEMENT FEATURES**

The features attributed to this phase principally represent an elaboration of the lattice-like system of ditches, mostly, but not exclusively, by sub-division and the creation of an enclosure housing settlement-related features (Figures 18, 19, 20). The elements attributed to this phase are Groups 7, 10, 27, 29, 30, 37, 38, 44, 47, 50 and 52. The placing of certain

of these features in this phase must be regarded as tentative (though they seem certain to relate a point spanning Phases 105–8) and are based as much on spatial arrangement as on stratigraphic succession. The arrangement of the bulk of the Phase 106 features implies the continuance in use of most of the principal elements of the lattice-like arrangements of Phase 105 and at least some of those of Phase 104.

Sub-division in the northern part of the lattice system created four small areas, Enclosures 15, 16, 17 and 18. Enclosure 15 was bounded to the south and east by the ditches of Groups 26 and 27 respectively. Immediately to the east of this, Enclosure 16 was bounded by the ditches of Groups 27, 26 and 29 to the west, south and east sides respectively, whilst the entrance gap to the north-east corner of Enclosure 7 provided access to this area. Enclosure 17 was bounded to the west, south and east by ditches of Groups 29, 31 and 30 respectively. Enclosure 18 was formed of the ditches of Groups 30, 31 and 48 to the west, south and east sides respectively.

The northernmost elements of the elaboration of the ditch system comprised parallel north-south-aligned ditches (Groups 27, 29 and 30) that mirrored the extant ditches of Group 28 and the northern part of Group 48. The northern ends of the Group 29/29–30 ditches tended to become shallower and fade out in the same manner as noted for ditches 28 and 48 and may relate to harder digging caused by changes in the sub-strata. Increased levels of plough truncation in the northern up-slope parts of the site may have exaggerated this.

Group 27 survived as a short northwards projection from an earlier east-west-aligned ditch (Group 26 Phase 105). This ditch was typically between 0.54 and 0.74m wide, up to 0.2m deep, and had moderately steep sides and a flattish to rounded base. Only single silty-sand fills were encountered in the excavated segments. Whilst Group 27 was seen to cut Group 26, this may represent little more than the latest cleaning out of the ditch. There can be little doubt that the ditches of Groups 26 and 27 were at some point contemporary as Group 27 fed into Group 26 and did not extend beyond its line.

The Group 29 ditch represents the recut of an earlier ditch (Group 28 Phase 105). The evidence for this recutting was confined to just one of the four segments excavated. It is possible that evidence for recutting was missed in the other segments as a sherd of Roman pottery, as well as Iron Age pottery, was recovered from the original ditch. Where observed, the recut ditch of Group 29 was seen to have a width of up to 1m and a depth of up to 0.39m. The observed single fill was a silty-clay-sand.

The Group 30 ditch extended northwards from an earlier ditch (Group 31 Phase 105). The relationship between these ditches was examined and the fill within both was seen to be identical. The ditch measured 10.5–1.52m wide by 0.38–0.53m deep and had a profile of moderately steep sides and a base that ranged from concave to V-shaped. With the exception of one segment (which contained two fills) only a single silty-sand fill was evident within each of the four excavated segments.

The course of an earlier ditch (Group 36 Phase 105) was realigned over 1m to the north in its eastern part and shortened. This new line, Group 37, is believed to have terminated a little under 2m short of the earlier ditch (Group 48 Phase 105), this narrow gap seemingly functioning as an access point between the ditched areas to north and south. It must be assumed that the areas to the north and south of the former Group 36 ditch (Enclosures 19 and 10) were now united as a single enlarged area. The width of the recut Group 37 ditch ranged from 0.42–0.9m, the depth from around 0.15 to in excess of 0.4m and the profile of the ditch displayed some variation. The silty-sand fills of the recut ditch contained some charcoal flecks.

Group 37 was subsequently redefined, along a very similar course, by a new ditch (Group 38). It is not known exactly when this ditch recutting took place and so its attribution to this phase is tentative. This later course of the ditch had a width that ranged from 0.5–0.89m, a depth of 0.25–0.42m, and a variable profile. Three of the excavated segments had a single fill, the fourth two fills. The fills were predominantly silty-sands.

In the south-eastern part of the site a short stretch of north–south-aligned ditch, Group 47, was seen to extend from an earlier ditch (Groups 45 Phase 104, recut as Group 46 Phase 105) for a distance of just under 18m to the point where it terminated. The sequential relationship of Group 47 to Groups 45/46 was not evident. Given, however, that Group 47 did not extend south of Groups 45/46 it is reasonable to assume that for some time at least they were contemporary. Group 47 ran parallel to the Group 48 ditch to its west, being separated by a gap of only 4.5m. The uniformity of alignment of this ditch to the lattice-like arrangement argues for its relating to some point between Phases 105 and 108. The precise function of ditch 47 is not entirely certain though its short length and arrangement indicate that it did not operate as one of the principal boundaries. It may, for example, have served as some sort of stock-holding area. This ditch measured up to 0.93m wide by 0.39m deep and tended to have moderate to steep sides and a slightly rounded base. The single fills of the excavated segments were sandy-silts.

A small nib-like south-west/north-east-aligned projecting ditch, Group 44, extended from a point towards the western end of the Group 42 ditch of Phase 105 (itself a recutting of the Group 41 ditch of Phase 104). The similarity of fill between Groups 44 and 42 suggests that they may have been contemporaneous. The profile of Group 44 was one of gently sloping sides and a concave base, in which only a single fill was evident.

A sub-rectangular enclosure, Enclosure 20, housing settlement features and measuring approximately 32m north–south by 27m east–west was created within the area occupied by Enclosure 7. The southern side of this enclosure was formed by an earlier ditch (Group 35 Phase 105). Its western side was formed by the earlier ditch (Group 49 Phase 103), which was recut by replacement ditch (Group 50), an episode that may relate to some time around the foundation of the settlement enclosure. In addition to pottery and a piece of ferrous slag, the Group 50 ditch also contained a few fragments of tooth enamel and burnt bone. The north and east sides of the enclosure were formed of a right-angled ditch, Group 52, with a slightly rounded north-eastern corner. This spatial arrangement is itself suggestive of the enclosure being grafted onto a pre-existing network of ditches. Indeed, in the adjacent (north-west area) excavations the western end of the northern arm of Enclosure 20 was seen to post-date the principal north–south-aligned ditch (Group 147, Phase 14). The precise relationship between this enclosure ditch and the small east–west gully of Group 33 Phase 105 could not be determined.

Enclosure 20 was accessed via an entranceway some 2m wide located in its southern side, close to its south-east corner. It would appear that this entranceway was the pre-existing one of the ditch of Phase 105. A considerable amount of spoil must have been created during the excavation of the enclosure ditch and this may have been mounded up as a bank on the interior side of the ditch. The distribution of internal features would have permitted this as the closest, the small ring-gully, lays over 3m from the interior edge of the ditch. The scale and proportions of the enclosure ditch suggest that it was intended primarily to provide a low level of security, for example, the holding and/or exclusion of livestock rather than defence. The cuts within the segments of the original ditch were of fairly large proportions, ranging in width from just under 1m to in excess of 1.80m whilst the depths ranged from 0.36–0.83m. The profile tended to be one of fairly steep sides and a rounded base. More than one fill was present within some of the segments and these tended to be quite variable. A small amount of Iron Age pottery and animal bone was recovered from the Group 52 enclosure ditch.

The enclosure accommodated two ring-gullies, one large and one small. The large ring-gully was located fairly centrally within the enclosure and went through three, arguably four, episodes of development, the earliest of which, Group 10, has been included within this

phase (Plate 11). This ring-gully was sub-circular in plan, being slightly elongated on its north–south axis, and measured some 7.25m internally (east–west) by 7.6m internally (north–south). An entranceway around 2.8m wide was present on the south-east side. The width of the gully varied between 0.32 and 0.97m. This variation may be due to Group 10 actually representing two constructional episodes rather than one. This appears to be indicated by the bulging ‘twin-terminal’ appearance of the southern terminal and the increased ditch width in this southern area. The presence of two gullies within the Group 10 contexts was not noted during excavation, presumably due to the similarity of fills. The ring-gully cut had a depth ranging from 0.21–0.41m. It is possible that the variation in depth and width relate to periodic cleaning out of the gully. The fill of the ring-gully was generally a sandy-silt with some clay and contained a number of fire-cracked cobbles and charcoal flecks, together with over 200 sherds of Iron Age pottery (including fragments of crucible, seemingly associated with non-ferrous metalworking). A number of pieces of vitrified furnace lining were also present within the ring-gully fill, as were large numbers of fragments of burnt bone and other materials. Towards the end of the northern terminal large quantities of pottery fragments, including the possibly deliberate deposition of a near-complete base of a vessel, were recovered. Two post-holes are believed to relate to this episode of construction on spatial grounds as they were located close to, and almost symmetrically to, the two terminals. Both post-holes were large, sub-circular, near vertically sided and had slightly rounded bases. This ring-gully is interpreted as a roundhouse, with the two post-holes forming a porch-like entrance.



**Plate 11** Sequence of ring-gullies of Groups 10–12, looking north-west, scale unit 0.5m

The smaller ring-gully was located in the south-eastern part of Enclosure 20 and had evidence for two episodes of development. The earlier of these episodes (Group 7) has been included within this phase. Group 7 was partially truncated by its later replacement and only a single 'arc' of gully survived. On the basis of this arc it is possible to suggest an original internal diameter of around 3.5–4.0m, slightly larger than its replacement. The absence of the remainder of the ditch is because of truncation, mostly by ploughing. The surviving portion had a width of 0.17m–0.55m and a depth of up to 0.08m, though was mostly considerably shallower. The profile of the surviving parts of the ditch was of gently sloping edges and a concave/slightly rounded base. The silty-sand fill of the ring-ditch contained a number of fire-cracked stones, charcoal and fragments of tooth enamel. No other features appear to be related to this ring-gully. It may be that this feature was too small to have served as a roundhouse for human occupation and alternative functions for the housing of livestock or as a gully around a hayrick may be appropriate.

#### **Dating evidence for Phase 106**

Only a few sherds of Iron Age pottery, relating to the extension of the lattice system, were recovered from ditch 30. The Group 50 ditch of the settlement enclosure produced substantial quantities of Iron Age pottery, whilst ring-gully 11 contained around 200 sherds. Other readily datable finds from this phase were flint objects of the Mesolithic–Neolithic that probably derive from reworking of soils and erosion.

#### **5.5.15 PHASE 107, RECUT ENCLOSURE 20 AND FURTHER INTERNAL DEVELOPMENT**

This phase incorporates the recutting of Enclosure 20, Group 53, and the replacement of both large and small ring-gullies, Groups 11 and 6 (Figures 18, 19, 20). In the absence of stratigraphic ties between these features it cannot be stated with absolute certainty that these three episodes were entirely contemporaneous and it is, for example, entirely feasible that the small ring-gully of Group 6 could relate to Phase 108. It is assumed that the lattice-like arrangement of ditches continued to function throughout this phase.

The recut line of the enclosure ditch, Group 53, followed the same course as that of its predecessor, but truncated Group 33 of Phase 105 and Group 50 of Phase 106. In the same segment in which the relationship with gully 33 was examined, two recuttings of the enclosure were identified (contexts 1346 and 1330). Secondary recuttings were not recognised in any of the other segments and whether this genuinely indicates that there were three episodes of this enclosure rather than two is not entirely certain. It may be that this third cut represents a restricted clearing out of the ditch. Several of the excavated segments of Group 53 had more than one fill. A large amount of Iron Age pottery, together with animal bone and heat-cracked stone, was recovered from this ditch, particularly in the southern part



of the eastern arm of the enclosure close to the entrance. A hammer-stone, together with a core rejuvenation flake, were also recovered from the ditch of Group 53. Although some of the finds material may relate to an episode of abandonment, the proximity of the concentration of the discarded materials may relate to the closeness of the roundhouse to the enclosure entrance, in other words, discard of materials at the nearest convenient location. A few pieces of Roman CBM were recovered from an upper fill of the Group 53 ditch.

A reworking of the large ring-gully is represented by Group 11 which comprised the single fill and cut of the north-eastern part of a gully – the remainder being truncated by a later recutting. The surviving elements of the Group 11 consisted of the northern terminal and a short stretch of ditch (approximately 3.35m). The gully was around 0.45m wide and up to 0.15m deep. The ditch profile was one of moderately steep sides and a rounded base and the fill was a sandy-silt which contained some burnt cobbles. No other features can be positively associated with this group.

The second and final episode of the small ring-gully is represented by Group 6 (Plate 12). Much more of this structure survived than its predecessor, although some truncation by ploughing and modern land drains was evident. This gully was almost perfectly circular and had an internal diameter of around 3.5m. The gully itself had a width of up to 0.62m, though on the more truncated eastern side it is less than 0.1m wide. Typically the depth of the ring-gully was up to 0.17m, though again considerably shallower on the eastern side. A narrow gap in the ring-ditch some 0.64m wide was evident on the eastern side. This putative opening lay in an area of truncation and the terminals were seen to fade out. It is possible that this gap is the result of later truncation and may not represent an opening, i.e. that the ditch was originally continuous. The cut of the ring-gully had moderately sloping sides and a slightly rounded base. The fills of the ring-gully were typically dark silty-sands and contained fire-cracked stones, charcoal fragments, and chunks of reddish-brown mineralised material. Twenty sherds of Iron Age pottery, a piece of ferrous slag, several lumps of vitrified furnace lining, together with a handful of other finds, were also recovered from the Group 6 ring-gully. A series of eight small, narrow and shallow stake-holes were observed at the base of one of the excavated segments. Six of these have the appearance of being paired in three clusters, with the remaining two being more isolated. It may be that these are animal burrows rather than stake-holes. There were no other apparent features which can be related to this ring-gully.



**Plate 12** Excavated ring-gully (Group 6 and arc of earlier unexcavated ring-gully 7) looking west, scale unit 0.5m

#### **Dating evidence for Phase 107**

Over 400 sherds of Iron Age pottery were recovered from the recut enclosure ditch, A few pieces of Roman CBM were recovered from an upper fill of this same ditch, but could be post-abandonment in origin. A number of flint implements diagnostic of the late Neolithic–early Bronze Age appear likely to have entered these fills through reworked deposits.

#### **5.5.16 PHASE 108, LATEST ENCLOSURE 20 RING-GULLY**

This phase represents the latest episode of cutting of the large ring-gully in the central part of Enclosure 20 (Figures 18, 19, 20). This ring-gully (Group 12) was sub-circular in plan and had an internal diameter of around 8.7m. A wide opening was present on the south-east side, measuring some 6.1m between the terminals. The width of the gully varied between 0.34 and 0.73m and the depth from 0.11–0.28m. The profile of the gully was generally one of moderately steep sides and a rounded base. In the western side of the gully (context 1205) the plan-form of the ring was slightly stepped and had the appearance of two sections of gully meeting. This irregularity may relate to digging of the gully starting at both terminals and meeting at this point. Alternatively, this effect may represent a redefinition of the ring-gully at this point. The fills of the ring-gully segments were dark sandy-silty-clays that contained occasional heat-fractured cobbles, charcoal flecks together with three sherds of Iron Age pottery. No other features were positively related to this ring-gully.

### **Dating evidence for Phase 108**

The few sherds of pottery recovered from episode suggest an Iron Age date.

#### **5.5.17 PHASE 109, ENCLOSURE 20 FEATURES RELATING TO ANY OF PHASES 106–108**

The components of Phase 109 comprised an alignment of five post-holes, a shallow curvilinear feature and an isolated post-hole type feature (Groups 23 and 71) (Figures 18, 19). All are located within Enclosure 20 and have no stratigraphic links with any other features. Whilst it is probable, though cannot be proven, that these features are contemporary with the life of Enclosure 20, their temporal placement cannot be refined further than to state that they are likely to belong to the span of Phases 106–108.

The Group 23 north–south alignment of five post-holes was located a short distance to the north-west of the large ring-gully. All the post-holes were of a regular sub-circular plan-form and well formed, though the northern one was very shallow. The spacing between the posts was between 0.2 and 0.6m. Although no finds or other dating evidence were recovered from the post-holes, their regularity of form and arrangement (the line being roughly parallel, and at 90 degrees to the sides of the enclosure) leaves little doubt about their genuine nature. No evidence was found for post-pipes, though the stone element within the fills may have served as packing. Whilst the individual post-holes are stratigraphically separate from one another, their arrangement does suggest the likelihood of their being contemporary. The precise origin and function of the line of post-holes is uncertain though it would appear likely that they formed part of a barrier or structure.

A shallow curvilinear feature (Group 71) was located immediately to the south-west of the large ring-gully within Enclosure 20. This had a length of 3.4m, a width that ranged from 0.36–0.88m and a depth generally of little more than 0.1m. The origin and function of this slightly amorphous feature is not known. A small quantity of Iron Age pottery was recovered from its fill.

The isolated post-hole type feature (Group 71) was located a couple of metres to the north-north-east of the large ring-gully. This was sub-circular in plan, had a diameter in excess of 0.5m, a depth of only 0.1m and was steep sided with a flat base. The proximity of this feature to the ring-gully complex suggests they were related, though to which group or episode is not known.

### **Dating evidence for Phase 109**

None of the post-holes contained any finds material. A small amount of Iron Age pottery was present in the curvilinear feature.

#### 5.5.18 PHASE 110, RING-GULLIES, RELATING TO ANY OF PHASES 105–108

A number of ring-gullies that lack stratigraphic relationships to other features but appear on spatial grounds to relate to some time between Phases 105–108 form the members of this phase, Groups 3, 4, 5, 8, 9 and 18 (Figures 18, 21, 22; Plate 13).



**Plate 13** Ring-gullies of Groups 4, 5, 8/9 (8/9 in foreground) looking north, scale unit 0.5m

The smallest of the ring-gullies was that of Group 3. This was nestled towards the southern end of the space defined by several ditches (Group 31 of Phase 105 and Groups 29–30 of Phase 106), in the northern, gently sloping, part of the site. The internal diameter of the ring-gully was slightly over 4m whilst the width was between 0.36 and 0.54m. The surviving depth was between 0.14 and 0.21m. The gully had sides that were generally fairly steep and a base that ranged from rounded to flattish. The single sandy-silt gully fill contained a few heat-fractured cobbles and flecks of charcoal, a piece of utilised flint, a few small fragments of cinder/slag and a single sherd of Iron Age pottery. An opening some 2.6m wide was present on its south-west side. A large pit-like feature occupied the central area of the ring-gully. This cut was ovate in plan-form and measured some 1.74m x 1.32m, with the long axis aligned north-west/south-east, and was some 0.21m deep. This pit had steep sides and an almost flat base. The single pit fill of silty-sand contained a few flecks of charcoal, a number

of heat-cracked cobbles, a piece of ferrous slag and a single sherd of Iron Age pottery. There was no indication of this ring-gully being replaced or realigned.

In the area immediately south of Enclosure 20 there was a concentration of ring-gullies, Groups 4, 5 and 8/9 together with a short stretch of curvilinear gully, Group 18. The curvilinear stretch, or partial arc of gully, Group 18, measured in excess of 3m long and was located immediately to the south of the adjacent ring-gullies. The gully had a fairly constant width of around 0.2m and a depth typically between 0.05 and 0.07m. The profile was one of gentle to moderately steep sides and a rounded to concave base with the ends of the gully rising quite gently. The silty-sand fill contained occasional flecks of charcoal. Given the shallowness of the feature it is possible that it was once more extensive, perhaps forming a ring-gully that has largely been lost to subsequent truncation. Were this to be the case, then a sequence of ring-gullies with those of Groups 8/9 would be implied. Alternatively, it may have formed a setting for a less extensive structure such as a wind-break. No finds were recovered from this feature.

The north-eastern of the ring-gullies was that of Group 4 whose northern side was located approximately 1.5m to the south of the southern side of Enclosure 20. This sub-circular ring-gully had an internal diameter of between 6.9 and 7.04m. The width of the ring-gully was 0.27–0.49m, whilst its surviving depth was 0.1–0.21m. In profile the gully was generally moderately steep and had a rounded base. The gully contained what was a single fill of sandy-silt, albeit with minor variations. A number of heat-fractured cobbles together with occasional flecks of charcoal, burnt fragments of bone and tooth, were present within the fill as was a single sherd of Iron Age pottery. An opening some 3.44m wide was present on the north-north-west side. In the area of this opening there were two post-holes. The largest of these, context 1400, was located in the entranceway and this position may suggest it related either to a door/covering or else served as a structural support. The smaller post-hole, context 1402 (sub-circular, some 0.14m across by 0.16m deep) was located immediately adjacent to and outside the western terminal; this may have served function(s) similar to those proposed for context 1400. Two small shallow stake-hole-like depressions were evident within the ditch cut on its eastern side and a further one just outside the ditch on its south-south-west side. These may have formed subsidiary structural elements. No evidence for anything other than a single episode of construction was noted. A small amount of Iron Age pottery was recovered from this feature.

The Group 5 ring-gully lay 2.5m west of the Group 4 ring-gully and approximately 1m south of the ditch forming the southern arm of Enclosure 20. In plan the Group 5 ring-gully was sub-circular and it had an internal diameter that ranged from 4.1 to 4.3m whilst the gully itself

had a width of 0.4–0.62m and a depth of 0.25–0.27m. A narrow opening some 0.68m wide was present on the western side of the feature. The profile of the gully was for the most part one of very steep sides with a flattish/slightly concave base. The ditch contained a single silty-sand fill in which a few flecks of charcoal, fragments of bone and tooth enamel, burnt cobbles, a worked flint and nineteen sherds of Iron Age pottery were present. A single sub-circular post-hole, context 1192, measuring some 0.25m in diameter and 0.26m deep, was situated immediately adjacent to the interior of the ditch on its east-north-east side. The proximity of this post-hole suggests it may have been related, though whether as a structural element or otherwise is uncertain. Only a single episode of construction appears to be represented within Group 5.

The ring-gully of Group 8 and the surrounding discontinuous gully of Group 9 lay some 1.5m to the south of the ring-gullies of Groups 4 and 5. This ring-gully was almost perfectly circular and had an internal diameter of almost exactly 7.2m. A narrow opening some 0.64m wide was evident on the south-west side. The gully had a width that ranged between 0.32 and 0.56m and a depth of 0.12–0.25m, generally closer to the latter. The profile of the ring-gully was generally one of moderately steep sides with a base that was rounded or slightly V-shaped. The single fills were all silty-sands. These contained a significant number of heat-fractured cobbles, two lumps of ferrous slag, a quantity of burnt and unburnt bone, and tooth enamel together with two sherds of Iron Age pottery. On the south-east side the fill contained some sandier material in which the amount of stone was greater, particularly in the area of a post-hole context 1428. This post-hole clipped/cut into the inner edge of the ring-gully in its south-eastern parts. The proximity of the post-hole may suggest close association, perhaps for some additional internal support for the structure.

The three stretches of discontinuous ring-gully of Group 9 were located centrally around ring-gully 8 at a distance of around 0.45m. The stretches of curvilinear gully/ditch measured 2.6–5.9m in length, had widths ranging from 0.34–0.61m and depths of 0.13–0.21m. The profiles of the gullies ranged from V-shaped to wide U-shaped, this being of greater variation than apparent in the Group 8 inner ring. The ends of each of the three gullies formed distinct terminals; they did not fade out due to later truncation. The fills of all three gullies were broadly similar silty-sands within which fire-cracked stones, a few charcoal fragments and 40 sherds of Iron Age pottery were found. Also present were a single grain of emmer/spelt wheat, a grain of barley, an oat fragment and a nut of sedge. It is tentatively suggested that the three outer gullies of Group 9, which mirror the arc of the Group 8 inner ring-gully perfectly, are directly associated with the inner ditch – perhaps they provided additional drainage once such a need was recognised – rather than forming an independent structure.

### **Dating evidence for Phase 110**

With the exception of the short stretch of curvilinear gully, Group 18, varying quantities of Iron Age pottery was recovered from each of the ring-gullies. Whilst a small quantity of earlier flint implements within this phase seem likely to have originated via reworking of deposits, no finds post-dating the Iron Age were found.

#### **5.5.19 PHASE 111, VARIOUS PREHISTORIC FEATURES, UNPHASED BUT PROBABLY RELATING TO PHASES 103–108**

The features within this phase are all stratigraphically isolated and cannot readily be associated with other phases of the prehistoric sequence on spatial or other grounds. Whilst the dating of these features is uncertain, most bear characteristics suggestive of a prehistoric date. These include a ring-gully, a number of pits, post-holes and an agglomeration of burnt stones (Figures 18, 21).

The largest of these features was the ring-gully of Group 17 located in the south-east corner of Area A1 on level ground to the south of the hill slope. The ring-gully lay close to a corner within the lattice of ditches over 120m to the east of the cluster of ring-gullies within, and immediately adjacent to, Enclosure 20. The ring-gullies of the A2 enclosure lie some 80m to the south-east. The plan-form of Group 17 was of a roughly semi-circular arc, and the gully tapered and bulged for much of its course. The widest point of the gully was some 7.12m (internally). The gully itself was shallow, with a depth range of 0.05–0.16m and a width of 0.2–0.51m. The profile of the gully was typically one of gently sloping sides and a concave base. The fills of the ring-gully were generally dark clayey silts and contained a few charcoal flecks, together with two fragments of burnt bone and a sherd of what appears likely to be Bronze Age pottery. The shallowness of the gully and the manner in which the ends of the gully faded out, rather than rising as well-formed terminals may suggest considerable truncation. Such truncation may account for the semi-circular plan-form of the feature which was perhaps originally more of a complete circle. The presence of a sherd of putative Bronze Age pottery may suggest that this feature belongs to an earlier phase of activity rather than Phase 111 as presently attributed.

A small isolated pit-like feature (Group 69, set 184), was located some 10m to the west of the Group 17 ring-gully. This feature was slightly irregular in plan (generally sub-oval) fairly steep sided and with a predominantly flat base. It measured up to 0.73m across and 0.11m deep. The silty-sand fill contained occasional charcoal flecks, but no readily dateable artefacts.

A much larger pit, Group 21, was located in the north-eastern part of A1 (Plate 14). This pit had eight fills, the lowest of which were laminated and which appear to have formed in watery conditions. The only finds from the pit were of charcoal, burnt stone and one unidentified charred grain of cereal. The pit was sub-circular in plan-form and measured some 1.8m across and 0.75m deep. The break of slope at the top was moderate to steep, breaking after a short distance to steep (generally vertical) sides, which in turn broke sharply to the base which was fairly flat. The function of the pit is not certain. The prevailing wet ground conditions render use as a storage type pit highly unlikely. Were it to have been for the collection of ground-water, evidence of a lining material might be anticipated. It may be that this pit served for refuse disposal.



**Plate 14** Pit cut 1702 (Group 21) looking south, scale units 0.10m

A pit (Group 70) backfilled almost exclusively with stone was located in the north-west area of the main part of A1. The pit cut was oval in plan with its long axis orientated north-west/south-east. The feature had a sharp break of slope, steep sides and a concave base, measured 1.8m x 0.88m, and had a depth of up to 0.44m. The pit was filled predominantly with fire-cracked stones but also contained some unburnt stones and a very small quantity of small fragments of cinder/slag. The evidence from this feature suggests that the burnt material was produced elsewhere and was deposited in the pit, though whether whilst still



hot, or cold, is uncertain. Many of the stones in the lower part of the fill were large and unburnt. The base of the cut itself showed no evidence for burning in the form of heat discolouration to the sandy edges. If the stone was deposited hot, then this pit may have functioned as a cooking pit. There seems little functional reason to bury burnt stones if they are purely waste.

A thin spread of fire/heat-cracked cobbles (Group 69), approximately 2m across, was located in the southern part of the excavation. No other finds were associated with this material which occurred stratigraphically between the subsoil and natural sands. Elsewhere across the site such heat-cracked cobbles were commonly found within the fills of prehistoric features.

A total of eight post-holes relating to four groups were widely distributed across the site. In the smaller western area of excavation Groups 66 and 67 were present to either side of the Phase 105 Group 57 ditch. Group 66 comprised a cluster of three post-holes that were distributed in a roughly east–west line and were separated from one another by less than 1m. All were sub-circular in plan, had moderate to steep sides and concave bases. Generally just over 0.3m in diameter, the depth of the post-holes ranged from 0.03–0.17m. None of these produced any datable finds material. Group 67 comprised two post-holes, again following the roughly east–west line of the adjacent Group 66, and were separated from one another by little more than 0.6m. Both post-holes were sub-circular/ovate in plan and displayed steep sides and flat bases. Both measured around 0.4m across and had depths ranging from 0.22–0.27m. Neither of these produced any datable finds material. Given the spatial and alignment similarities of Groups 66 and 67, it is quite possible that they were directly associated. Group 24 comprised two post-holes located in the north-east part of the excavation. One post-hole was located some 2.5m east-north-east of the other. Both were of similar proportions and shape, typically oval/sub-circular, steep sided, flattish based with diameters in excess of 0.4m and depths of 0.35–0.37m. Their proximity to one another, together with their similarity of form, suggests that the two may be associated. A single sherd of Iron Age pottery recovered from one of these may reflect their origin. A single post-hole was located immediately adjacent to the intersection of several ditches in the south-east corner area of Area A1, Group 69, set 183. This feature was sub-square in plan, measured up to 0.22m across, was vertically sided, had a flat base and a depth of only 0.05m.

#### **Dating evidence for Phase 111**

There were few datable finds recovered from deposits within this phase, these being limited to a sherd of pottery from the Group 17 gully that may have some possible Bronze Age affinities and a sherd of Iron Age pottery from one of the post-holes of Group 24.

The east–west-aligned ditch of Group 147 of Phase 14 (north-west A1) can be correlated with the ditch of Group 52 (remainder of A1) which forms the north-western part of the ditch of Enclosure 20.

## **5.6 CONTINUITY OF IRON AGE AND ROMAN**

### **NORTH-WEST A1**

#### **5.6.1 PHASE 20, SECOND MID-WEST DITCH RECUT**

This phase (Figure 14) represents the undertaking of a second recut of the mid-west ditch (Group 145) which was backfilled and levelled (Group 183) prior to the formation of erosion gullies (Group 156) in the top of it.

Group 145 includes Sets 490 and 492–3. This recut was excavated in several segments, with each one being allocated its own set number. The northernmost of them was located 24m south of the northern trench edge and was allocated Set 492, with Sets 493 and 490 following southwards. This ditch had been cut down the line of the Phase 19 ditch and it had a slightly sinuous, linear shape in plan, was 37.53m x 1.2m x 0.47m, and had a moderate to steep U-shaped profile. The base fell gently towards the south. It probably continued for a further 88m in that direction, to run beyond the trench edge, but as it was not investigated beyond the reduced area of excavation, this could not be ascertained. Its fills comprised dumps of coarse sand or sand silts with moderate or frequent small to large pebble inclusions with, in some instances, organic material present. Animal bone was recovered from Set 492 deposits 1730, 1738 and 1746, which also went on to produce a flint-backed blade (Sf322). Set 493 deposits 1662 and 2161 were sampled (217 and 313, respectively) due to their high organic content. Sample 217 showed a few wood fragments and a little charcoal was present, whereas 313 was inconclusive. Deposit 2413 stood out as produced a complete cow skull, minus its lower mandible. Further animal bone was recovered from deposit 2154.

Group 183 comprises Sets 489 and 854 and represents the infilling of the slump-hollow formed above the settled fills of the Phase 19 recut of the mid-west ditch. The majority of comprised natural accumulations of alluvial and wind-blown sands which had been subject to limited human interaction. This was most noticeable in Set 854 where animal bone was recovered from deposit 1761 and 1987, which also went on to produce a flint core rejuvenation flake (Sf89).

Group 158 comprised erosion gullies which had cut down into the top of Group 183 deposits.

### **Dating evidence for Phase 20**

Group 183 produced Iron Age pottery whereas Iron Age pottery and Roman Ebor ware were recovered from Group 145. Residual flint implements were recovered from both.

#### **5.6.2 PHASE 21, LEVELLING OF SLUMPED FEATURES AND REINSTATEMENT/REPAIR OF PHASE 11 COBBLE SURFACE**

Phase 21 (Figure 15) comprises Group 146, 159 and 184 deposits and features. These represented the final levelling of the still slumping fills of Phase 20 mid-west ditch recut and several features located around it (Group 146). After they were levelled, Phase 11 surface 2396 (=2432) was repaired and extended further towards the east (Group 159). Group 184 comprises features cut into the top of surface 2396 (=2432) and the levelled mid-west ditch.

Group 146 includes Set 482, 494–96 and 875–6 levelling deposits, which were mostly sands or sandy clays where dumps of redeposited natural appeared to have been predominant. An erosion gully (Set 876) which had abraded the top of Set 496 deposits is also included in this group. As with the ditches, these deposits were excavated as a series of intermittent lengths, each one being placed within its own set. The northernmost of these was Set 482, which was followed southwards by Sets 495, 494 and 496. Set 482 deposit 1543 produced two lumps of iron slag (Sf26) and an iron nail (Sf75). Set 495 deposit 1642 stood out as it had a medium to high organic/humic content, so a GBA sample (223) was taken and assessed. It consisted of a decayed plant matrix (roots/rootlets, wood fragments and unidentifiable) with charcoal fragments, charred grain, and a small amount of decayed plant seeds and fruits present. The plant species were indicative of a variety of habitat, including standing water, grassland, meadow, scrub and hedgerow. The uppermost deposit, 1564, produced a complete red deer antler (Sf159; see front cover, Assessment Report Appendices) which had been placed over the centre of the underlying infilled mid-west ditch and was similarly aligned. A small part of the skull was still attached to the base of the antler, suggesting that it had been taken from a butchered kill rather than being a chance find of a natural moult. Animal bone was recovered from Set 495 deposits 1609, 1642 and 1669, which also produced a flint double-crested flake (Sf157). Set 875 contexts 1610, 1621 and 1599 also produced animal bone. A flint end scraper (Sf65) and a section of alder root (SA280) were recovered from deposits 1599 and 1610, respectively. A GBA sample (206) of organic deposit 1600 was submitted for assessment. Apart from attesting to the presence of large stones, a little brick/tile and charcoal fragments, it was inconclusive. Set 496 comprised a linear pit or erosion gully (2142) which had truncated the top of the Phase 20 mid-west ditch recut. Only its basal fill (2130), a build up of a manganese-flecked grey-brown sand, could be described as 'just' an erosion gully. The rest of its fills were similar to those observed elsewhere in Group 146 and suggested that it had been deliberately infilled. One of these levelling deposits, 2012,

produced a flint plano-convex knife (Sf91). Set 876 cut 1775 was an erosion gully which had become filled with natural banded sands

Group 159 comprises Set 860 and 863 deposits and represented the levelling, repair and extension of the Phase 11 metallised surface 2396 (=2432) after the slumped fills of several cut features had been levelled (Group 146, above). The majority comprised small to medium pebbles in a silt matrix of varying hue. Set 860 deposit 2015 was north–south aligned, 7.39m x 2.76m, and was thought to represent an extension of the Phase 11 surface 2396 (=2432) towards the east. After it was laid it had slid down the western edge of the underlying Phase 20 mid-west ditch recut as its fills continued to settle, pulling both it and surface 2396=2432 apart, rendering it untenable for use. This was later rectified by the formation of a new surface. Animal bone was recovered. Deposit 1603 (=2394) represented a rather shoddy repair of surfaces 2015 and 2396 (= 2432) combined. Although it was truncated by a modern trial trench and running section, it could be extrapolated that it had been rectilinear in plan, east–west aligned, 8.5m x 6.45m x 0.15m. It also produced animal bone. Animal bone, flint flake (Sf161) and two flint objects (Sfs162–3) were recovered from its equivalent, 2394. A GBA sample (207) of deposit 1603 was taken and assessed but proved to be inconclusive.

Group 184 includes two pits cut into the top of surface 1603 (above), as well as an isolated post-hole which, although located some distance away, was thought to have been contemporary. Set 872 pit 2782 had been cut into the southern edge of surface 1603, where it was sub-rectangular in plan, east–west aligned, 0.72 x 0.42 x 0.45m, with gentle to steep sides and a flat, uneven base. Its fill (2683), a mid-brown organic-rich sandy silt (intermixed with patches of highly organic material), was shot through with many lenses of blue-grey sand. The formation of the lenses suggested it had filled up naturally and had, therefore, been left open for some time. The presence of fragments of roundwood (one halved; SA796), a section of forked roundwood (Sf261) and a flint scraper (Sf263) suggests that visits were made while it was silting up. Pit 1605 had also been cut into the top of surface 1603, but in this instance it was located close to its northern edge, some 5.65m due north of pit 2782, above. It was sub-circular in plan, 0.4m x 0.15m, with vertical sides and a flat base. The profile of cut 1605 was suggestive of the remnants of a truncated post-pipe, but as it was very shallow and lacked indications for a post-hole cut, guide-hole and/or post-packing, it would seem highly unlikely. It was backfilled with a dark grey-brown silty sand with frequent pebbles and moderate charcoal flecks (1604). Post-hole 1771 was located 5.65m south-east of pit 1605, where it had been cut into the south-east edge of Phase 20 levelling/build-up deposit 1987. It was almost square in plan (with rounded corners), east–west aligned, 0.4m x 0.38m x 0.1m, with steep sides and a gently rounded base. It was thought to have been the

impression of a square post-base (based entirely on the form of the cut). Its backfill (1770), a pebble-rich organic sandy clay, gave no indication of its use.

#### **Dating evidence for Phase 21**

Group 159 produced Iron Age pottery. Groups 146 and 149 produced both Iron Age and Roman pottery, as well as a fragment of Roman CBM (brick). Further 2nd- to 3rd-century Roman pottery was recovered from Group 184. Residual flint tools were found throughout.

#### **5.6.3 PHASE 22, FEATURES SEALING/CUT INTO PHASE 21 DEPOSITS**

Phase 22 (Figure 16) comprises Groups 157 and 162. Group 157 (Sets 859, 865 and 868–9) represents the final episode of the repair and/or reinstatement of the Phase 21 metalled surface, the formation of a stone footing of indeterminate use (Set 868) and the digging of an elongated pit or short length of ditch (Set 869). The repair of Group 157 surface was achieved by levelling several earlier cut features as their fills had settled and slumped. Group 162 comprised Set 871 deposits, used to level the ground after Set 869 pit/ditch (and probably Set 868 footing) was infilled.

Group 157 cut 1852 was difficult to interpret as it had been heavily truncated by an exploratory slot, removing most of its centre. What remained suggested it was a north–south-aligned linear cut, 2.94m x 0.89m x 0.3m, with rounded ends and a flat-bottomed U-shaped profile. Although unclear, its northern end was assumed to match the extent of standing 1767 (below) and, if so, it had cut the top of a Group 142, Phase 18 levelling deposit. The base was purposefully lined with large stones and pebbles (1767) 0.1m thick, with smaller stones wedged between. It may have been the relict foundation of a robbed-out structure or stone water tank. Because of these uncertainties it was interpreted as a foundation/standing of indeterminate use. The fills were all sandy in nature and were representative of a combination of natural silting and dumped, reworked natural. One of these (1745) produced burnt animal bone. Cut 1683 was located 2.5m north-west of standing 1767 and may have been contemporary with it. This feature was linear in plan (rounded ends), north-north-east/south-south-west aligned, 3.08 x 1 x 0.32m, with steep sides and a flat base, giving a flat-bottomed U-shaped profile. The base fell gently towards the south-south-west, where it had been cut into the top of a Phase 18 deposit. On the north-west side of the cut, close by the southern terminus, the base was truncated by a pair of very shallow, square-shaped cuts interpreted as a pair of post impressions. Its backfill (1682) comprised a dark grey silt sand with frequent small–medium pebble inclusions, suggesting that it was deliberately infilled at the end of its use, rather than being left to silt up naturally. It produced fragments of unidentifiable burnt animal bone.

Set 868–9 features appeared to have been contemporary with the above and represented the repair and rebuilding of the Phase 21 surface 1603 (=2394). Initially this entailed the levelling of the slumped fills of several earlier features with Set 859 and 865 deposits, comprising mid-grey-brown clay sands with frequent cobble and pebble inclusions. Of these, deposits 1677 and 1998 produced animal bone, whereas deposit 1588 produced flint flakes (Sfs139–40), animal bone and a glass bead fragment (Sf138). Context 1585 was an extensive, 4.85m x 3.96m deposit of compacted light brown-grey sand which may have been used as a levelling/consolidation deposit, or may have been a surface in its own right. Deposit 1623 was located immediately to the east of it and is thought to be the only Group157deposit that could be reliably classified as a surface. It was 6.75m x 3.27m and comprised small–medium pebbles, in a dark grey-brown silt sand matrix with occasional charcoal flecks. Animal bone was recovered.

Group 162 levelling deposits 1537–8, 1545 and 2356 had been used to level uneven ground after cut 1683 was infilled. The primary dump (1545=1537) in this sequence sealed the top of it and comprised a firm, light olive-brown-grey silt sand with frequent small stones and occasional pebbles. The green colouration of deposit 1545 suggested the presence of broken down cassy, organic materials, so a GBA sample (224) was taken and assessed. Despite attesting to the presence of a minuscule amount of seeds and a little coal, it was inconclusive. Deposits 1538 and 2356 both comprised a loose, dark grey-brown coarse-grained sand with occasional pebbles. They could only be discriminated by the presence of a little charcoal and animal bone (some burnt) in 1538. After the ground was levelled, the area appeared to have been abandoned due to the widespread and extensive settlement of the fills of underlying palaeochannel(s) and the features cut into them (see Phase 23).

#### **Dating evidence for Phase 22**

Group 157 and 162 both produced fragments of Iron Age and Roman pottery (Ebor ware).

#### **5.6.4 PHASE 23, CONTINUED SLUMPING OF PALAEOCHANNELS AND FEATURES**

Phase 23 (Figure 17) comprises Sets 877 and 878, Group 165 features. Set 877 represents the formation of an extensive slump-hollow and includes a primary build up of wind-blown alluvial sands combined within it. Set 878 deposits sealed the top of Set 877 and were representative of a secondary stage of silting, a build up of colluvium, which went on to fill the top of the hollow.

Set 877 slump-hollow was designated as a cut (1565) yet it was entirely natural in formation and had resulted from the combined settlement and shrinkage of the fills of Phase 1 palaeochannels and all features cut into them. Although it had a stratigraphical relationship

with a multitude of deposits (too numerous to list), it will suffice to note that it had formed above after the end of Phase 22. Cut 1565 was located just inside the western trench edge and it was north–south aligned, amorphous in plan, c.208m long and continued beyond the north and south trench edges. Due to its considerable size, it was decided to machine excavate a 40m length at the northern end, where it proved to be 20m x 0.74m. The east–west profile was in the form of a relatively shallow, wide, bowl-shaped hollow. The north edge had a similar shaped profile, but tended to be steeper where it abutted an east–west-aligned boulder clay outcrop which ran the length of the northern edge of A1. The base of cut 1565 was sealed by a c.0.18m thick build up of compacted, mid-grey silt sand (1534) which extended for over 25m north–south and 15m east–west. Only the northern part of it was planned and recorded. As this deposit only comprised bleached alluvial and/or wind-blown sands, a GBA sample (179) was taken with a view to gaining an understanding of the depositional processes involved. When a sub-sample was assessed it was found to be almost completely sterile, suggesting that 1534 had built up through natural processes. The lack of charcoal and other settlement-related material suggested that the area was deserted throughout its formation.

During this time, however, at least one visit had been made to deposit a variety of objects, comprising an iron nail (Sf47), iron object (possible hook/lynch pin; Sf52), a coin hoard (four silvered bronze Centenionalis, Magnentius, AD 350–53 (Sfs53–56) and three, possibly four, copper alloy, Constantius II, c.AD 350s (Sfs49–51 and 57–59)), a copper alloy fragment (Sf49) as well as a flint flake (Sf318), a fragment of lead (Sf48) and a fragment of haematite (Sf349). These were placed along a loose east–west alignment in the south-west quadrant of 1534 and are thought to constitute ritual deposition. Although fragments of pottery and animal bone were found in association, it was not clear if they had been introduced at the same time or for the same purpose. All the coins, metalwork, bone and pottery were located within the mass of deposit 1534 and did not appear to have been placed within a deliberately cut feature(s). As 1534 appeared to have been formed in a body of standing water and/or waterlogged ground (a body of water was often favoured as the location for ritual activities), it is quite possible that the coins and metalwork were introduced during the active formation of the sands and had, therefore, been covered as it continued to build up. Deposits 1563 and 1663 were located close to the edge of the north-east quadrant of cut 1565 and were also alluvial in origin. Their proximity to the edge of the cut suggested that they may have been washed into the hollow during a period of high-energy water flow (hence the pebbles), after being scoured from the higher ground to the north. Deposit 1563 produced another coin (Sf24; bronze radiate; Gallienus; AD 253–68). Deposit 2419 had built up in the remnants of a shallow water-abraded channel cut down into the top of deposit 1565 and it preceded the formation of deposit 1518. This comprised a sandy colluvium or hill-wash which extended the

full 208m length of the western side of Area A1. Roman pottery, medieval pottery and animal bone were recovered. The medieval pottery was probably introduced by ploughing (see Phase 24) and is regarded as intrusive. 1518 was sealed beneath a small, isolated deposit (1871) gathered in a small water-cut hollow, suggesting that the area was still subjected to periods of flooding as 1518 was building up.

### **Dating evidence for Phase 23**

Fragments of Iron Age pottery, Roman pottery, Roman brick and a coin (AD 253–68) were recovered from Group 165 although it was more precisely dated to the latter half of the 4th century by the presence of a coin hoard.

### **REMAINDER OF A1**

5.6.5 PHASE 112, CONTINUITY OF IRON AGE FEATURES AND ROMAN PERIOD FEATURES (Figure 23) The evidence of datable finds from the north–south-aligned ditches of Groups 39 and 48 (both in Phase 105) suggests that these features remained open until well into the Romano-British period. These ditches have already been discussed and the curiosity of their displaying no discernable evidence for recutting considered. The infilling of Group 39 produced a number of sherds of a smashed, but almost complete, Roman flagon (context 1789) and a barbarous radiate of Tetricus I or II dating to around the AD 270s (context 1911). The backfill of Group 48 produced ceramic building material dating from the 1st–4th centuries AD. These well-stratified finds leave little doubt that these ditches survived well into the Roman period.

The north–south-aligned ditch extending from the waterhole area (Group 49 Phase 103, recut as Group 50 Phase 106) is known to have had a long and complex history. Group 51 represents the latest recognised recutting of this ditch, which post-dated the latest recutting of Enclosure 20. The dating evidence for the Group 51 ditch comprised a sherd of Iron Age pottery and another of Roman date. Although the recutting represented by ditch 51 has been tentatively placed within the Roman period it is possible that it may in fact relate to the late Iron Age.

In all cases where a stratigraphic relationship was apparent Groups 39, 48 and 51 of this phase were seen to cut through earlier east–west-aligned ditches. Whilst the case for the survival of these north–south-aligned ditches is strong, it cannot be ruled out that other elements of the prehistoric ditch also survived into the Roman period, though any secure evidence for this has been lost to the mixed zone of the plough-soil.



In the western part of the excavation a number of features of probable Roman origin were found. One of these, Group 15, comprised two stretches of ditch that lay in the southern part of the western area of A1. The north-west end of the eastern element was cut by a later feature, after which it continued into the baulk. The western element of the feature was of slightly wavy appearance and orientated on a more east–west axis and continued westwards beyond the limits of excavation. The two parts of the ditch were separated by a 2.6m gap with each of the arms ending in steep-sided, well-formed, terminals. No post-holes or other features appear to be related to this feature. It is probable that only a small part of this ditch occurred within the excavated area and the remainder of its course is uncertain. The ditch measured 0.48–0.97m wide, 0.13–0.39m deep and had moderately steep sides and a rounded base. Only single silty-sand fills of a fairly homogeneous nature were apparent within this ditch. Occasional flecks of charcoal, a number of small splinters of bone and fragments of Roman imbrex and tegula roofing tile, together with a sherd of Roman pottery and two of Iron Age date were also present.

A substantial curvilinear feature, Group 60, was located towards the western end of the western part of the excavation. The long side of the feature was aligned roughly north–south and ran for a length in excess of 8.5 m; the northern end of the feature curved round through nearly 90 degrees, to the east, for a further distance of approximately 3m. This feature had a width of 0.55–1.01m and a depth of around 0.2m. The sides were moderately steep and the base concave. The primary fills of the segments were sandy-silts and the upper fills clayey-silts containing a high proportion of cobbles and stone, some of which were burnt. Several lumps of ferrous slag were also present in the fills. This feature may have functioned as a drainage gully or demarcating boundary. The slag and burnt stone in the gully may have originated from activity carried out in this enclosed area.

Group 68 comprised a cremation. The fill, a friable, mid-orangey-brown clayey-sand contained large amounts of charcoal and 426g of burnt bone, together with fragments pottery which formed a cremation vessel of Roman date. The burnt bone was composed almost entirely of small fragments in which pieces of possible skull appear to be present. This occupied a cut some 0.55 x 0.5m in area and 0.09m deep which had steep sides, a sharp top edge and a gentle bottom edge. This cremation appears to be isolated, no others being found in the vicinity or elsewhere on the site.

#### **Dating evidence for Phase 112**

Most of the groups attributed to this phase contained pottery of Roman date, whilst brick/tile and a coin of the same period were also recovered. A handful of Iron Age pot sherds present are likely to be residual.

## **5.7 MEDIEVAL**

### **NORTH-WEST A1**

#### **5.7.1 PHASE 24, MEDIEVAL PLOUGHING**

Phase 24 (Figure 17) comprises Group 169 plough furrows. Of these, only cut 1601 was recorded. It was cut into the top of Phase 23 deposit 1871 and only an 8.29m length was sample excavated. The furrow was north–south aligned, linear in plan, 1.45m x 0.12m, and had steep sides and a flat, uneven base. Its fill (1589=1867), a firm light grey-brown silt sand with frequent cobbles, contained Roman pottery and brick.

Another short length of furrow, located 27m north-north-east of 1601 was sample excavated for a length of 1m. (Originally this was thought to have been a north-west/south-east-aligned ditch, but as excavation commenced it became clear that this was not the case so the feature was abandoned and the cut not planned). The fills suggested it was c.1m wide. Basal fill 2162, a soft, grey-brown sandy clay with frequent pebbles, moderate sandstone fragments and occasional manganese flecks, was sealed beneath upper fill 2155. This was similar in its make-up but was light grey-brown in colour and contained frequent sandstone flecks and occasional small limestone fragments. No finds were recovered. The top of deposits 2155 and 1589 were sealed beneath Phase 115 plough-soil and stubble (1002) which formed the ground surface at the time the excavations were undertaken.

### **REMAINDER OF A1**

#### **5.7.2 PHASE 113, MEDIEVAL FEATURES**

The only features that can be securely attributed to activity of the medieval period in Area A1 are the traces of a ridge and furrow field system in which the plough-truncated remains of the furrows survived (Figure 24). The furrows were all aligned approximately north–south, i.e. following the ground slope down to the south, with some of the individual furrows being seen to run for over 125m. It seems certain that the ridge and furrow system in Area A1 relates to at least part of that apparent in Area A2. The distance between furrows (centre to centre) ranged from 7.2 to 11.7m. Despite this disparity in spacing there is little evidence to suggest any significant reorganisation of the system once it had been established. The furrows showed only very limited evidence of the reverse-S curvature typical of medieval ridge and furrow. This is likely to be due to the length of this system. Similarly aligned ridge and furrow is present in the south-west corner area of A2 and there is little reason to doubt that this relates to the same system, a minimum length of over 460m being implied. Further evidence for the length of this system is to be found in the reverse-S curvature of the dyke that currently bisects Area A1 and which extends for around 460m. It may be that this field system originally extended from Field Lane to Low Lane. There is little evidence to suggest anything other than agricultural land-use for the site in the medieval and later periods.

### **Dating evidence for Phase 113**

Finds from the furrow fills included residual Iron Age and Roman pottery together with some of 13th- to 15th-century date.

The same system of medieval ridge and furrow extended across both areas of the A1 excavations.

## **5.8 POST-MEDIEVAL**

### **REMAINDER OF A1**

#### **5.8.1 PHASE 114, POST-MEDIEVAL FEATURES**

The features attributed to the post-medieval period appear to relate to agricultural field systems (Figure 24).

Groups 14 and 61 represent ditch/drain-type features. The Group 14 feature was aligned east–west and was located immediately south of the central baulk in the western area of A1. The ditch had a width of 0.4–0.9m, a depth of 0.14m–0.32m, and had moderately steep sides and a base that varied between flattish and rounded. Finds of a post-medieval date were recovered from the excavated segments. Ferrous slag within this feature is probably residual. This ditch lay parallel to and immediately to the south of what was, until the stripping of the site, a modern field boundary composed of little more than a slight east–west-aligned linear hollow. The features seem to have been related spatially, the hollow perhaps representing a former hedge-line associated with the ditch. Group 14 may originally have fed into the extant north–south dyke immediately to the east.

In the western part of A1 was a north–south-aligned cut (Group 61). This feature was typically c.0.48m wide and just over 0.4m deep. The sides were near vertical and the base almost flat. The sandy-silt fill contained a number of post-medieval finds. Groups 14 and 61 are likely to relate to land divisions imposed on the once open field system of ridge and furrow, perhaps originating at the time of enclosure.

Two major alignments of post-holes, Groups 2 and 19 appear to be of post-medieval date. Group 2 comprised a staggered line of 29 post-holes collectively aligned approximately east–west in the northern area of the site. Many of these post-holes were sub-rectangular in plan-form, this almost certainly being indicative of the sectional profile of the posts that they once held. As such it is probable that the posts were driven rather than placed within pre-cut holes. This alignment cut across earlier patterns of features, including the ridge and furrow. The staggered arrangement of the post-holes may suggest that some are a replacement for

others or that they may have served as reinforcing within a hedge-line, in which case some may be placed to either side of the hedge thereby producing the staggered effect.

The Group 19 post-holes were all of similar size, approximately 0.3m across and 0.16–0.24m deep, and had steep sides and flattish bases. These post-holes occurred in five staggered pairs, within each pair one post-hole lying a few centimetres to the north-east of the other. The pairs of post-holes were positioned approximately 2.3m apart. Post-medieval material was again noted within these post-holes. All post-holes of this group were characterised by dark fills and were highly visible immediately upon stripping. One of the investigated post-holes had three fills which included packing stones – the implication being that the posts once held within these holes had been manually placed rather than being mechanically driven. The post-pipe in this example was some 0.1m across, this presumably being the width of the post once supported. The staggered nature of the post-hole pairs suggest that either the posts/post-holes may have been replaced once the originals had rotted, or, that horizontal members may have been held in place by the twinned pair arrangement of posts/post-holes. Again, it is likely that these features relate to former divisions of the once open field system.

A curvilinear gully in the north-central part of the western area of A1, Group 62, extended from the north baulk of the trench in a slightly irregular arc towards the south-west for a distance of just over 6m. The feature was generally c.0.25m wide and up to 0.3m deep. The sides of the cut were very steep and the base slightly rounded. The sandy-silt fill was notable for the large number of cobbles and fragments of stone it contained which formed around 40–50% of the fill. This dense concentration of stone suggests that it may have been created for drainage purposes. Two adjacent post-holes appear very likely to be related to this feature.

#### **Dating evidence for Phase 114**

All the groups attributed to this phase produced post-medieval pottery, often in substantial quantities.

## **5.9 MODERN**

### **REMAINDER OF A1**

#### **5.9.1 PHASE 115, MODERN FEATURES**

This phase encompasses all modern features within Area A1. This included modern land drains such as those of Sets 132 and 187; other elements of this drainage system were noted rather than recorded in detail. Also included is Set 185 which embraces all overburden

deposits in A1 areas including the top-soil or plough-soil, together with other deposits that sealed archaeological features.

**Dating evidence for Phase 114**

Although earlier finds occurred residually within these deposits, modern finds predominated.

## **6. AREA A2 RESULTS**

### **6.1 PHASE 500, NATURAL AND PALAEOCHANNELS**

The natural sub-soil in Area A2 was highly variable, ranging from sandy-clays, to sandy-gravelly-clay, to almost pure sand. This phase includes a small number of contexts that were thought prior to excavation to be backfills of features, but were simply patches of variable composition within the natural.

Two 3m wide machine-excavated trenches were dug to assess the evidence for palaeochannels (Figure 2). The northernmost of these trenches was 50m in length while the southernmost was L-shaped, measuring 80m on the longer side and 21m on the shorter side. The contexts allocated to soil samples taken from these trenches are reported on in Appendix 12.

### **6.2 PHASE 501, ISOLATED PRE-IRON AGE PIT**

Phase 501 was an isolated circular pit and associated backfills (Figure 25). The pit was 3m x 3m x 0.5m, with a U-shaped profile. The infilling comprised three superimposed deposits, the uppermost of which contained a late Neolithic stone axe and a jet fragment (Sfs 105 and 107 respectively).

### **6.3 PHASE 502, CURVILINEAR DITCHES, PRE-IRON AGE**

Phase 502 (Figure 25) was a series of curvilinear ditches and their associated backfills. These features are interpreted as being of pre-Iron Age date on the basis of the stratigraphy (they pre-date an Iron Age enclosure complex of Phases 504–8).

The earliest of these ditches, Group 501, comprised series of linear cuts which together formed a pair of curving discontinuous ditches in a funnel shape. On the southern side of the funnel shape were two ditches and a small pit (Figure 26) on a shared north-east/south-west alignment; these features had an overall length of 38m, were 0.99–1.17m wide and up to 0.36m deep. The three ditches on the northernmost side of the funnel shape were collectively 190m in length, the three component segments being (from north to south) 80m, 91m and 8m long, separated by a 10m wide gap and a 0.8m gap respectively. A small, possibly related, pit (context 3389, Figure 26) was located 35m from the southern end of, and immediately adjacent to, the northernmost of the funnel-shaped ditches.

One ditch on the northern side of the funnel shape was partially infilled and then recut (Figure 26). The recutting also truncated context 3389. It is possible that a shallow 8m long ditch (context 3362, Figure 26) was also part of this recutting. All of the Group 501 ditches,

including the recut, were eventually infilled. A fragment of melted glass (Sf108) was present in one of the backfills; this probably represents later contamination.

Group 502 was a north-north-west/south-south-east-aligned ditch, 20m x 1.4m x 0.5m in size. It was located to the west of one of the gaps in the northern side of the Group 501 ditches, which may imply that it is a related feature.

A severely truncated cut 4m x 1.3m x 0.15m in size (Group 503, Figure 26) was located close to the southern portion of Group 501. The precise interpretation of this feature is unclear and, as with Group 502, it is uncertain whether this was associated with Group 501 or not.

Groups 501–3 were infilled and were truncated by a series of ditches (Group 505) which were aligned end to end on a predominantly north-north-west/south-south-east alignment, the northern end turning through 90° to align east-north-east/west-south-west and the southern end being aligned north-east/south-west. Group 505 was 128m in length overall, and the ditches were 0.4–1.07m wide and up to 0.62m deep. The ditches were later infilled with deposits derived from the surrounding natural. Horse bones from an animal aged 4–5 years at the time of death were present in one backfill. Analysis of samples from the backfills (samples 700 and 713) also yielded some iron-rich mineral concretions and traces of coal.

Group 504 (Figure 26) was a series of short intercut linear ditches ranging from 0.28–0.65m in width and 0.03–0.4m in depth. These were to the immediate south of and parallel to the southern end of the Group 505 ditch and were interpreted as relating to it on the basis of their layout. One of the Group 504 ditches had fire-cracked pebbles in its backfill. It should be noted that the underlying boulder clay in the area of the Group 504 ditches formed a natural hollow; machine removal of an additional 0.4m in thickness of later deposits was required to expose these features.

#### **Dating evidence for Phase 502**

Contexts in Group 501 yielded Iron Age pottery, glass, Roman pottery, medieval pottery, and a sherd of post-medieval pottery, while Group 505 contained a flint and Iron Age pottery. As these features were clearly truncated by an Iron Age enclosure complex, they are at the very latest of early Iron Age date. The presence of these finds (with the exception of the flint) can be explained by contamination due to later truncation and ploughing.

#### **6.4 PHASE 503, POSSIBLE PRECURSOR OF THE IRON AGE ENCLOSURE COMPLEX**

Phase 503 (Figure 25) comprised a series of aligned pits and some ditches, together with their associated backfills. The Phase 503 features definitely pre-date Phase 504. They form linear patterns which have more in common with the rectangular Iron Age enclosure complex of Phase 504 (see below) than with the curvilinear ditches of Phase 502; they may therefore represent all that remains of an initial Iron Age enclosure system which was largely obliterated by Phase 504.

Group 506 comprised a series of pits 1.3–2.3m x 0.65–1.4m x 0.4–0.78m in size. These features were infilled with deposits derived from the surrounding natural. These pits were all truncated on the western side by a later Iron Age enclosure ditch (see Phase 504, Group 510) and may represent the tenuous remains of an earlier boundary, possibly formed by a line of trees, which was later replaced by Group 510.

Four ditches were present that pre-dated Phase 504. The first (Group 507) was aligned east-north-east/west-south-west and was 30m x 1.35m x 0.4m in size, while the second ditch (Group 508) was aligned almost north–south and was 15m x 0.55m x 0.26m in size. The third ditch (Group 519) was aligned east-south-east/west-north-west and was 12.5m x 0.8m x 0.22m in size and the fourth ditch in the north-eastern extension of A2 (also Group 519) was 0.3–1.5m wide and 0.2–0.5m deep. All these ditches were infilled prior to the creation of an Iron Age enclosure complex (Phase 504).

#### **Dating evidence for Phase 503**

A sherd of Roman pottery and a sherd of medieval pottery were recovered from Group 507. Given that these features pre-date an Iron Age enclosure system, these finds must represent contamination caused by the later ploughing of the site.

#### **6.5 PHASES 504–8, IRON AGE ENCLOSURE COMPLEX**

An Iron Age enclosure complex was present across most of Area A2. This settlement underwent periodic changes (Phases 504–8) which are collectively illustrated on Figure 27, with a detail of the principal enclosure on Figure 28.

Allocating the contexts in question to specific phases proved problematical given the relative lack of direct stratigraphic links between features. There were, however, a maximum of four phases of recutting on some of the ditches, and a maximum of four superimposed features within any of the enclosures. The earliest ditch was therefore placed in the same phase as the earliest internal enclosure feature, the second phase of ditch with the second phase of internal feature and so on, giving four main phases (Phases 504–7). All features interpreted



as belonging to the enclosure complex, but lacking any direct stratigraphic links to other features, were placed in Phase 508; individual features in Phase 508 could relate to any or all of the features in Phases 504–7.

#### 6.5.1 PHASE 504 – INITIAL LAYING OUT OF THE ENCLOSURE COMPLEX

Phase 504 represents the laying out of a major enclosure system which extended across most of Area A2. The enclosures were all sub-rectangular and were bordered by ditches that were 0.5–2.6m wide and 0.25–1.0m deep, with variable cross-sectional profiles. The enclosure system comprised the following elements all of which are part of Group 510:

Enclosure A (Figure 28) measured 50m x 40–50m. The only entrance to the enclosure was on the southern side, though it should be noted that since part of the northern boundary lay beyond the limits of excavation it is possible that a second entrance was located on that side. The gap seen on the western side of the enclosure does not represent an entrance into the enclosure, but rather an error when machining the site. The entrance to the enclosure was 2.5m wide and to either side of the entrance were two 6m long ditches aligned north-north-west/south-south-east. A wooden post 48mm x 47mm x 209mm (Sf419) had been rammed into the base of the eastern entrance ditch; this was the only structural timber within the Enclosure A ditches.

A post-hole 0.62m x 0.38m (context 6483) was located in the entrance. Inside the enclosure, 0.75m to the north of the entrance ditches, and aligned with them, there were two pits, 0.7m x 0.7m x 0.23m and 1.28m x 0.92m x 0.32m in size. The location of these three cuts suggests that they relate to the use of the enclosure entrance, possibly to a gate of some kind.

Parallel to and 2.5m to the south of the southern enclosure ditch was an external gully, which was to either side of, and flowed into, the entrance ditches. This gully was 0.5–0.6m wide and up to 0.3m deep. A similar gully 5m x 0.8m x 0.4m in size was found parallel to, and 2m north of, part of the northern side of the enclosure (context 4113).

A gully, 0.55m wide and 0.25m deep, was located within the south-western corner of the enclosure; this ran parallel to, and 2m inside, the western and southern boundary ditches but curved inwards at the north-western end. A second internal gully was present in the north-western corner of the enclosure, 1.5m to the east of and parallel to the western enclosure ditch; this gully was 0.72m wide and 0.1m deep and flowed into the northern enclosure ditch.

Enclosure B was in excess of 45m x 35m. The southern boundary ditch petered out at the western end, making the original shape of the enclosure unclear.

Enclosure C was 105m long north–south. Both the northern and southern ditches petered out on the western side, making the original width of the enclosure uncertain. The eastern boundary had a 3m wide entrance way which led into Enclosure D. A pit 0.8m x 0.8m x 0.25m in size was located mid-way within this entrance. The southern boundary ditch had two gaps which seem to represent entrances; one was a 2m wide gap in the south-eastern corner, the second was a 3.5m gap located approximately 16.5m west of the south-eastern corner.

Enclosure D was 100m x 100m in area, the north-westernmost corner of which was occupied by Enclosure A. There were three gaps 1–1.5m wide in the southern boundary ditch of the enclosure. It is unclear if these represent entrances or simply areas where the boundary ditch was too shallow to survive. The northern boundary ditch was markedly less straight than any of the other boundary ditches in the enclosure complex.

Enclosure E – the size of this enclosure is unclear as no southern limits were found. A gully 3.3m x 0.46m x 0.15m in size (context 4262) was located close to the northern boundary ditch; this layout may suggest that the gully was dug in relation to the boundary ditch.

Enclosures F/G/H all lay largely beyond the limits of excavation, making their size uncertain. Despite being clearly contemporaneous with all the other Group 510 ditches, the western boundary ditch of Enclosure F was on a notably different alignment, being north-east/south-west; the reason for this differing alignment is unclear.

Also included in Group 510 are the stratigraphically earliest features in Enclosure A. There was a roundhouse located 10m north-west of the enclosure entrance (Figure 29), which comprised a discontinuous ring-gully 11.1m in diameter, 0.28–0.54m wide and up to 0.32m deep. The north-eastern portion of the ring-gully had not survived. A 1.1m wide gap on the eastern side represented the entrance. A C-shaped gully (context 3030, Figure 28) 3.2m x 0.3m x 0.05m was located in the northern portion of the enclosure.



*Plate 15 Enclosure A2 facing north-east, scale unit 0.5m*

#### **Dating evidence for Phase 504**

Group 510 was recorded as having a sherd of post-medieval pottery and a sherd of 19th-century pottery (from the southern and northern boundary ditches of Enclosure A respectively). Given that the infilling of the ditches was of Iron Age date, these finds are best interpreted as contamination.

#### **6.5.2 PHASE 505 – THE SECOND PHASE OF USE OF THE ENCLOSURE COMPLEX**

This phase saw alterations to Enclosure A (Group 511, Figure 28). Part of the western boundary ditch of Enclosure A collapsed, but there was no evidence of recutting. The entrance ditches and the northern and eastern boundary ditches of Enclosure A were partially infilled. Discarded dog, cow, sheep/goat and horse bones were recovered from these fills. In addition, degraded fragments of bark and roundwood were present (Sfs602, 633, 737 and 814), together with a wooden board (Sf776) 622mm x 238mm x 21mm in size with a chamfered edge. Analysis of a soil sample from a backfill of the northern boundary ditch (sample 640) yielded some well-preserved pollen. Following the infilling, these ditches were recut.

The earliest ring-ditch within Enclosure A was infilled. Artefacts from the backfilling included pig, cow and horse bone fragments; some of the bone fragments were burnt.

A second roundhouse (Figure 29) was constructed directly above the site of the first roundhouse. This comprised a discontinuous ring-gully 12.2m in diameter, 0.36–0.56m wide and up to 0.43m deep. The north-western side of the ring-gully had not survived. There were two opposing entrances on the western and eastern sides which were 1.6m and 2.5m wide respectively.

Gully 3030 was backfilled before being truncated by a rectangular pit 2.5m x 1m x 0.36m in size (context 3034), aligned with the long axis north–south. The pit was infilled with silty-sand with frequent charcoal (soil sample 305), animal bone (including sheep/goat bone), fire-cracked pebbles and a possible copper ingot (Sf305).

The two pits immediately inside the Enclosure A entrance were infilled; the western pit fill contained fire-cracked stones. The pits were then replaced by new post-holes, slightly to the north-west of the original pits. The new western cut comprised two adjacent circular post-holes which were 0.9m and 0.5m in diameter and up to 0.37m deep, while the new eastern cut was a sub-oval post-hole 0.6m x 0.85m x 0.3m in size. Given their location, these post-holes almost certainly relate to the enclosure entrance.

Silting and recutting of the southern boundary ditch of Enclosure B and the eastern boundary ditch of Enclosure H also took place.

#### **Dating evidence for Phase 505**

The Enclosure A ditch fills contained a flint and early Iron Age pottery, Iron Age pottery, a sherd of medieval pottery, a fragment of Roman CBM and two sherds of post-medieval pottery. The backfill of the first roundhouse was associated with Iron Age pottery. Pit 3034 contained a copper alloy fragment and a copper alloy ingot. Overall an Iron Age date is suggested by the artefacts; the Roman, medieval and post-medieval material probably represents contamination.

#### **6.5.3 PHASE 506 – THIRD PHASE OF USE OF THE ENCLOSURE COMPLEX (Figure 28)**

The northern boundary ditch of Enclosure A underwent further silting. Analysis of soil samples 607–8 from this silting produced poorly preserved pollen, iron-rich mineral concretion, traces of burnt bone and charcoal; in addition the analysis suggested that there was standing water within the ditch. The ditch was then recut. The ditch leading westwards from Enclosure A was also partially infilled; the infilling contained some horse bones.

The post-holes immediately inside the enclosure entrance were infilled; some horse bone was present in the backfill.

The second roundhouse was demolished and its ring-gully was infilled; some cow bone was recovered from the backfill. A third roundhouse was then constructed on the same site, of which only the southern half survived (Figure 29). The roundhouse was 12.5m in diameter, and the ring-gully was 0.4–0.6m wide and up to 0.23m deep. A 1.64m wide gap on the south-eastern side represents the entrance.

Pit 3034 was truncated by a short gully (context 3065, Figure 28) which was 1m x 0.67m x 0.06m deep.

The eastern boundary ditch of Enclosure H was partially infilled with brown-grey clayey-sand before being recut (Group 548, Figure 27). The recut ditch was 4m x 0.3m x 0.79m.

#### **Dating evidence for Phase 506**

The silting of the northern boundary ditch of Enclosure A contained two fragments of late Bronze Age/early Iron Age pottery. A single of pottery of Iron Age or Roman date was also present in the infilling of the second roundhouse; overall an Iron Age date is suggested.

#### **6.5.4 PHASE 507 – THE FOURTH PHASE OF USE OF THE IRON AGE ENCLOSURE COMPLEX**

The northern boundary ditch of the enclosure underwent further silting. Soil samples from this infilling (samples 601, 609 and 610) yielded iron-rich mineral concretions, some coal and mammal bone. The boundary ditch was then recut before further infilling, containing discarded horse bone, took place.

Gully 3065 was infilled with silty-sand containing frequent fire-cracked cobbles. The fill was truncated by a ring-gully (context 3003) 5.8m x 0.78m x 0.27m in size, with a 0.46m wide entrance on the south-eastern side.

The ditch of Group 548 was infilled (Group 549, Figure 27).

#### **Dating evidence for Phase 507**

Iron Age pottery was present in two contexts in this phase, suggesting an Iron Age date for the activity.

#### 6.5.5 PHASE 508 – FEATURES RELATING TO THE ENCLOSURE COMPLEX WHICH COULD NOT BE CLOSELY PHASED

Phase 508 comprised a number of cut features and their associated backfills which were interpreted as relating to the Iron Age enclosure system of Phases 504–7, but due to a lack of direct stratigraphic links they could not be closely phased. Unless otherwise stated these features are illustrated on Figure 28.

A circular pit 1.1m in diameter and 0.12m deep (Figure 29), was located inside the three superimposed roundhouses of Phases 504–6, and presumably relates to the use of at least one of them. The infilling of the pit contained fire-cracked pebbles and charcoal, but there was no sign of in situ burning.

Two features were located in the south-western corner of Enclosure A. The first was a curving gully 3.4m x 0.36m x 0.17m in size, while the second feature was a post-hole 0.44m in diameter and 0.22m deep. There were no related post-holes nearby.

To the immediate south of the three superimposed roundhouses of Phases 504–6 was an arc-shaped cut 1.9m x 0.7m x 0.41m in size. This was infilled with charcoal-rich deposits containing burnt stones and animal bone including cow bones.

Almost 2.5m to the north of and on the same alignment as the eastern entrance ditch of Enclosure A was a north-north-west/south-south-east-aligned gully 3m x 0.5m x 0.3m in size. The spatial relationship suggests that this gully was linked to the entrance in some way. The backfill of this feature contained Iron Age pottery.

Slightly to the north-east of the Enclosure A entrance were two short gullies which together formed an arc shape. The western gully was 2m x 0.4m x 0.15m, and the eastern gully was 1.5m x 0.6m x 0.2m.

Context 4562 (Figure 28) was a C-shaped gully 5.1m in diameter, 0.15m wide and up to 0.05m deep. This petered out on the western side and may originally have been a circular ring-gully. The infill contained burnt animal bone and charcoal (soil sample 662).

Along the eastern side of Enclosure A was a linear gully aligned north–south, 28m x 1m x 0.32m, which flowed into an C-shaped gully, 10m x 0.85m x 0.45m, at the northern end. The backfilling of these features contained fire-cracked stones, cow, pig and sheep/goat bones.

In the north-eastern quarter of Enclosure A, close to the boundary ditch, there were four cut features. The first was a sub-circular post-hole 0.95 x 0.75m x 0.4m (context 3221). A stone quern fragment from the fill may have been intended to act as post-packing. To the immediate south of this was a pit 4m x 1.1m x 0.5m in size (context 3010), the infill of which contained charcoal, manganese, burnt stones, animal bone and several iron objects including a possible nail (Sf414), a suspension ring (Sf415) and an unidentifiable fragment (Sf417). A short east–west gully 0.8m x 0.24m x 0.17m in size (context 4024) was located at the northern end of context 3010. The relationship between these two cuts was unclear at the time of excavation. The gully infill contained some sheep/goat bone fragments. The fourth feature was a linear east–west cut (context 3006) which was 3.2m x 0.65m x 0.14m in size, the infill of which contained some sheep/goat bone fragments.

Two cuts were present in Enclosure D (Figure 27). The first was an arc-shaped gully 6m x 0.4m x 0.15m, with the long axis aligned north-north-west/south-south-east. The backfill contained fire-cracked cobbles and animal bone. Soil sample analysis of the backfill (samples 705–7) yielded some iron-rich mineral concretions, charcoal, charred twig, bone and burnt bone. An isolated circular pit or post-hole 0.33m in diameter and 0.17m deep was located in the south-eastern quarter of Enclosure D.

In the north-western corner of Enclosure D there was a group of six post-holes (Figure 28) which ranged from 0.2–0.44m in diameter and 0.3–0.43m in depth. The infill of the post-holes contained Iron Age pottery and cow bone fragments.

The only feature in Enclosure H was an arc-shaped gully (Figure 27) 3.6m x 0.6m x 0.15m in size.

Two ring-gullies were located in the south-western quarter of Area A2 (Figures 27 and 30). Only the north-western portion of the northernmost ring-gully survived; this was 8.4m x 0.3–0.72m x 0.14m in size and its backfill contained fire-cracked cobbles. A soil sample from this infilling (sample 728) contained iron-rich mineral concretions. The southern ring-ditch was 5.6m in diameter, 0.40–0.66m wide and up to 0.15m deep. The northern side the gully widened to incorporate a post-hole 1m in diameter and 0.2m deep. The ring-ditch infill contained Iron Age pottery.

#### **Dating evidence for Phase 508**

Artefacts recovered from Phase 508 included a number of flints, a quern fragment, an iron nail and two iron objects, a fragment of jet, Iron Age pottery (in eleven contexts) and a single sherd of Roman pottery (in the backfill of the arc-shaped gully in Enclosure D). Overall an

Iron Age date is suggested; the single sherd of Roman pottery could represent contamination, or may suggest that infilling continued into the Roman period.

## **6.6 PHASES 509–514, LATTICE-LIKE ENCLOSURE SYSTEM, LATE IRON AGE TO ROMAN OR ROMAN**

The majority of the features of the enclosure complex were infilled and replaced by a lattice-like enclosure system which was present across much of Area A2 (Figure 31). In terms of dating, the earliest of these phases, Phase 509, was associated with mainly Iron Age material, though some Roman material was present, while the remaining phases (Phases 510–14) contained only Roman material. It is possible that this system of enclosure came into use in the late Iron Age and continued in use into the Roman period, or that the system is of Roman date, the Iron Age material being residual.

### **6.6.1 PHASE 509 – FINAL INFILLING OF THE IRON AGE DITCHES**

The final infilling of features within Enclosure A is included in this phase. The infilling of ring-gully 3003 (sample 650) contained some mineral concretions and traces of charcoal, pottery and burnt bone, while the infilling of the main roundhouse contained some cow bone. The majority of the ditches from the enclosure system of Phases 504–8 were infilled, though at least one of these ditches (Group 527) seems to have remained in use. Hand-collected artefacts from the backfilling of these ditches included horse bones, caprovid bones, pig bones, dog bones and cow bones. Soil samples from the final infilling of the Enclosure A ditches (samples 606, 638 and 744) contained traces of charcoal, burnt bone and iron-rich mineral concretions.

#### **Dating evidence for Phase 509**

While the overwhelming bulk of the finds from Phase 509 were of Iron Age pottery (145 sherds from nine contexts, three fragments of which were residual material of Early Iron Age date), there were a six sherds of Roman pottery, one of medieval pottery and one of medieval roof tile. It is unclear if the process of infilling continued from the Iron Age into the Roman period, or whether the Roman pottery represents contamination. It is highly unlikely that Iron Age features were still being infilled in the medieval period, and the medieval material should therefore be seen as contamination.

### **6.6.2 PHASE 510 – LATTICE-LIKE ENCLOSURE SYSTEM**

Phase 510 was a lattice-like pattern of enclosures which occurred over much of Area A2. The preservation of these ditches was poor, making the overall layout difficult to determine. The enclosures were bordered by ditches up to 1.4m wide and 0.55m deep, with variable cross-sectional profiles.



Enclosures J, K and L were three parallel linear enclosures, 18m, 20m and 20m wide respectively, and in excess of 95m long. The ditch on the southern side of Enclosure J was largely destroyed by later features. The eastern side of Enclosure L terminated at the earlier Group 527 ditch, which seems to have remained in use. There was a 4m wide gap close to the south-eastern corner of Enclosure L which presumably represents an entrance.

Enclosure M was 40m x 40m in area. The western boundary had not survived, but can be projected as a line between the western ditches of Enclosures J and O to the north and south respectively. The southern boundary ditch of Enclosure M petered out at the western end but the alignment was continued by a post-hole and a number of stake-holes. There were 37 stake-holes, but these did not form particularly regular patterns suggestive of a fence-line or palisade, so their precise function is unclear.

Enclosure N was 20m wide and of indeterminate length. The eastern limit of Enclosure N was marked by the earlier Group 527 ditch, which seems to have remained in use. There was a 5m wide gap on the western side, which was an entrance. Enclosure O was 67.5m x 38m. The southernmost enclosure, Enclosure P, was in excess of 85m x 32.5m.

In the eastern half of A2 there was a discontinuous L-shaped ditch 153m long on the long axis and 33m long on the short axis. It is unclear if the gaps in this ditch represent entrances or simply points where the ditch did not survive. A second ditch was located 17m to the north-east of the L-shaped ditch. The area between the two ditches is interpreted as Enclosure Q, the length of which is unknown.

An L-shaped ditch was present in the north-eastern extension of Area A2. A fragment of Roman pottery and animal bone recorded as being from this cut should presumably have been recorded as coming from the backfill.

### 6.6.3 PHASE 511 – ALTERATIONS TO THE LATTICE-LIKE ENCLOSURES

The southern boundary ditch of Enclosure K partially silted up and was recut (not illustrated) with a ditch 0.9m wide and 0.6m deep. The length of this recutting is unclear, as it was largely destroyed by a later ditch. A vertically sided flat-based post-hole 0.35m in diameter was inserted into the partially infilled ditch. No trace of wood survived within the post-hole.

### 6.6.4 PHASE 512 – FURTHER ALTERATIONS TO THE LATTICE-LIKE ENCLOSURES

The ditches of the Phase 510–11 enclosure systems were infilled with deposits of variable composition which contained few artefacts except for some cow bone. Soil samples from two of the backfills (sample 617 and 621) contained traces of possible charcoal. Cutting into

these fills were the two ditches of Phase 512, one of which was a north-north-west/south-south-east-aligned ditch and was 9m x 0.64m x 0.16m in size, while the second was an east-north-east/west-south-west-aligned ditch 39m x 0.55–0.9m x 0.22–0.4m, with a rounded terminus at each end.

Group 527 was also included here; this was the infilling of the western boundary ditch of Enclosure A which was dated by artefactual evidence to the Roman period.

#### **Dating evidence for Phase 512**

Most of the artefacts recovered from Phase 512 were of Roman date comprising pottery, CBM, and part of a Roman glass bangle of late 1st- to early 2nd-century date (Sf401); in addition some dog bones, cow bones and residual Iron Age pottery were recovered.

#### **6.6.5 PHASE 513 – FINAL ALTERATIONS TO THE LATTICE-LIKE ENCLOSURES**

The ditches of Phase 512 were infilled; the only artefacts recovered from the infilling were residual Iron Age pottery. A new L-shaped ditch was dug 0.5–0.6m in width and 0.06–0.3m deep with one arm aligned north-north-west/south-south-east, and the second arm aligned west-south-west/east-north-east.

#### **6.6.6 PHASE 514 – INFILLING OF PHASE 513**

The ditches of Phase 513 were infilled; Roman pottery and CBM was recovered from the backfill.

#### **6.7 PHASE 515, ROMAN FEATURES**

Phase 515 (Figure 31) included all other cut features and associated backfills that were dated by artefactual evidence to the Roman period or seemed to be related to Roman features in terms of layout.

Group 528 (Figure 32 and Plate 16) comprised two square cuts, each 1.4m x 1.4m x 0.53, connected by a gully 1.6m x 0.6m x 0.48m in size. Collectively these were on a north-north-west/south-south-east alignment. The function of this feature is unclear. This feature was undated, but in terms of layout it seemed to relate to Group 529, the infilling of which was dated as Roman.



**Plate 16** Group 528, facing south, scale unit 0.5m

Group 529 (Figure 32) comprised a figure-of-eight shaped pit aligned with the long axis north-north-west/south-south-east. The cut was 10.4m x 3–5.3m x 0.7–2.33m and the base of the cut sloped markedly and consistently downwards from south to north. The cut seems to have been excavated to provide access to a constant supply of water. It should be noted that although the infilling of this feature was dated by pottery to the Roman period, it is perfectly possible that it was dug in the Iron Age; indeed the similarity of alignment/position between Groups 528–9 and the westernmost ditch of the earlier Enclosure A ditch is striking. Further work is required to clarify when this pit was excavated.

The floor of the pit was sealed by five successive layers of cobbles (Plate 17) each of which was up to 0.22m thick. It is possible that before a new layer of cobbles was inserted the area was levelled slightly. Clearly the successive layers of cobbles were designed to give a firm access route down to the water table, which was located within the base of the cut. One of the cobble layers incorporated a length of wickerwork 0.6m long held in place by five small upright stakes and a timber post 0.16 x 0.12m in cross-section; this was aligned east–west. A further stake and rectangular wooden post 0.16 x 0.12m in size were located nearby. The wickerwork and posts were presumably inserted to give additional stability to cobbles. The

only artefacts recovered from the cobbles were some fragments of animal bone and 110 fragments of wood in context 3715.



**Plate 17** *The sloping gravel surfaces of Set 598, facing south, scale unit 0.2m*

Running on a north-north-west/south-south-east alignment to both the north and south of the large pit were gullies which drained into the pit. The northern gully was 16.5m x 0.88m x 0.31m and contained patches of cobbles possibly designed to help drainage within the gully. The southern gully was a funnel shape at the northern end, and was 3.4m x 0.5–2m x 0.21m in size.

Group 528 was infilled with two superimposed deposits (Group 530, not illustrated), both of which contained cobbles. It is unclear if these cobbles were in some way connected to the use of the feature or represented part of a collapsed structure. Flint was present in both fills.

The deepest portion of the Group 529 pit was infilled with alternating bands of organic silty-clay and sandy-silt (Group 531, not illustrated). The upper backfills were notably different, being inorganic in nature. A soil sample from one of the backfills (sample 755) yielded

mineral concretions and a little charcoal. Cow and horse bone fragments were also recovered from the backfill.

Group 534 (Figure 31) was an isolated sub-oval pit 1.3m x 0.84m x 0.8m in size.

In the south-western portion of Area A2 there were two parallel north-west/south-east-aligned gullies (Group 543, Figure 31). The northernmost was 11m x 0.55m x 0.2m, while the southernmost was 17m x 1.1m x 0.1m. The gullies of Group 543 were on a markedly differing alignment to any other features in Area A2; it is therefore unclear what they relate to.

#### **Dating evidence for Phase 515**

The Group 529 pit contained Roman material in both the lower organic fills and the upper inorganic fills, in addition to an iron/copper alloy object. The pit of Group 534 yielded a residual Mesolithic flint scraper (Sf112) and Roman CBM, while one of the gullies of Group 543 contained Roman pottery and Roman CBM.

### **6.8 PHASES 516–518, FEATURES OF UNCERTAIN DATE**

The features of Phases 516–18 comprised a number of pits that were difficult to phase. Phase 516 was a pit which was stratigraphically later than the ditches of Phase 512, so could be Roman or later in date. The pit of phase Phase 517 was stratigraphically later than Phase 503 so could be of any date from the Iron Age onwards. The undated pits of Phase 518 had no stratigraphic relationships to any other features in Area A2 and could therefore relate to any of the other phases.

Phase 516 (Figure 33) was a roughly rectangular pit, 2.1m x 1.4m x 0.37m, which was infilled with four superimposed backfills, one of which contained Roman pottery, though this could represent residual material or contamination.

Phase 517 (Figure 33) comprised a single circular pit 0.9m x 0.9m x 0.42m in size. The pit was directly above an infilled boundary ditch, but it is unclear whether it represents some form of later reuse of this boundary for a fence or hedge line or the superimposition is merely coincidental.

There were five undated pits and their associated backfills in Phase 518, all of which could relate to any of the other phases on site (for this reason they are illustrated on Figures 25, 27, 31 and 33). Context 4155 was a sub-oval pit, 2.37m x 1.55m x 0.5m; context 3287 was an irregularly shaped pit, 1m x 0.8m x 0.16m; context 3135 was a sub-oval pit 1.1m x 0.54m

x 0.15m; and context 3306 was an oval pit 3.57m x 1.53m x 0.41m. The largest of the five pits, context 3414, was 2.3m x 1.4m x 0.4m and was infilled with three superimposed backfills each of which had a high charcoal and ash content suggesting it was a rubbish pit; a flint was also recovered from the backfill, though it was unclear if this was residual or not.

## **6.9 PHASES 519–520, MEDIEVAL FURROWS**

A number of furrows were present (Figure 33). The furrows were backfilled with deposits of varied character reflecting the nature of the surrounding natural deposits with which they were infilled.

### **6.9.1 PHASE 519 – FURROWS ALIGNED NORTH-NORTH-WEST/SOUTH-SOUTH-EAST**

These furrows occurred in two groups, one at the northern end of Area A2 (Group 538) and a second group at the southern end of the site (Group 539).

The furrows of Group 538 covered an area of 155m x 100m. This group of furrows was far from straight, having a gently curving shape.

Group 539 comprised twelve shallow furrows in the southern portion of A2 covering an area of 55m x 118m. These furrows were noticeably straighter than those of Group 538, which may suggest that the two groups are not contemporaneous.

#### **Dating evidence for Phase 519**

Group 538 contained residual Roman pottery and CBM, medieval pottery and a clay pipe, while Group 539 contained residual Roman pottery and CBM, a fragment of medieval plain tile, medieval pottery and a fragment of late 19th- to 20th-century sewer pipe. Overall a medieval date can be suggested for this phase; the clay pipe and modern sewer pipe would seem to be contamination, probably due to modern ploughing of the site.

### **6.9.2 PHASE 520 – FURROWS ALIGNED BROADLY EAST–WEST**

These furrows were placed into two groups (Groups 540–1), which were of a slightly differing character. One furrow in Group 540 was stratigraphically later than a furrow in Group 539 of Phase 519.

Group 540 comprised three broad slightly curving furrows aligned west-north-west/east-south-east located in the south-eastern portion of A2. These furrows were up to 5m wide and 0.2m deep with gently sloping sides and flat bases.

Group 541 comprised twelve furrows aligned west-south-west/east-north-east that extended over an area of 180m x 140m along the eastern limits of A2. The Group 541 furrows were noticeably straighter and narrower than those of Group 540.

#### **Dating evidence for Phase 520**

Group 541 was infilled with material containing residual Roman pottery, medieval pottery and 19th-century pottery. Given that the site had been heavily ploughed in the modern era, the 19th-century pottery may represent contamination. A medieval date is therefore suggested by the finds.

### **6.10 PHASE 521, MEDIEVAL FEATURES**

In the north-eastern extension of Area A2 there was a ditch aligned north-south (Phase 521, Figure 31), which was 1.6m wide and 0.7m deep with a steep western side, a stepped eastern side and concave base. This was partially infilled before being recut. The recut ditch was 0.77m wide and 0.54m deep with a sharp break of slope to the west, a very gradual one to the east, steep sides and a flat base. The recut ditch was subsequently infilled.

#### **Dating evidence for Phase 521**

The primary backfill of this feature contained one sherd of residual Iron Age and one sherd of medieval pottery.

### **6.11 PHASE 522, MODERN FEATURES**

All the modern features on site (not illustrated) were placed in Group 545 which included field drains containing ceramic pipes, a linear cut and its associated backfill, a line of modern post-holes marking a fence-line, a pit and associated backfill, and a gully and associated backfill. The modern plough-soil was also placed in this group. A modern wheel rut from one of the earth-moving machines (many of which became bogged down in the initial stages of clearance, creating ruts) and a probable bucket mark again from the machining of the site were also in this group.

In addition, a large number of features scattered across Area A2 that were interpreted as tree root disturbance or animal burrow disturbance were included in this phase (Group 535).

#### **Dating evidence for Phase 522**

The finds from the phase were largely residual (Iron Age pottery, 16th-century pottery, post-medieval pottery, an iron object, slag and a clay pipe fragment) but some modern glass and pottery was also found.

## **6.12 TRENCHES L1–L7**

Since no archaeological features were present in Trenches L3–7, these trenches are not illustrated in detail (their location being given on Figure 2).

### **6.12.1 PHASES 523, 529 AND 531–2, NATURAL AND A BUILD UP OF PEAT**

The natural deposits within Trenches L1–L7 (Phases 523, 529 and 531) were variable. In the western portion of Trench L1 natural was orange-grey sand with patches of grey clay, while in the eastern portion of the trench it was gravelly boulder clay. In Trench L2 the natural was orange-grey sandy-clay, in Trenches L3–5 it was sandy-silts and in Trenches L6–L7 it was gravelly boulder clay.

It is clear the boulder clay formed deep natural hollows in the area of Trenches L6 and L7. Peat accumulated within both hollows (Phase 532). For safety reasons it was impossible to examine the peat in the area of Trench L7 in any detail (the sides of the machine-cut trench were highly unstable). Samples were collected by machine from the peat in Trench L7 and by hand from Trench L6; a full report on these peat deposits is given elsewhere (Appendix 12). These peat deposits showed no clear signs of human activity.

### **6.12.2 PHASE 527, UNDATED DITCH**

A slightly curving ditch was present in Trench L1 (Figure 34) which was oriented north-east/south-west and was 14.5m x 0.6m x 0.2m with a varied profile. The feature was infilled with mid-blue-grey clayey-sand. No artefactual evidence was found to suggest a date for this feature, though its slightly curving shape may indicate that it relates to the curvilinear ditches of Phase 502 in Area A2, and could even represent the continuation of the Group 501 ditch (Figure 25); if this is the case Group 501/Phase 527 would have formed part of an enclosure 155m x 236m with an oval-shaped northern end and a funnel shape at the southern end.

### **6.12.3 PHASE 524–5, FEATURES OF PROBABLE IRON AGE DATE**

Phase 524 (Figure 34) was a north-north-west/south-south-east ditch that was visible in Trenches L1–L2. The ditch was 0.7–1.58m wide and up to 0.32m deep. In Trench L1 the ditch was partially infilled with soft light grey sandy-silt and was then recut. The recut ditch (Phase 525) was 1.24m x 0.40m, with slightly stepped sides and a concave base. The ditch, infilling and recut clearly relate to Iron Age ditches in Area A1.

### **6.12.4 PHASE 526, ROMAN ACTIVITY**

Phase 526 was the final infilling of the Phase 524–5 ditch in Trenches L1–L2 (Figure 34). In Trench L1 there was a primary fill of orange-grey clay and a secondary fill of hard grey clay,



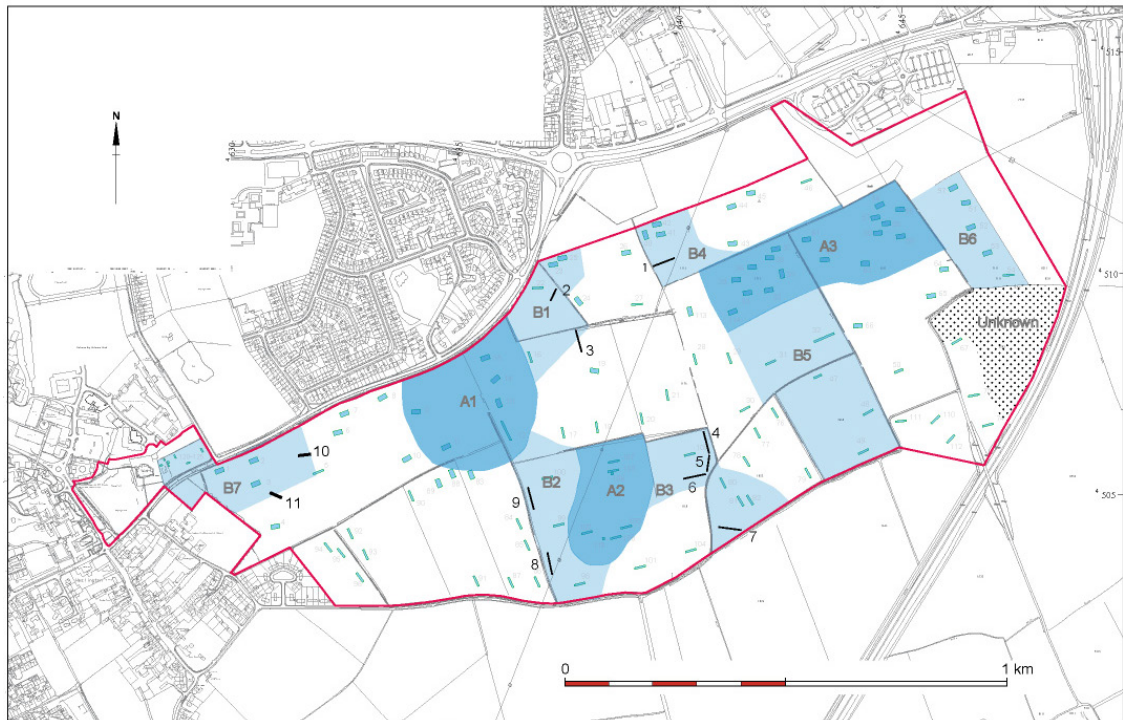
while in Trench L2 the ditch was infilled with three superimposed deposits of varied composition. Roman pottery and CBM were recovered from the backfilling in both trenches.

#### 6.12.5 PHASES 528, 530 AND 533, MODERN CONTEXTS

The only modern deposits present in Trenches L1–L7 were modern agricultural soils and field drains, which were not recorded in detail.

### 6.13 EVALUATION TRENCHES 1–11

These trenches were widely spread across the western half of the development area (Figure 37). Although it was originally intended to excavate eleven trenches, only nine were opened. Trenches 6 and 9 could not be excavated owing to the presence of standing water.



**Figure 37** Evaluation trenches 1-11

#### 6.13.1 PHASE 120, NATURAL DEPOSITS

Natural deposits of the drift geology (Groups 82, 85, 88, 90, 93, 95, 97, 102 and 105) were reached in all of the evaluation trenches at depths ranging from 0.3–0.62m below surrounding ground level. These deposits were variable, ranging from orange-yellow and red-brown clays to yellow sands. Even within individual trenches considerable variation within the drift geology was noted. Cobbles and pebbles occurred within some of these deposits, particularly the clays. Sub-soils, seemingly derived from the underlying parent drift, were noted in Trenches 1, 4 and 11 and were typically between 0.1 and 0.3m in thickness.

#### 6.13.2 PHASE 121, FEATURES OF PREHISTORIC AND PROBABLE PREHISTORIC DATE

Features of prehistoric and probable prehistoric date were encountered in Trenches 2, 3 and 10. Towards the north-eastern end of Trench 2 an east–west aligned linear feature, Group 82, cut into natural deposits. This feature displayed moderately steep sides with a flattish base and had a width of around 1.15m and a depth of 0.26m. The cobble-rich orange-brown clayey-silt fill contained a few flecks of charcoal but no datable artefacts.

Parts of a possible east–west-aligned linear feature (Group 87) were observed in the central part of the west-facing section of Trench 3. This feature had a width of around 1.60m and a depth of 0.2m, the profile having moderately steep sides and a flattish base. This may represent part of a ditch, or possibly even part of a natural feature. No artefacts were present within the backfill.

A clearly defined east–west-aligned linear cut extended across Trench 10 (Group 101). This feature was 0.9m wide and 0.24m deep, and displayed moderately steep sides with a slightly concave base. Pottery of Iron Age date was recovered from this feature, together with a residual late Neolithic flint. These three features of probable prehistoric date can be interpreted as ditches. All three follow an alignment that broadly reflects that of the prehistoric field systems excavated in areas A1 and A2.

#### 6.13.3 PHASE 122, FEATURES OF MEDIEVAL DATE

Features of medieval date were present in Trenches 1, 5, 10 and 11. Virtually all of this was in the form of furrows and their fills relating to ridge and furrow field systems. All the furrows had gently sloping sides and concave bases.

Within Trench 1 a north–south-aligned cut nearly 4m wide and 0.4m deep (Group 81) was observed. Finds material from this feature consisted of single sherds of Iron Age and Roman pottery, a fragment of Roman CBM and a piece of clay tobacco pipe. The profile of this feature was similar to that of medieval furrows excavated at the site, suggesting that the earlier finds in the feature may be residual.

Five parallel east–west-aligned furrows were examined in Trench 5 (Group 92). Typically around 7–7.5m apart these furrows were 0.7–1.98m wide and around 0.2m or less deep. Finds from the Trench 5 furrows comprised single sherds of Iron Age and Roman pottery, fragments of Roman CBM, several sherds of medieval pottery and a small number of post-medieval finds.

Two further furrows, Group 99, were identified in Trench 10. These were aligned north–south and separated by a gap of 9m. The furrows were 2.0–2.5m wide and around 0.24m deep. Finds from these features comprised a few fragments of Roman CBM, medieval pottery, and a number of post-medieval finds including a copper alloy button (Sf1). Interleaved between the two furrows and the earlier prehistoric ditch of Group 101 was a deposit of grey-brown sandy-silt (Group 100), nearly 0.3m thick in places. This material, which produced no finds or other dating evidence, may have accumulated via wind-blown deposition, and could have built up before the medieval period.

In Trench 11 three north–south-aligned and close-spaced furrows (Group 104) measuring 1.5–2.5m wide and around 0.2m deep were encountered. Finds of Roman CBM, medieval and post-medieval pottery and other finds of the post-medieval period were recovered from these furrows.

The furrows in four of the evaluation trenches would appear to relate to at least two systems. Those in Trenches 1, 10 and 11 relate to north–south-aligned systems, those in Trench 5 to an east–west system.

#### 6.13.4 PHASE 123, FEATURES AND DEPOSITS OF POST-MEDIEVAL AND MODERN DATE

Post-medieval and modern features were restricted to a series of later 19th- to 20th-century land drains in Trenches 7 and 11. Deposits of this date comprised extant top/plough-soils in all trenches and underlying thin soils in Trenches 2 and 5 (Groups 80, 83, 86, 89, 91, 94, 96, 98, 103). Only post-medieval pottery and modern materials were recovered from these features and deposits.

### **6.14 EVALUATION TRENCHES 12–17**

#### 6.14.1 PHASE 534, NATURAL

As would be expected for a glacial moraine, the natural showed considerable variation ranging from silty-clay to silty-sand to gravely-silty-clay and stony-clay. In places there were fissures in the natural.

#### 6.14.2 PHASE 535, FEATURES OF ROMAN DATE OR INTERPRETED AS BEING OF ROMAN DATE (Figure 35)

A number of features in Evaluation Trench 14 were of Roman date. Several undated features in this trench are also included here as they seemed a better match for the Roman features in this area than for the later phases of activity seen.

The earliest Roman feature was a linear north-north-east/south-south-west aligned cut (context 24002) which was 20m x 0.74m x 0.24m, with concave sides and a concave base. This was infilled with compact mid-orange-grey-brown sandy-silty-clay which contained fire-cracked cobbles, dog and horse bones and Roman pottery.

Truncating 24002 was a linear ditch, aligned almost north-south (context 24012), which was 9.4m x 2.33m x 0.65m and was shallower at the northern end, which had a rounded terminus. The sides were at 45 degrees and the base slightly uneven. The ditch was infilled with firm mid-red-brown clayey-sand from which no datable material was recovered, though a fragment of cow bone was present. As this ditch truncates a Roman feature, it must be of Roman or later date.

Two other ditches were aligned with context 24012, perhaps suggesting that they were related. As with 24012 these ditches were shallower at the northern ends which had rounded termini. Context 24008 was 15m x 0.97m x 0.32m, with concave sides and a concave base. The cut was infilled with firm mid-red-brown sandy-clay containing Roman CBM and fragments of cow and horse bone. Context 24006 was 11m x 1.4m x 0.56m, with steep sides and a flat base. This cut was infilled with firm mid-red-brown sandy-clay with occasional sub-rounded cobbles and pebbles and some animal bone including one fragment of cow bone. A sub-oval pit with steep sides and flat base, context 24032, was located 2m to the north of and on the same alignment as context 24006 which may imply that the two features were related. The pit was infilled with firm mid-grey-yellow-brown sandy-clay with occasional gravel.

In addition to the ditches, there was a gully aligned north-north-east/south-south-west (context 24016) which was 47m x 0.4m x 0.17m, with steep sides and a flat base. This cut was infilled with firm mid-red to grey-brown sandy-clay containing some Iron Age pottery. Context 24016 was to the north of and at right angles to the ditches described above; this layout may imply that all these features were related. Given that one of these four features (context 24008) contained Roman pottery, and one had to be of Roman or later date (24012), a Roman date is suggested for the entire grouping.

Context 24016 was truncated by a later sub-oval cut, context 24040, which was 1.55m x 1.5m x 0.45m, with steep sides and a flat base. This was backfilled with firm mid-grey-brown sandy-clay with frequent sub-rounded cobbles which contained pottery of uncertain date and a fragment of unidentifiable animal bone.

Two pits were present which had no direct stratigraphic links to any of the features listed above. Context 24004 was a sub-circular cut 2.6m x 1.45m x 0.28m, with shallow concave sides breaking imperceptibly to a concave base. It was backfilled with firm dark grey-brown sandy-silt which yielded Iron Age pottery (though this could be residual) and unidentifiable animal bone. Context 24014 was a sub-circular cut 0.9m x 0.4m x 0.12m, with steep sides on the north and east but gently sloping on the south; it had a flat base. This was backfilled with firm mid-grey to red-brown clayey-sandy-silt with very occasional gravel. The lack of dating evidence makes it difficult to interpret these pits. Given that most of the features in this trench are interpreted as being of Roman date, they have been included here; however, it should be noted that they could equally represent Iron Age features.

#### 6.14.3 PHASE 536, UNDATED FEATURES, PROBABLY ROMAN

There were a small number of undated features in Evaluation Trenches 12–13 and 17 (Figure 35). Given that there is no evidence for any form of medieval or later settlement activity in this area, these features are more likely to be of pre-medieval date. They probably relate to the Roman settlement located to the immediate south in Evaluation Trench 14.

Context 22034 was a sub-rectangular pit cut, 1.5m x 0.6m x 0.3m, aligned with the long axis north–south. This had steep sides and a concave base and was backfilled with mid-orange-brown moderately firm silty-sand with very occasional pebbles. A 12.5m long, 0.61m wide and 0.13m deep linear gully (context 22026) was present in Trench 12. This was aligned east–west and had concave sides and a flat base. It was infilled with mid-brown moderately compact silty-clay with moderate angular stones. Context 22008 was a linear cut 2.8m x 0.4m x 0.4m in size with almost vertical sides and a flat base, which was later infilled with moderately compact to friable mid-red-brown silty-sand.

In Trench 13 there was a linear cut aligned north–south, which extended beyond the northern and southern limits of excavation (context 23005). This was 0.6m wide and 0.3m deep, with steep sides and a concave base, and was infilled with mid-grey-brown moderately compact silty-sand. Also within Evaluation Trench 13 there was a circular cut with a protrusion at the northern side and very shallow profile which petered out on the southern side. Lining this cut were the remnants of a probable hearth structure (context 23005) comprising angular, non-dressed, limestone fragments located around the perimeter of a circular cut. The highest concentration of stones was on the eastern side, with only three stones present on the western side and one or two disturbed stones on the northern and southern sides of the structure. Within the structure were two superimposed deposits, the earlier being compacted dark brown baked clay with occasional burnt red-pink patches, and the later being a mid-brown silty-clay with some patches of scorched/burnt reddened clay.

The presence of charred cereal grains in soil samples taken from this feature suggests that it was a corn-drying oven (samples 812–13).

Trench 17 contained two undated features. The first (context 27024) was a linear cut 10m x 0.34m x 0.2m in size with steep sides and a slightly concave base. It was infilled with moderately compact mid-brown sand with patches of mid-brown silty-clay. The second (context 27050) was a linear cut aligned north-north-west/south-south-east which petered out at both ends. The cut was 3.6m x 0.37m x 0.11m in size, with irregular sides and a concave base, and was infilled with moderately compact mid-yellow-brown slightly silty-sand with occasional angular stones.

#### 6.14.4 PHASE 537, FURROWS PROBABLY OF MEDIEVAL DATE (Figure 36)

This phase consisted of parallel plough-furrows in Evaluation Trenches 12, 15 and 17 which were evenly spaced in a north–south alignment. The furrows were spaced up to 9m apart and were 0.8–3.4m wide and 0.04–0.25m deep, with gently sloping sides and flat bases. In addition there were a number of features interpreted as plough-scores within Evaluation Trench 17, which were on the same alignment as the furrows. The plough-scores were on average 0.2m wide and 0.15m deep with V-shaped profiles, though there were some places with more U-shaped profiles. All these features were interpreted as being of medieval date.

#### 6.14.5 PHASE 538, MODERN CONTEXTS

A number of modern field drains were present (Figure 36). Evaluation Trenches 12–16 had two superimposed sets of field drains, while Evaluation Trench 17 had a single set of drains. The modern plough-soil was also included in this phase.

### 6.15 BRONZE AGE CREMATION FROM CONTRACTORS' TRENCH

During the cutting of drainage trenches by contractors in early June 2009 a prehistoric cremation was found some 19m east of the north-eastern corner of Area A1. Although not excavated under archaeological conditions, the remnants of the find were ably salvaged by the engineer in charge of the works, Mr Martin O'Neill, who has a background in amateur archaeology. York Archaeological Trust is grateful to Mr O'Neill for his recovery of the cremation and for information regarding the context and location of the discovery.

The surviving cremated bone has been identified as human and is in good condition (see Appendix 8). The cremated remains were covered by an inverted, decorated, collared urn, the first to be found in the immediate environs of York. It is thought that the urn, which may belong to Longworth's 'Primary Series' is likely to date to the early centuries of the second millennium BC. The cremation and vessel were found at a height of 14.5m OD which is

around 1.7m below the pre-topsoil stripped ground level. Examination of the ground to either side of the cremation by Mr O'Neill did not reveal the presence of any other features or variation of deposits. This observation raises the possibility that the ground surface contemporary with the cremation may have been at a level considerably lower than that of today and that the bulk of the overlying material in this area may be of fluvial origin. This hypothesis of a buried ground surface finds some support in the observations of depositional sequences made in the trenches through the palaeochannels at the site.

## **7. SITE-WIDE SUMMARY BY PERIOD**

### **7.1 NATURAL**

The excavations confirmed that the natural deposits were highly variable, ranging from clays to silts and sands. Excavation also revealed the presence of palaeochannels running broadly north–south across the area. Peat deposits had accumulated in at least one of these palaeochannels (Trenches L6–7).

### **7.2 PRE-BRONZE AGE**

Some 133 flints ranging from early Mesolithic to Bronze Age in date were present across the site; 119 of these were from Area A1, while the remaining 14 were from Area A2. The overwhelming bulk of these flints occurred residually in later features. Fragments of broken saddle querns and a possible rubber-stone of prehistoric date were also found. These finds were concentrated in the north-western portion of the eastern block of Area A1 and they were in use up until 400–300 BC. This area was above an earlier north–south-aligned palaeochannel. The northernmost excavated portion of this palaeochannel seems to have been a springhead or waterlogged area which acted as a focus for activity throughout the prehistoric period. The early to mid-Mesolithic flints were abraded and had signs of water rolling suggestive of prolonged exposure; in contrast many of the later flints were unabraded. It is unclear why these flints were unabraded despite occurring as residual material; possibly they eroded out of exposed earlier strata in the sides of later cut features, only to be rapidly reburied.

A pit in Area A2 (Phase 501) contained a later Neolithic axe fragment (Sf105); this is the only cut feature in A2 which can be clearly dated as pre-Iron Age by the artefactual evidence.

A number of deposits accumulated within the palaeochannel described above; these were sealed by a deposit (context 1491) from which a carbon-14 date of Cal. 1300–1020 B.C. (i.e. Bronze Age) was obtained. This implies that at least some of the earliest palaeochannel infill deposits were of pre-Bronze Age date, possibly being formed in the Neolithic period. The date of the final infilling of the palaeochannel could be fixed with a greater degree of accuracy if animal bone (including the torso of a deer/sheep/goat), charcoal or wood observed in the uppermost backfill of the channel was submitted for carbon-14 dating.

Two pits (Phase 102) in Area A1 each contained a single flint of potential Bronze Age (or earlier) date. While these pits may represent Bronze Age activity, it is equally possible that the finds were residual in pits of a later date.



### **7.3 BRONZE AGE (c.2500–700 BC)**

Bronze Age features were only present in the north-westernmost portion of area A1. The earliest of these features (phase 3) included a number of pits, post-holes and levelling deposits, all of which were cut into and/or sealed the top of natural, with the exception of one pit (context 2484) which truncated an earlier pit. One of the pits (context 2863) contained the possible remains of a wicker lining, the earliest example of a wicker lining on the site. It is possible that this pit served as a well-head. Some of the pits may have been in widely spaced alignments, and several pits contained stakes. The precise function of these features is unclear, but the stakes may have acted as markers. The date of these pits is by no means certain; one at least pre-dated a pit of Bronze Age date (Phase 4 context 2738), suggesting that it was of Bronze Age or earlier date.

A series of levelling deposits (Phase 4 Group 168) sealed the Phase 3 features. At the same time a patch of the natural ground surface was levelled prior to the insertion of a number of aligned post-holes. Three pits (Group 117) containing wooden artefacts could have been contemporary with either of the post-rows. Two of the pits contained sections of discarded wooden cylinders, one of which (context 2738) gave a carbon-14 date of Cal. 930–780 BC. When these were infilled and levelled and the post-row(s) removed, several pits (Group 113) containing deposits of burnt/heat-shattered pebbles were excavated. One of them (context 1567) stood out from the rest as it only contained burnt quartz pebbles. The lack of heat reddening or scorching to sides and bases of all these pits indicated that the stones were brought in from elsewhere for disposal, rather than being heated in situ. Few other finds were present in these pits, but they included a horse tooth and painted stone (context 2345), two flint flakes (context 2679), burnt wood fragments (context 2839) and a cow metatarsal (context 2720). The relative lack of what might be termed domestic debris within these pits was in sharp contrast with the number of burnt stones seen. This may suggest a link between the excavation of pits and the gathering of the stones for disposal.

The area was then levelled (context 2847 Group 187) prior to the cutting of the second and ultimate series of pits containing burnt stone (Group 132). One of them (context 2827) also yielded calcined bone, slag, sections of roundwood, a fragmented wooden board, a flint object and a bladelet. A second pit (context 2778) produced fragments of unidentifiable animal bone and traces of coal/charcoal.

A new wicker-lined cut was dug which seems to have formed a well-point (context 2861). This truncated a number of earlier pits including the possible Phase 3 well-head and the Phase 4 wood-cylinder pit. It is possible that slumpage into these earlier features created a hollow which was then chosen as the most favourable site for a new well-point. A single

fragment of red deer bone was trapped within the weave of the wicker lining. Following the collapse of the wicker lining the cut was infilled with deposits which contained cow and horse bone fragments, a fragment of haematite and 31 fragments of wood, the majority of which were worked.

Two closely spaced pits (Group 119) on a shared centre-line were located some 7m to the north-east of the well-point. One of the pits (context 2655) was cut directly into the top of the Group 117 pit containing wooden cylinder section 2738 and it contained sherds (from a single vessel) of late Bronze Age/early Iron Age Staple Howe-type pottery, 129 worked and unworked wood fragments, and two unabraded flint flakes, one of Early Bronze Age date, the other being undiagnostic. Analysis of a soil sample from the pit produced a few fragments of charcoal, buds, seeds and fruits, mostly hazelnut shell fragments.

A post-pad and a post-pipe void (Group 188) were located close to the earlier Phase 4 wooden cylinder pit. These features did not appear to have had any structural function and might represent markers giving the general location of the underlying pits. It is unclear if these two features were contemporaneous.

#### **7.4 PRE-IRON AGE, DATE UNCERTAIN**

In Area A2 and Trench L1 there was a group of discontinuous curvilinear ditches in Area A2 (Phase 502 and 527) which were of at least two phases. It is unclear if the funnel shape appearance of these ditches at the southern end of Area A2 represents an entrance or is simply part of two adjacent enclosures. Beyond knowing that these features are pre-Iron Age, their date is uncertain. They are perhaps best interpreted as Late Bronze Age enclosures such as those depicted in Stoertz (1997, fig 24). The ditches could alternatively represent the remains of what have been termed 'irregular curvilinear' enclosures (*ibid*, fig 5.12), but the date and function of such features is far from clear (*ibid*, 15).

#### **7.5 IRON AGE (8TH CENTURY BC TO AD 71)**

The earliest reliable date for this period was produced by a small pit (Group 131, context 2620) which contained an articulated human skull (containing a preserved brain) and lower mandible (SK01) accompanied by fragments of animal bone including pig bones. The skull provided a carbon-14 date of Cal. 519 +/- 34 BC, or the early Iron Age. The skull, lower mandible, two articulated vertebrae and animal bone were located in a tight group and because of this are thought to have been buried in a leather or fabric bag which had not survived. The retention of decapitated heads for display or treatment as special objects is a known activity of the later prehistoric periods, although evidence for burials and other funerary practices is almost non-existent in Britain between c.1000 and 400 BC (Whimster

1981, 180). The closest regional comparison to the find was in the form of a pair of skulls revealed in the terminal of the outer ditch on the north side of the eastern entranceway of the Marsh Fort at Sutton Common, South Yorkshire (Van de Noort and Collis 2007, 182–4). The preserved brain is the earliest example of its kind from Britain to date and is currently undergoing in-depth scientific examinations and testing (report forthcoming).

An extensive Iron Age enclosure complex was present which extended across most of Areas A1 and A2 (Phases 103–4, 504–8) and Trenches L1–2. Enclosure complexes of this type are well known in the Yorkshire, notably through work on the Yorkshire Wolds by the RCHME (Stoertz 1997, 51–9).

The enclosure complex was largely located to the east of a north-north-west/south-south-east ditch complex close to the western limits of the main portion of Area A1, which continued into Trenches L1–2. This series of ditches followed the line of the underlying palaeochannel, the northern end of which had proved a focus for earlier activity in the area. Although there were a few features to the west of this boundary there was no evidence of this settlement continuing to the north (Trenches L6–7), to the south-west (Trenches L3–4) or to the north-east (Trench L5). It is impossible to say if the settlement continued southwards as this area lay beyond the limits of excavation. The eastern limits of the settlement are less clear; an undated ditch seen in Evaluation Trench 109 (Macnab 2004, 63 and 185) may be related, but this could equally be of a later date.

#### 7.5.1 ENCLOSURE SIZE, SHAPE AND ACCESS ROUTES

The enclosures were sub-rectangular in plan, bordered by ditches, and ranged from 0.25–0.75ha in area (though the precise size of many of the enclosures is unclear as they lay partly beyond the limits of excavation). In Area A1 two of the initial enclosures (Enclosures 1–2) were sub-divided at some stage into smaller units (Enclosures 7–20). The typical size for enclosures seen in the Yorkshire Wolds is 0.25–0.5ha (Stoertz 1997, 51), making some of the Heslington East enclosures somewhat larger than is typical in this area; it is difficult to know if this is a reflection of agricultural needs or not. The majority of these enclosures are thought likely to represent agricultural fields.

There is no obvious access route leading into or through this settlement. Although the majority of Iron Age settlements have interconnecting trackways, a small number of settlements have been observed which lack trackways, an example being known from Kilham parish in the Yorkshire Wolds (Stoertz 1997, 53 and fig 26.4).

Gaps in the boundary ditches presumably represent entrances between enclosures; in Area A1 there were gaps providing access between Enclosures 7/16, 8/18 and 9/20 while in Area A2 there were entrances between Enclosures A/C–E. Other adjacent enclosures did not have clear signs of entrances between them; in Area A1 there were no clear entrances into enclosures 8/10–14/19 while in Area A2 there were no clear entrances into enclosures B/F/G/H; either these enclosures were not interconnected, or they were connected by some other means (such as planks laid over the ditch). A similar pattern of adjoining enclosures, some with and some without obvious interconnecting entrances, has been seen on other sites in the Yorkshire Wolds (Stoertz 1997, figs 26.3, 26.4 and 26.5).

While the numerous enclosure boundary ditches presumably functioned to demarcate property, they must also have had an important drainage function. The north–south ditches which ran down-slope were presumably the principal drains taking water into the Vale of York to the south, with the east–west ditches acting as feeder drains. An exception was the east–west-aligned ditch marking the northern edge of Enclosure A in Area A2; this ditch was one of the largest on the site and clearly drained towards the east, possibly into a pre-existing brook or stream. It is clear that some of the enclosure boundary ditches partially silted up and were then recut, but it was difficult to determine how extensive such activity was. That is partly a reflection of the method of excavation; cross-sections were excavated at regular intervals along the ditches and a recut would often be visible only in one cross-section.

#### 7.5.2 ENCLOSURES CONTAINING EVIDENCE OF SETTLEMENT

Two of the enclosures (Enclosure 20 in Area A1 and Enclosure A in Area A2) contained evidence of intensive settlement activity including a sequence of superimposed roundhouses (three, possibly four, in Area A1 and three in Area A2), together with a number of other features such as small ring-gullies and pits. The size and internal arrangement of these two enclosures is typical for Iron Age homesteads and can be compared with other published examples (Collis 1997, fig 2; Taylor 1997, fig 19.3).

The ditches around Enclosure A were 1.9–2.6m wide and 0.74–1.0m deep whilst those around Enclosure 20 were marginally narrower and shallower. Subsidiary gullies ran parallel to the northern and southern sides of Enclosure A and it is possible that these may represent trenches dug to accommodate hedges, though there was no clear evidence of root activity associated with these gullies.

Both Enclosure 20 and Enclosure A had an entrance on the south-eastern side, close to their south-eastern corners. The entrance to the A1 enclosure was simply a 2m wide gap in its

southern ditch. Enclosure A had a 2.5m wide entrance flanked by a 6m long corridor formed by two ditches projecting outwards from the enclosure. There were post-holes adjacent to this entrance way on the inside of the enclosure and a post-hole within the entrance corridor, perhaps implying some sort of gate to bar the entrance.

In addition to a sequence of roundhouses (discussed below) Enclosure 20 and Enclosure A contained various features relating to settlement. Enclosure 20 enclosed an alignment of five post-holes, a further post-hole situated adjacent to the northern side of the roundhouses and an amorphous feature of unknown function. Also present were two small ring-gullies with internal diameters of 3.6m and 4.0m. At least one of these had a gap some 0.64m wide in the eastern side of the gully circuit, which may represent an entrance. If these ring-gullies formed buildings they were clearly of very small proportions and they may represent little more than drainage gullies around, for example, haystacks.

Enclosure A contained two subsidiary ring-gullies 5m and 5.8m in diameter, together with a C-shaped gully and a number of pits. The most unusual feature within this enclosure was a roughly semi-circular gully 10m in diameter with an interconnecting linear gully 28m long. The function of this feature is far from clear; although superficially it resembles an eaves-drip gully and associated drain, the linear gully did not run into the enclosure boundary ditch so could not have functioned as a drain. In addition, the curving section was positioned too close to the corner of the enclosure to accommodate a roundhouse in the space available. A broadly similar feature, in terms of layout, was present in Enclosure VII at Dalton Parlours in West Yorkshire (Wrathmell and Nicholson 1990, fig 27).

As few occupation surfaces were present within these enclosures it is difficult to interpret their function. In the case of Enclosure 20, however, considerable amounts of debris likely to have been generated within a domestic context, principally pottery and heat-fractured stones, were recovered from those parts of the enclosure ditch nearest to the roundhouses. This observation has much to say about discard practices within the settlement enclosure. The close proximity of Enclosure 20 to the metalworking area of Phase 14 may also imply some functional connection, whilst the setting of the enclosure within a network of fields may point towards the principal economic base underpinning the settlement. Backfill deposits within Enclosure A contained cow, horse, sheep, goat, pig and dog bone fragments, all of which would be typical for a mixed farming economy. The presence of wood chippings in some of the Area A2 backfills also suggests woodworking was taking place. A copper ingot may suggest that metalworking was practised in the vicinity, but there was no direct evidence for this in Area A2.

### 7.5.3 ROUNDDHOUSES AND RING-GULLIES

Both the A1 and A2 enclosures contained a number of large ring-gullies that have been interpreted as roundhouses. The internal diameter of the Area A1 ring-gullies ranged from 7.6–8.7m, while in Area A2 the ring-gullies ranged from 11.1–12.5m in diameter. None of the ring-gullies at Heslington East had a central post, but this is the norm. Only 3% of excavated roundhouses have an internal central post as these were not necessary to support the roof structure (Pope 2008, 17).

The construction method for the walling of the roundhouses is unclear. There is no evidence for any post-holes or stake and wattle walling within any of the ring-gullies themselves; neither was there any clear evidence for any associated concentric lines of post- or stake-holes within or outside the ring-gullies. If timbers were used in the construction of the walls they have clearly left no trace (for example, the timbers may have been removed for reuse elsewhere when the roundhouses went out of use). If timbers were used in the walling they would have been prone to rotting at the base, especially on such a wet site.

An alternative possibility is that the ring-gullies do not represent the remains of walls, but are eaves-drip drains surrounding walls of earth or clay. Clay walls could have supported the roof rafters directly, or there could have been a wall plate at the top of the wall. Little evidence is published to suggest how thick or high such clay walls could have been, but earth or clay walling could erode to leave little if any trace, which may explain the lack of any obvious superstructures at the Heslington East site. Pope suggests that clay-walled structures are a feature of river-valley landscapes in the later Iron Age especially in eastern England (Pope 2008, 16).

The entrances into the Enclosure 20 ring-gullies were 2.8m wide, succeeded by nearly 5m and finally by one of nearly 6m, with all these entrances tending to the east-south-east side of the structures. The earlier of the A1 enclosure ring-gullies had two post-holes adjacent to the entrance gap and these are likely to be indicative of a porch-like entrance arrangement. The entrances to the ring-gullies in Enclosure A were a 1.1m wide east-facing opening to the first roundhouse, two openings facing east and west on the second roundhouse which were 1.6m and 2.5m wide respectively, and a 1.64m wide south-east facing opening on the third roundhouse. The average size for roundhouse doorways generally is 1.5m (Pope 2008, 17). There is no fixed orientation for doorways in the Iron Age, but the majority are oriented south-east to north-east (*ibid*, 19). This may reflect a desire to obtain maximum light (from the south) and/or protection from rain bearing south-westerly winds and cold northerly winds (Oswald 1997, 89).

There was no evidence for internal hearths in any of the Heslington East roundhouses. Hearths were usually centrally placed (Pope 2008, 18). It is unclear if this absence of hearths was due to poor preservation or later truncation, or whether the roundhouses genuinely lacked hearths. Pope states that two in five roundhouses lack internal hearths and that this may suggest seasonal occupation (*ibid*, 20). The roundhouses at Heslington East also lacked any surviving internal floor surfaces which might have provided a clue as to the activities taking place inside (from artefactual or soil sample evidence).

In addition to the roundhouses in Enclosures 20 and A, there was a series of ring-gullies across the site; in Area A1 these were largely clustered in the north-western corner of Enclosure 9, with two further ring-gullies in Enclosures 10 and 17. In Area A2 there were two ring-gullies close to the western limits of excavation, with a third badly preserved example in Enclosure D. These ring-gullies ranged from 4–8m in diameter and had entrances 0.68–3.44m wide on their south-west, south-south-west, north-west and west-north-west sides. A large central pit was associated with the smallest Area A1 ring-gully. A second Area A1 ring-gully was associated with two post-holes and a third with a single post-hole. The larger ring-gully in Area A2 had an integral post-hole on the northern side of the gully.

#### 7.5.4 DATING OF THE ENCLOSURE SYSTEM

It has been suggested that enclosure complexes began to appear in the Yorkshire Wolds sometime around the end of the 2nd century BC and continued throughout the Roman period (Stoertz 1997, 53). It is difficult at this stage to determine whether the Heslington East enclosure complex fits into this pattern. A few sherds of Bronze Age/early Iron Age pottery and early Iron Age pottery were present in the backfills of the Enclosure A ditches (Phases 505–6), but this pottery seems to have been residual. The earliest pottery from the A1 enclosures has been identified as Iron Age, whilst a handful of flint artefacts appear to be residual within the enclosure ditches. The majority of the pottery recovered was simply dated as Iron Age, making it difficult to assess when within this period the enclosure system came into being. More analysis of the pottery or carbon-14 dating of material from the backfills of the enclosure system would be required to clarify the dating.

#### 7.5.5 ACTIVITY IN THE NORTH-WESTERN PORTION OF AREA A1

The north-western portion of the eastern block of Area A1 saw levelling and consolidation prior to the insertion of a metalled surface (Group 126). This included a probable track-way leading into the site from the north. An east–west-aligned causeway (Group 130) was also laid out. A sequence of major north–south ditches was then cut to follow the line of an underlying palaeochannel. Repeated slumping in this area, coupled with the formation of erosion gullies running down-slope, and the deposition of hill-wash from higher land to the

north necessitated the constant recutting and realigning of the ditches. At any given time a single north–south ditch was in use. Group 147 Phase 14 recut of the east ditch may have been contemporary with the Group 52/53 Phase 106 boundary ditch on the northern side of roundhouse Enclosure 20. Further levelling and repairs to the metalled surfaces was also undertaken. Several pits were excavated across this area. At one stage a stone-lined well-point or tank (Group 115) was built; this was interpreted as being for domestic use rather than for watering livestock or for industrial usage. This well-point was subsequently infilled. Collectively, these features are interpreted as ranging in date from the early–middle Iron Age.

An east–west ditch (Group 180) was inserted and a possible metalworking area (Groups 149, 152 and 189) was created close to the western limits of excavation. These features are possibly of mid-Iron Age date. While it seems logical to suggest that the metalworking area was in use at the same time as the roundhouses in Enclosure 20, there were no direct stratigraphic links between these two areas, so their precise chronological relationship is unclear.

Further changes, probably of late Iron Age date, included the insertion of a row of stakes (Group 139) into one of the major north–south boundary ditches (Group 144); the precise function of these stakes is unclear. Two of the earlier north–south ditches silted up and the area was then used for the excavation of pits and post-holes which were randomly scattered across the area.

## **7.6 LATE IRON AGE/EARLY ROMAN**

A lattice-like enclosure system replaced, or developed out of, the earlier Iron Age enclosure complex. The lattice-like enclosure system was largely seen in Area A2, but some of the ditches within it continued into Area A1 to the north. A number of the ditches from the earlier Iron Age enclosure clearly remained in use and were integrated into this new system. In Area A2 the enclosures were bordered by ditches and were up to 40m x 40m in area, but most were 20m wide and gaps up to 4m wide in the ditches presumably related to entrances between the enclosures. In Area A1 some of the enclosures were of slightly larger proportions. There were entrances between most of the enclosures but not all. Some of the enclosures in the system were too badly preserved to determine whether entrances were present or not.

Whilst this system may have begun in the late Iron Age and continued into the Roman period, it cannot be completely ruled out that it was of entirely Roman origin. The major north–south Iron Age ditch seen in Area A1 and Trenches L1–2 was certainly recut in the



Roman period. If the system is of Roman date it may well be associated with the Roman settlement of Area A3 located approximately 400m to the north-east, which was first excavated by Macnab (2004, 186–7) and more recently by the University of York (<http://sites.google.com/a/field-archaeology.co.uk/heslington-east/Home>).

This enclosure system may be of a type termed ‘subdivided rectilinear enclosures’ which are present on the Yorkshire Wolds (Stoertz 1997, fig 28). These are thought to be characteristic of Romanised settlement with pre-Roman origins, and some have tentatively been assigned as having villa status (ibid, 55).

## **7.7 ROMAN (AD 71 TO EARLY 5TH CENTURY)**

In the north-western portion of Area A1 an earlier major north–south Iron Age ditch was recut (Group 144) and then partially silted up (Group 183). A series of erosion gullies (Group 156) formed above the ditch suggesting that the area was neglected or abandoned for a time. Deposits then accumulated within and above the earlier ditch (Group 146). One of these deposits (context 1564) contained a complete red deer antler with part of the skull still attached, suggesting that it resulted from butchery rather than being a naturally moulted cast-off. The fact that it represented deliberate wastage of a valued source of raw material, used in the manufacture of utilitarian and/or decorative objects, suggested that it was most likely placed in the top of the ditch deliberately. Various pits and post-holes (Group 184) were cut into the area, at least one of which (context 2782) contained 2nd- to 3rd-century Roman pottery. Later activity in the area (Phase 22) comprised a metallised surface, a stone footing and an elongated pit with a pair of square post impressions in the base.

Shrinkage of underlying palaeochannel deposits the north-western portion of Area A1 caused a large slump-hollow, which then gradually silted up (Phase 23). The earliest backfill of the slump-hollow (context 1534) was found to be almost completely sterile and the lack of charcoal and/or other settlement-related debris implied that the area was deserted throughout its formation. Later fills within the slump-hollow contained a variety of objects, including an iron nail, iron object, four coins dating to AD 350–53, three coins dating to the 350s, a copper alloy fragment, a flint flake, a fragment of lead, a fragment of haematite, fragments of Iron Age and Roman pottery, Roman CBM and animal bone. These objects were placed along a loose east–west alignment within the slump-hollow, which may have contained standing water or been waterlogged ground at the time. The objects are thought to constitute votive offerings placed within either a body of water or marshy ground, the location often favoured for such activities.

Apart from the continued use of earlier enclosure ditches there is relatively little evidence of Roman activity across much of Areas A1 and A2. In Area A1 there was an isolated cremation (Group 68), a curvilinear feature (Group 60) and a ditch (Group 15). At the southern end of Area A2 a feature of uncertain function and a waterhole with associated gullies were infilled in the Roman period (though they could be of earlier date). The access ramp into the waterhole was too steep and confined to have been of any practical use for the watering of livestock, so it must have had some other function.

A more intensive pattern of Roman land use was suggested in Evaluation Trenches 12–14 and 17. A number of Roman gullies, ditches and some pits were present, together with undated features including gullies/ditches and a possible corn-drying oven; these were though most likely to be of Roman date. These features almost certainly represent the northern limits of a Roman settlement seen in Area A3 to the immediate south. The activity seen in these trenches was not of the same scale or elaboration as that seen in Area A3, however; this may be due to severe truncation through a combination of erosion and post-Roman ploughing. There is no evidence for this settlement continuing north-eastwards into the area of Evaluation Trenches 15–16.

## **7.8 POST-ROMAN (5TH–20TH CENTURIES)**

No evidence of any activity dating to the Anglian/Anglo-Scandinavian period (early 5th to mid-11th century AD) was recovered.

Throughout the medieval (mid-11th century to early 16th century), post-medieval (early 16th to mid-19th century) and modern periods (mid-19th century to the present) the site has been subjected to purely agricultural usage. Medieval plough furrows were present across most of the site. A field boundary ditch of medieval date was present in A2, and one of post-medieval date was identified in Area A1. Modern activity over the whole site comprised plough-soils, field drains, post-holes for fences and occasional pits.

## 8. CARBON-14 DATA

Sample No.	Context No.	Feature/Deposit Sampled	C14 Date
204	1602	Palaeochannel/Branchwood See <b>12</b> : Appendices report	Cal. 1600–1570 BC
339	2326	Palaeochannel/Rootwood See <b>12</b> : Appendices report	Cal. 1460–1310 BC
347	2340	Pit fill/Rootwood	Cal. 160 BC–AD 60 (95% probability)
348	1491	Palaeochannel/Rootwood also see <b>12</b> : Appendices report	Cal. 1300–1020 BC
SK01	2617	Pit/Human Skull	Cal. 519 BC +/- 34
ST01	2774	Pit/Wood Cylinder Fragment	Cal. 930–780 BC

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