Northamptonshire Archaeology

An Iron Age settlement at Tattenhoe Park, Bletchley, Milton Keynes Buckinghamshire

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OASIS REPORT FORM

PROJECT DETAILS		
Project name	An Iron Age settlement at Tattenhoe Park, Bletchley, Milton Keynes, Buckinghamshire, April–September 2005	
Archaeological excavations at Tattenhoe Park, Bletchley, Milton Keynes, Buckinghamshire, were carried out by Northamptonshire Archaeology between April and September 2005. The main area excavation included most of an open settlement of the middle Iron Age, which has been radiocarbon dated to the early part of the period, 400-200BC. The settlement comprised a principal roundhouse group and was surrounded by further roundhouses and groups of four-post structures. A linear ditch may have formed a landscape boundary, and in the later use of the settlement there was a partial enclosure of some structures. The material evidence was poor, with the pottery highly fragmented and few other finds recovered, but some copper alloy casting had been carried out. Animal bone and charred plant remains were also sparse and poorly preserved, but it is suggested that pastoral agricultural may have dominated the economy. A few larger pits and other features produced a little late Iron Age and Roman pottery, and a few cremation deposits have been radiocarbon dated to the mid-3rd to mid-4th centuries, perhaps showing long-term ancestral memory. The remains of a small post-medieval farmstead comprising a brick-built house within a walled yard, was also investigated.		
Project type	Excavation	
Site status (none, NT, SAM etc)	None	
Previous work (SMR numbers etc)	Trial Trench Evaluation and Geophysical Survey by NA (Brown *et al* 2005)	
Current Land use	Pasture	
Future work	No	
Monument type/ period	Iron Age settlement Post-medieval farmstead	
Significant finds	Iron Age coin, pottery, copper alloy casting crucibles, cremated human remains	
PROJECT LOCATION		
County	Buckinghamshire	
Site address	Land near Tattenhoe Bare Farm	
Study area (sq.m or ha)	54 ha	
OS Easting & Northing (use grid sq. letter code)	SP 824 323	
Height OD	105m	
PROJECT CREATORS		
Organisation	Northamptonshire Archaeology	
Project brief originator	Milton Keynes Council (Giggins 2005)	
Project Design originator	Northamptonshire Archaeology	
Director/Supervisor	Edmund Taylor	
Project Manager	Adam Yates	
Sponsor or funding body	EDAW	
PROJECT DATE		
Start date	April 2005	
End date	Sept 2005	
ARCHIVES	Location (Accession no.)	Content (eg pottery, animal bone etc)
Physical	2006.14	Pottery, animal bone, small finds, cremated human remains, ceramic building material, stone artefacts
Paper	2006.14	Site record (context sheets, drawings, photographs etc)
Digital	2006.14	Photographs, digital reports
BIBLIOGRAPHY		
Title	An Iron Age settlement at Tattenhoe Park, Bletchley, Milton Keynes Buckinghamshire, April–September 2005	
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Author(s)	Edmund Taylor	

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AN IRON AGE SETTLEMENT
AT TATTENHOE PARK, BLETCHLEY, MILTON KEYNES
BUCKINGHAMSHIRE

April–September 2005

Abstract
Archaeological excavations at Tattenhoe Park, Milton Keynes, Buckinghamshire, were carried out by Northamptonshire Archaeology between April and September 2005. The main area excavation included most of an open settlement of the middle Iron Age, which has been radiocarbon dated to the early part of the period, 400-200BC. The settlement comprised a principal roundhouse group and was surrounded by further roundhouses and groups of four-post structures. A linear ditch may have formed a landscape boundary, and in the later use of the settlement there was a partial enclosure of some structures. The material evidence was poor, with the pottery highly fragmented and few other finds were recovered, but some copper alloy casting had been carried out. Animal bone and charred plant remains were also sparse and poorly preserved, but it is suggested that pastoral agricultural may have dominated the economy. A few larger pits and other features produced a little late Iron Age and Roman pottery, and a few cremation deposits have been radiocarbon dated to the mid-3rd to mid-4th centuries, perhaps showing long-term ancestral memory. The remains of a small post-medieval farmstead comprising a brick-built house within a walled yard, was also investigated.

1 INTRODUCTION

Archaeological excavation of three separate areas was carried out by Northamptonshire Archaeology on land at Tattenhoe Park, Bletchley, Milton Keynes, Buckinghamshire between April and September 2005. The work was undertaken for EDAW on behalf of English Partnerships in accordance with a brief prepared by Milton Keynes Council (Giggins 2005). The archive will be deposited with Buckinghamshire Museums with the Accession Number 2006.14.

The development site occupies approximately 54ha of land, extending up to 1km east-west by 600m north-south, lying on the western margin of Bletchley, at the south-western corner of Milton Keynes (Fig 1: NGR SP 824 323). It is bounded to the east by Snelshall Street, V1, to the north by Chaffron Way, H7, to the west by open fields and to the south by a tributary of Loughton Brook.

The underlying geology comprises Oxford Clay and Kellaways Beds overlain by Boulder Clay and morainic drift (http://www.bgs.ac.uk/geoindex/index.htm). The slowly permeable calcareous and clayey soils are of the Hanslope association (SSEW 1983). The land cover was predominantly arable, with some recreational land.

Loughton Brook runs eastward from the site, but then turns abruptly northwards to join the River Great Ouse to the north of Milton Keynes at New Bradwell. Adjacent to the site, the stream lies at 100m aOD, and the land rises steadily towards the north-west, with the Iron Age settlement on the highest ground within the development area, at 122-123m aOD. The land continues to rise, and 2km to the west it reaches 140m aOD.

2 BACKGROUND

In order to assess the archaeological resource of the site a programme of evaluation works had been requested by Milton Keynes Council and these were undertaken by Northamptonshire Archaeology in 2005 (Brown *et al* 2005). The evaluation comprised a reconnaissance magnetic susceptibility survey to identify areas of archaeological potential, followed by several areas of detailed gradiometer survey. The geophysical survey was followed by a programme of trial trench evaluation comprising 102 trenches, some 2% by area.

This work identified four areas of archaeological interest (Fig 1):

- Area A: An Iron Age settlement site at Tattenhoe Bare Farm in the north-west part of the development area with some peripheral features, and occupying an area of 6ha.
- Area B: A post-medieval farmstead known as Bottle House, occupying 0.1ha in the south-east part of the development area.
- Area C: Two ditches in the south-west part of the development area.
- Area D: A localised scatter of features in the central part of Area D

3 AIMS AND OBJECTIVES

As a result of the evaluation works a programme of archaeological mitigation works were required by Milton Keynes Council, as set out in the brief (Giggins 2005). This required that a two-phase programme of works be carried out comprising archaeological excavation on Areas A, B and C, which are discussed here, and a watching brief on Area D.

The general aims of the archaeological excavation were to:

- Preserve by record the archaeological remains present at Tattenhoe Park
- Characterise the date and nature of the archaeological remains
- Undertake a programme of post-excavation analysis to reconstruct a sequence of human activity at the sites
- Place the discoveries in their local and regional context with particular reference to the recent excavations undertaken at Kingsmead South. The work will also consider published articles and client reports relating to the previous work in the vicinity
- To present the results in a written report with publication in an appropriate outlet

The site specific objectives as set out in the brief (Giggins 2005) were:

- Area A: To establish the plan of the settlement, hut construction details, the period of occupation, the occupation activities on site, the floral and faunal resources, the dating of the Iron Age pottery fabrics and their continued use into Roman times

- Area B: To establish the plan of the dwelling, its development, date range and usage and to establish the probable owners and occupiers of the site through documentary research

- Area C: To trace and establish the function of one of the two ditches by the excavation of a 50m by 2m trench following the line of the ditch.

- Area D: To investigate the scatter of features at the centre of Area D and to sample any other archaeological features in the surrounding area as exposed during soil stripping prior to the construction of the access roads. A further watching brief during soil stripping for a school playing field, not part of the original programme, was carried out at the northern end of the field containing Area D in November 2007.

4 EXCAVATION METHODOLOGY AND SITE CHRONOLOGY

4.1 Methodology

The middle Iron Age settlement, Area A, occupied most of the field to the south of Tattenhoe Bare farm and a portion of a field immediately to the east (Fig 2). The eastern limit of the excavation was determined by the presence of a fuel pipeline. Originally, it was intended that the north-eastern corner of this field was also to be excavated, but given the safety implications of passing heavy plant machinery across the pipeline and the expected paucity of archaeological activity in this part of the field, the area was omitted. In lieu of this, an additional area was stripped along the western extremity of the site which revealed archaeological remains not anticipated during the formation of the original strategy.

Topsoil was removed using a 360° excavator fitted with a 2.20m toothless ditching bucket, and operating under intensive archaeological supervision. Topsoil and subsoil was stripped to reveal the first significant archaeological layer or the natural substrate. Removed soil was handled by articulated dump trucks and stacked at a safe distance from the excavation areas.

A site grid was established at 20m intervals and related to the Ordnance Survey National Grid using a Leica System 1200 GPS. Where necessary the archaeological surface was cleaned by hand and planned at a scale of 1:50. All sectioned features were drawn at a scale of 1:10 or 1:20 and recorded on pro-forma sheets. A unique context number was allocated to each distinct deposit and feature.

Following the advice of Helen Keeley (freelance consultant) and Dominique de Moulins (English Heritage regional adviser), soil samples of 40 litres (where possible) were taken for flotation from dateable contexts with a potential for the recovery of charcoal and carbonised plant remains.

The site and the spoil heaps were scanned with a metal detector to maximize finds retrieval.

A full photographic record comprising both 35mm monochrome negatives, with associated prints, and colour transparencies was maintained.

All works were conducted in accordance with the IFA *Standard and Guidance for Archaeological Field Evaluation* (2001) and the Code of Conduct of the Institute of Field Archaeologists (1985, revised 2002).

4.2 **Radiocarbon dating** by Andy Chapman

The chronology of the Iron Age settlement and activity during the Roman period is provided by a group of seven radiocarbon dates, along with the pottery assemblage and a single Iron Age coin. As with all sites occupied in the middle Iron Age, the 'wiggle' in the calibration curve produces double dates at the 68% confidence level and broad, sometimes still double, date ranges, spanning as much as 300 years, at the 98% confidence level, making interpretation problematical.

However, four of the five dates lying within the Iron Age are consistent in indicating that the settlement was occupied through the earlier part of the middle Iron Age. A single date, from roundhouse RD12, suggests that occupation might have begun in the late 5th century BC, but the central group of three dates, from a boundary ditch and roundhouses RD1 and RD8, are consistent with a period of occupation spanning the 4th and 3rd centuries BC.

The latest radiocarbon date in the Iron Age, from roundhouse RD21 towards the northern end of the site, is consistent with the site phasing, which also indicates that the northern roundhouses were later in date than those to the south, suggesting that occupation at this end of the site continued through the 2nd century BC and perhaps even as late as the mid-1st century BC. A potin coin of the 1st century BC was also recovered from a late use of one of the principal roundhouses, RD1, perhaps suggesting that at least this building was retained throughout the lifetime of the settlement.

Late Iron Age pottery was recovered from a single pit in the northern part of the settlement, and small quantities of Roman pottery came from other pits and boundary ditches, not roundhouses. It would appear, therefore, that occupation of the settlement had ceased by the early to mid 1st century BC, but with some occasional activity over the following decades. This may have included the deposition of at least two cremation deposits, perhaps burials close to a former home. Further cremation deposits have been radiocarbon dated to the late Roman period, the 3rd-4th centuries AD, when the deposition at this location may have been either fortuitous or a deliberate reuse of a known ancestral home.

Unexpectedly, as there was no pottery evidence, a charcoal rich deposit from an isolated pit produced a date in the 10th to mid-11th centuries AD, indicating late Saxon activity in an area that was within the open fields either then or shortly thereafter.

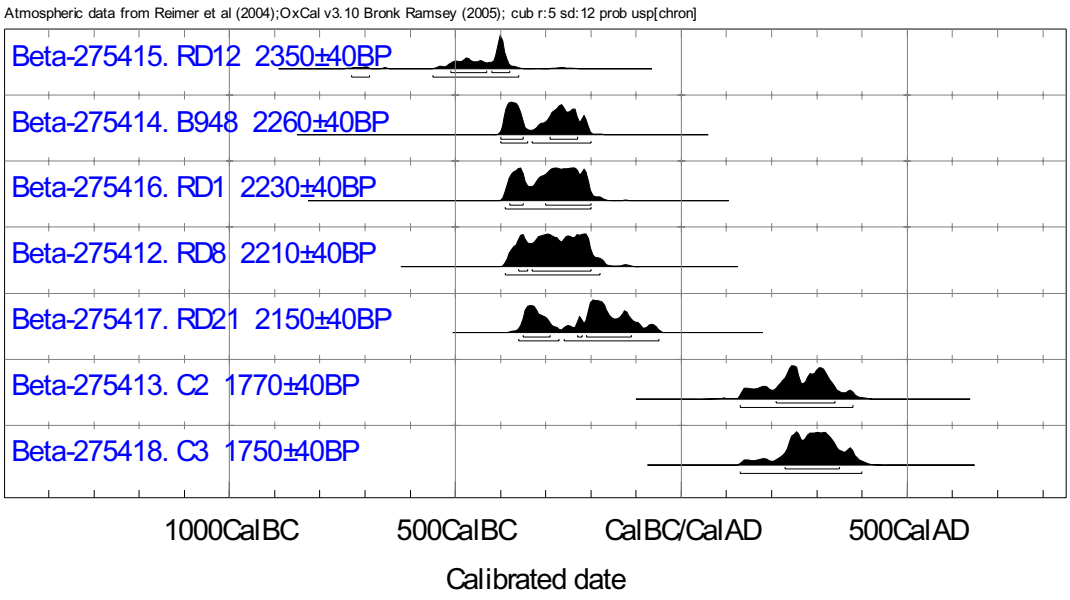

Table 1: Radiocarbon determinations

Sample/ Lab no	**context/ feature/ structure**	**Sample type**	**Conventional Date (BP)**	**13C/12C Ratio**	**Calibrated date** intercept 68% confidence **95% confidence**
TP05/978 Beta-275415	978/979 RD12	Charcoal *Prunus*	2350+/40-	-23.6	Cal BC 400 410-360 **510-380**
TP05/946 Beta-275414	946/948 Boundary ditch	Charcoal *Pomoideae*	2260+/-40	-24.2	Cal BC 370 390-360 & 290-240 **400-340 & 330-220**
TP05/1265 Beta-275416	1265/1266 RD1	Charcoal *Prunus*	2230+/-40	-24.8	Cal BC 360 & 280 & 260 380-340 & 320-210 **390-190**
TP05/741 Beta-275412	741/742 RD8	Charcoal *Pomoideae*	2210+/-40	-25.7	Cal BC 350 & 290 & 220 370-200 **390-170**
TP05/1285 Beta-275417	1285/1286 RD21	Charcoal *Pomoideae*	2150+/-40	-24.7	Cal BC190 340-320 & 210-160 **360-280 & 260-60**
TP05/944 Beta-275413	944/945 Cremation C2	Charcoal *Pomoideae*	1770+/-40	-25.3	Cal AD 250 Cal AD 230-260 & 280-330 **Cal AD 140-380**
TP05/1426 Beta-275418	1426/1427 Cremation C3	Charcoal *Pomoideae*	1750+/-40	-25.7	Cal AD 260 & 300 & 310 Cal AD 240-340 **Cal AD 210-390**
TP05/312 Beta-275411	312/313 pit	Charcoal *Quercus* (oak) Sap wood	1040+/-40	-26.00	Cal AD 1010 Cal AD 980-1020 **Cal AD 900-1040**

4.3 Summary of site chronology

The presence of six phases of activity is based upon the sequence of stratigraphic relationships, the overall pattern of features and the radiocarbon dates. The ceramic assemblage cannot be more finely divided to provide a means of identifying sub-divisions of activity within each phase.

Phase 1: Middle Iron Age settlement (4th-3rd centuries BC)
An open settlement focused on a principal house group was established. Curvilinear gullies defined the locations of roundhouses and post-built rectangular structures indicated possible storage buildings or drying racks.

Phase 2: The Middle Iron Age enclosure and boundary system (4th-3rd centuries BC)
The sparse structures of the northern part of the settlement were abandoned and an open-ended rectilinear enclosure was established. A substantial linear boundary ditch marked the northern boundary of the settlement at this phase, but it may have been established at an earlier date.

Phase 3: Middle Iron Age occupation at the northern boundary (2nd century BC- mid 1st century BC)
Occupation comprised at least five new roundhouses developed close to the substantial northern boundary ditch, but it is likely that some of the structures to the south were still in use, particularly roundhouse RD1. By the end of this period the settlement had been abandoned.

Phase 4: Late Iron Age and Roman activity (mid 1st century BC-4th century AD)
There was sparse activity during the late Iron Age and early Roman period comprising linear boundary ditches, scattered pits and at least two cremation burials. In the late Roman period, the 3rd and 4th centuries AD, the earlier settlement, perhaps still visible as earthworks, was visited by the local population who interred cremated human remains at the site, often within or close to former dwellings.

Phase 5: Medieval pits (10th century)
Two shallow pits were dug in the northern part of the site. The charcoal-rich fills came from oak, which may have been burnt *in situ*.

Phase 6: A post-medieval animal burial
In the corner of the field, parallel to the hedge which marked the modern boundary, there was a large pit which contained the articulated skeleton of a cow. The animal probably died from disease as the bones showed no evidence of slaughter.

5 THE IRON AGE SETTLEMENT: AREA A

5.1 Middle Iron Age Settlement

There appears to have been no occupation on the site until an open settlement was established during the middle Iron Age (Figs 2 and 3). This may have had its origins in a principal house group (roundhouses RD1, RD2 and RD16) along with further structures to the immediate west (roundhouses RD3, RD4, RD5 and RD6, and structures S1, S2, S3 and S4) which displayed a prolonged sequence of maintenance and replacement. There were also further roundhouses to both the south-west (RD7, RD8, RD9 and RD22) and to the south (RD12, RD13, RD14 and RD15), along with other minor structures both circular and rectilinear. To the north there was perhaps little early activity, with a single isolated roundhouse (RD 17). It cannot be

established whether the linear land boundary ditch to the north was a primary feature, beside which the settlement was established, or whether it was a later addition, respecting the location of an established settlement.

Given the generally low incidence of ring gully intercutting, other than within discrete groups, and the paucity of closely dateable pottery, it is difficult to interpret how the settlement developed during this initial phase. Analysis of the stratigraphic data and the spatial layout of the site would suggest that up to 13 of the roundhouses and 11 of the other structures could have stood at any one time. The settlement appeared to have been limited to the west by a boundary that is archaeologically invisible, possibly a hedge, which was later realised by the provision of a linear boundary ditch.

The principal house group (RD1, RD2 and E1, S8, RD16)

Two large roundhouses, RD1 and RD2, and their less substantial ancillary buildings, roundhouse RD16 and an open sided semicircular structure S8, were sited in the central part of the settlement (Fig 4). The ring ditches of roundhouses RD1 and RD2 displayed multiple recuts suggesting a prolonged process of respect and maintenance. The ring ditches were both quite large in diameter and RD2 may have enclosed the largest roundhouse in the settlement, with a rectilinear ditch system, E1, forming an enclosed forecourt beyond the south-eastern entrance.

Roundhouse RD1

This ring ditch had an internal diameter of 15m, and was defined by a sequence of four intercutting ditches (Figs 5 and 6). The earliest of these, [1268], comprised two arcs of gully with narrow entrances, 1.50m and 1.00m wide, at the north-west and the south-east sides respectively. The gullies were 0.60-0.70m wide and 0.20-0.30m deep (Fig 8, section 342). Although largely truncated by recutting, complete profiles at the terminals displayed steep sides and a narrow base. Charcoal from one of the terminals indicates ash, hawthorn and blackthorn were being used for domestic fuel. Fragments of a fired clay loomweight were retrieved from a terminal of the north-west entrance. Subsequent recuts maintained the south-east facing entrance while the opening to the north was only a feature of the primary ring ditch.

The initial recut [1076] had an internal diameter of 12.0m, and the south-eastern entrance was 2.50m wide. The gully was wider and shallower than its predecessor, 0.65-1.20m wide and 0.15-0.20m deep. A fragment of possible saddle quern was retrieved from the western side. A short spur of gully [1179] near the northern terminal was 4m long, 1.16m wide and 0.26m deep.

The penultimate ditch [1266] was the most substantial in the sequence. It was up to 1.60m wide and 0.40-0.50m deep. The ring ditch had an internal diameter of 12.5m and the south-eastern entrance was 5.5m wide, with the northern terminal offset to the east. The profile varied but generally comprised gently sloping sides and a slightly concave base.

The final recut [1262] again widened the internal diameter of the ring ditch, to between 13.5m and 15.0m. The eastern entrance was 3.0m wide, and the eastern terminal was again offset to the east. The ditch was 0.15-0.30m deep, generally narrower than the previous cuts, but widened at the terminals to 0.80m.

The profile displayed concave edges with a broad flat base. With the exception of the penultimate gully [1266], where a sequence of three fills was identified, the others all contained a homogeneous fill of mid grey-brown silty clay. A coin, a *potin,* attributed to the Cantiaci tribe and dated to the 1st century BC was retrieved from near to the southern terminal of this gully.

There were nine postholes within RD1. Postholes [1240] and [1288], between 0.40m and 0.60m in diameter and 0.25m to 0.38m deep, probably held the posts of a doorway at least 1.7m wide. Their position suggests that the roundhouse was *c* 9.0m in diameter, and likely to be associated with the penultimate re-cut [1266]. Two fragments from a broken saddle quern came from posthole [1288]. Posthole [1270] might also have been a doorpost at a different phase of use.

The other seven postholes within the ring ditch, [1006], [1054], [1099], [1258], [1270], [1305] and [1307], formed no recognisable pattern and are likely to relate to internal structures or partitions. They were 0.30-0.70m in diameter and 0.10-0.70m deep. Two external postholes or pits along the southern margin of the ring ditch, [1276] and [1155], were cut by the earliest gully and the penultimate re-cut respectively. They were both at least 1.0m in diameter and 0.20m and 0.30m deep. All of the postholes were filled with mid grey-brown silty clay.

Roundhouse RD2 and enclosure E1
This ring ditch had an internal diameter of 15.0m, and was defined by two arcs of gully (Figs 4 and 7). There were openings to the north-west and south-east, which were 3.50m and 3.00m wide respectively.

The gullies had multiple recuts. The primary cut of the southern side of the gully [457] was relatively linear in plan, 0.40-0.50m wide and 0.15-0.20m deep. The profile varied from V-shaped to broad and flat based. The three subsequent recuts [379], [340] and [354] were 0.30-1.60m wide and 0.20-0.60m deep, with a general decrease in width and depth from earlier to later (Fig 8, section 119). The gullies contained fills of mid greyish-brown silty clay. The northern arc [71] had been recut [624]] to within 6.0m of the north-west entrance terminal, while only a single cut was observed at the south-eastern terminal. Although the silty clay fills of the gully were flecked with charcoal throughout, there did not appear to be any concentration within the terminals.

Within RD2 there were no postholes near either entrance to denote the provision of substantial doorposts. There were nine sub-circular postholes towards the centre of the ring ditch, possibly representing the remains of internal structures or divisions. The two largest postholes, [211] and [272], were 0.65m and 0.90m in diameter and 0.20m and 0.43m deep. In posthole [211] there were a number of sub-angular stone fragments which are likely to have been used as post packing. The other postholes, [193], [195], [197], [223], [229], [230] and [256], formed no recognisable pattern, and were 0.20-0.33m in diameter and 0.07-0.25m deep. Near these postholes were three short and shallow linear gullies, [227], [261] and [332]. Although too wide and shallow to be convincing as beam slots, if the gullies were contemporary with the use of RD2 they are likely to represent some kind of internal structure.

Surrounding RD2 was sub-rectangular ditched enclosure, E1. This was 26m long and 20m wide, and comprised three separate elements; [301] to the south-east, [209] to the north-west and [433] to the west. These lengths of ditch were between 0.40m and 1.00m wide and 0.12-0.35m deep. Their profiles varied, but generally comprised steep straight edges and a narrow concave base. The gullies contained homogeneous fills of mid to light greyish-brown silty clay.

The south-eastern end of the enclosure was closed, and ditch [301] formed a 'forecourt' of approximately 100m² at the south-eastern entrance of RD2. The north-western end of the enclosure was largely open, but a short L-shaped gully [209] restricted access to the north-western. Although this gully was truncated by later pits it may have originally completely spanned the entrance. A section of curvilinear gully

[433] formed part of the western side of the enclosure, and a posthole [373] may suggest that the enclosure continued as a fence to the north. A short spur [346], protruding at right angles from gully [433] towards the ring ditch, created a small sub-enclosure of approximately 30m² on the south-western side of the roundhouse.

In the forecourt to the south-east of roundhouse RD2 there were two postholes and a short linear gully. The postholes, [185] and [189], were 0.50m and 0.63m in diameter and 0.30-0.42m deep. Posthole [189] contained sub-angular fragments of stone which may have been used as post packing. Gully [205] was 2.50m long, 0.47m wide and 0.20m deep.

A shallow pit [461] on the western side of enclosure E1 was cut by gully [433]. The northern element of the enclosure, [209] was cut by a shallow pit [263].

To the north-west of roundhouse RD2 were a group of seven pits. The largest of these, [305] and [386] were between 2.65m and 3.60m in diameter, and 0.48m deep with steep sloping sides and broad flat bases. Pit [305] was cut by a linear gully, [270] which was 7.50m long, 0.15m deep and had been dug across the north-west entrance to roundhouse RD2.

Structure S8
This lay to the north-east of roundhouse RD1 and was defined by a semicircular arc of gully with a diameter of 10.5m (Fig 4). The gully [207] was 0.40-0.85m wide and 0.27-0.40m deep and had a uniform bowl-shaped profile. The fill comprised a light to mid brown-grey silty clay. The northern side of the gully was cut by a later boundary ditch B1.

The opening on the eastern side was 10.5m wide and in the centre of this was a group of five postholes, [187], [247], [225], [245] and [243]. These were 0.45-0.90m in diameter and had an average depth of 0.20m. The fills were similar to that of gully [207]. To the west of this group there was a single large posthole or small pit [259], 1.20m in diameter and 0.15m deep. The primary fill comprised light brown silty clay and the upper fill darker brown sandy silt. Three metres to the west of the southern terminal of gully [207] there was a short linear gully [267], 2.70m long, 0.50-0.80m wide and 0.30m deep.

Roundhouse RD16
This ring ditch lay to the north of RD2. It had an internal diameter of 11.5m and was defined by an incomplete and truncated penannular gully, [106], 0.55-0.70m wide and 0.30m deep (Fig 4). The profile generally comprised steep straight edges and a narrow base. It was filled with orange-brown silty clay. There were two interior postholes [56] and [64], 0.55m and 0.75m in diameter and 0.24m and 0.30m deep. Posthole [64] may have formed the southern side of a north-west facing doorway. Burnt pebbles found in the gully near the postholes also suggests the presence of a western entrance. A pit to the east of the postholes, [87], was up to 3.2m in diameter and 0.60m deep. The fills of orange-grey silty clay contained burnt stones and a single sherd of Roman pottery which was likely to have been intrusive.

The western roundhouses (RD3–RD10) and structures (S1-S4)
This linear arrangement of some eight buildings was aligned north-east to south-west along an archaeologically invisible boundary, possibly a hedge or fence which was at right angles to the major land boundary ditch B6 (Fig 3).

At the north-eastern end of the line, RD3, RD5, RD6 and structures S1 to S4 and RD4 represent an extended period of use and replacement of, perhaps, a pair of adjacent and related more structures (Fig 9). The ring ditches to the south-west, RD7, RD8, RD9, RD10 and RD22, show less intensive usage (Fig 10).

Ring ditch RD3
This ring ditch had an internal diameter of 10.0m, and was defined by a semicircular or horseshoe-shaped gully [295] with an 8m-wide opening on the eastern side (Fig 9). The gully was 0.21-0.55m wide by 0.21-0.55m deep and its profile varied along its length. There was a homogeneous fill of orange-grey silty clay.

Sub-circular pits or large post-pits, [344] and [555], were located at the north and south terminals, and may have held substantial posts. The pits were between 0.71m and 1.40m in diameter and 0.18m and 0.40m deep. Between the two pits there was a line of three postholes [423], [829] and [842], which had diameters of between 0.27m and 0.44m and were no deeper than 0.19m. The most southerly of these, [423] contained an urned human cremation, C1, dated to the middle Iron Age, which is discussed in detail below (section 7).

Within the ring ditch a pair of sub-circular postholes, [480] and [488], were 0.90m apart. To the east of these there was a cluster of three postholes [482], [484] and [486]. All of these internal features were between 0.21m and 0.35m in diameter and 0.09-0.15m deep. To the north-west there was a small pit or posthole [465], 0.90m in diameter and 0.22m deep, cutting the inside edge of the ring ditch.

Roundhouse RD4
This ring ditch had an internal diameter 9.0m, and was defined by a penannular gully [473], with a 6.0m-wide opening facing to the south-east (Fig 9). The gully was 0.50-1.10m wide and 0.13-0.27m deep, and showed no evidence of recutting. The profile was generally steep-sided with a broad flat base and the fill comprised dark brown silty clay. A single posthole [809], 0.20m from the northern terminal of the gully, was 0.50m in diameter and 0.07m deep. At the rear of the ring ditch the gully cut a pit, [682], which was at least 0.50m in diameter and 0.20m deep. Approximately 3m from the northern entrance there was a posthole [490] and at a similar distance east of the southern terminal there was a pair of postholes, [492] and [502], set 1.2m apart. These postholes were between 0.35m and 0.70m in diameter, and no deeper than 0.18m.

Roundhouse RD6
This ring ditch had a maximum diameter of 10.5m at its open south-eastern side, and was defined by a semicircular gully, [536], 0.46-0.56m wide and 0.17-0.30m deep (Fig 9). The profile was generally V-shaped and the fill comprised dark grey-brown silty clay. Near the western terminal there were a number of irregular gullies and shallow pits which are likely to derive from animal or root disturbance.

Roundhouse RD5
This was an open-sided ring ditch, which had a diameter of 9.0m at its open western side, was defined by a semicircular gully [655] (Fig 9). The gully was 0.50-1.00m wide and 0.30m deep, with gently sloping edges and an almost flat base. The fill comprised orange-brown silty clay. Within the opening on the western side there was a line of

three sub-circular and oval postholes, [375], [377] and [415], which were approximately 1m apart. They ranged in diameter from 0.45m and 0.60m and from 0.17m to 0.39m deep. Posthole [415] contained large angular stone fragments possibly used as packing. A further posthole of similar dimensions [712] and a larger pit [661], lay to the west. It is unclear which of the structures, RD5 or RD6, that these features were related to.

Roundhouse RD7
Two concentric gullies defined this ring ditch, with internal diameters of 11.00m and 12.50m (Fig 10). There were both western and eastern entrances, which were 3.50m and 7.00m wide. The outer, earlier gully [892] was 0.43-0.75m wide by 0.15-0.33m deep. The profile generally comprised steep straight sides and a broad flat base. The fill of dark brown silty clay at the north-west and south-east terminals, contained concentrations of Iron Age pottery, charcoal and fire-cracked flint.

The inner gully [894] was 0.27-1.00m wide and up to 0.35m deep. The profile and fill were also similar, with concentrations of pottery, animal bone, charcoal (from hawthorn, blackthorn, oak and field maple) and a fragment of fired clay loomweight in the north-west terminal. On the northern side the inner gully cut the outer gully, while to the south they were near concentric with the spacing varying from 0.25m to 1.30m (Fig 25, section 293). A short length of a third gully [831] had survived between the inner and outer gullies on the southern side.

Within the ring ditch two pairs of postholes 1.50m apart, and set 2.0m inside the ring ditch, may have formed doorways at the western and eastern entrances. The western postholes, [744] and [846], were sub-oval in plan, 1.00m long, 0.50m wide and no deeper than 0.35m. The eastern postholes were circular in plan, 0.30m in diameter and 0.14m deep. These doorposts suggest that the roundhouse was 7.0m in diameter. Three other postholes within the roundhouse, [848], [850] and [856], were between 0.26m and 0.40m in diameter and 0.13m deep. All of the postholes were filled with mid grey-brown silty clay.

Roundhouse RD22
It was unclear if two curvilinear spurs of gully, [862] and [837], and a posthole [815], protruding from the inner and outer gullies on the southern side of RD7, were part of ring ditch RD7, or a separate circular structure, RD22 (Fig 10).

Roundhouse RD8
This ring ditch had an internal diameter of 11.0m, defined by a sub-circular gully with a north-western entrance, 2.70m wide (Figs 10 and 11). The gully [781] was 0.28-1.05m wide and 0.15-0.65m deep. Only a single section to the south showed evidence of recutting. The profile varied but generally consisted of steep straight sides and a narrow base. The fill comprised mid brown-grey silty clay. Near the south-western terminal there was a short section of gully, [811] which was 0.35m wide and 0.17m deep. Charcoal collected from the north-western terminal has been radiocarbon dated to between 390 and 170 Cal BC (98% confidence, 2210+/-40 BP, Beta 275412).

A posthole [714], 0.70m in diameter and 0.28m deep, near to the entrance may have been part of the doorway arrangement. Another posthole [716], 0.33m in diameter and 0.18m deep, lay within the ring ditch.

Ditches [948] and [954]
To the north of roundhouse RD8 there was a north-east to south-west aligned ditch, [948] which was 0.80m wide and 0.40m deep (Fig 10). The ditch was 3.0m from the

entrance of the roundhouse and terminated close to the rear entrance of roundhouse RD7. This was later replaced by a similar ditch, [954], which appeared to restrict access to the entrance of roundhouse RD8 and the rear entrance of RD7. Charcoal from the terminal of the earlier ditch, presumably domestic fuel waste from either or both of the roundhouses, has been radiocarbon dated to between 400-340 and 330-220 Cal BC (98% confidence, 2260+/-40 BP, Beta 275414)

Roundhouse RD9
Two sections of curvilinear gully, [777] and [871], 0.68m-0.90m wide and 0.13m deep, are likely to be a further ring ditch (Fig 10). Although only partially exposed, extrapolation of the circuit would indicate a diameter of approximately 12.50m. A terminal on the north-east side may suggest the presence of an entrance which was later blocked by the construction of RD8.

Roundhouse RD10
This lay to the east of roundhouse RD7 and, with an internal diameter of 8.5m, was one of the smallest ring ditches (Fig 10). It was defined by a fragmentary gully [921]. A deep south-eastern terminal suggests the location of a 6.0m wide entrance to the south. The gully was 0.25-0.68m wide and 0.07-0.39m deep. The northern terminal of the eastern arc of the gully was cut by a pit [942], 0.56m in diameter and 0.09m deep, which contained a single sherd of Roman pottery, suggesting that the pit was much later in date. A circular posthole [773], 1m beyond the north-eastern edge of the gully, was 0.50m in diameter and 0.13m deep.

Structure S1
Defined by two near concentric arcs of gully [512] and [510], the structure had a diameter of 12.5m and was open on the northern side (Fig 9). The primary gully [512] was 0.65-0.90m wide and 0.30-0.40m deep. The recut, [510], was up to 1.10m wide and 0.23-0.60m deep. The eastern arm of the gully appeared 'flattened'. Both of the gullies generally had steep sides, a concave base and were filled with dark grey-brown silty clay.

Structure S2
This was defined by an arc of gully [522] open on the eastern side with a diameter of 4.50m (Fig 9). The gully was 0.50m wide and 0.22m deep with steep sides and a broad flat base. It was filled with mid brown silty clay.

Structure S3
A semicircular arc of gully, [559] was open to the west and had a diameter of 8.0m (Fig 9). It was 0.33-0.39m wide and 0.22m deep. It had steep sides and a flat base and was filled with a mid brown-grey silty clay.

Structure S4
This was defined by a broad arc of gully, [721], 0.15-0.30m wide and 0.19-0.23m deep (Fig 9). It had steep sides, a narrow concave base and was filled with a dark brown silty clay.

Pits and postholes
There were 13 sub-circular and oval postholes associated with structures S1 to S4, [543], [672], [674], [697], [699], [723], [725], [735], [737], [740], [750], [752] and [754]. These had an average diameter of 0.39m and were between 0.09m and 0.41m deep with steeply sloping sides and a flat base. Most of them were filled with homogeneous dark grey-brown silty clay, with a single example of possible post packing in [723]. Six of the postholes, [672], [674], [697] and [543], [699], [723] formed two lines of three

posts to the east of structure S3. The other postholes formed no recognisable patterns.

To the south of structure S4 there was an oval pit [703], 1.20m long, 0.70m wide and 0.45m deep, which had been recut twice, perhaps suggesting that it was a post-pit (Fig 9). Pit [668], to the east of structure S3, was of similar dimensions to pit [703] and had also been recut. To the north of structure S3 there was a third sub-circular pit or large posthole [646], which was 0.80m in diameter and 0.10m deep. All of the pits were filled mid to dark brown silty clay.

The southern roundhouses (RD11 to RD15), structures (S5 to S7) and post-built structures (PS4 to PS8)

This group was located to the south of roundhouse RD1 and comprised five roundhouses, RD11-RD15, three small structures defined by curvilinear gullies, S5-S7, and five rectangular and square post-built structures, PS4-PS8 (Figs 12-15). The form and function of rectangular post-built structures has been discussed in depth elsewhere (Cunliffe 1984) but are generally thought to be grain storage platforms. Alternative interpretations include food/hide drying racks or animal pens. At Salford, Bedfordshire one of the four-post structures may have been a shrine (Dawson 2005).

Roundhouse RD11

This ring ditch had an internal diameter of 12.0m and a south-eastern entrance which was 1.5m wide. It was defined by a penannular gully [886], 0.46-0.67m wide and 0.20-0.37m deep. In profile the edges generally sloped steeply to a narrow concave base. It was filled with homogeneous dark greyish-brown silty clay. The northern edge of the gully was disturbed by a tree hole.

Within the roundhouse there were three sub-circular postholes, [950], [956] and [958], between 0.25m and 0.80m in diameter and 0.07m to 0.27m deep. They had varying profiles and were filled with light to dark grey silty clay.

Roundhouse RD12

This ring ditch was located to the east of roundhouse RD 11 and was defined by two arcs of curvilinear gully giving a diameter of 8.20m (Figs 12 and 13). There was a 3.50m-wide south-eastern entrance and an opposing gap of 0.50m. The northern arc [960] was 0.35-0.50m wide and 0.10-0.25m deep. The southern arc [979] was between 0.45m and 0.80m wide and 0.25m to 0.28m deep. The profile of both gullies varied from U-shaped to gradually sloping edges and flat base. The mid greyish-brown silty fill contained concentrations of Iron Age pottery, burnt animal bone and fire-cracked flint in the south-east terminal. Charcoal from the terminal has been radiocarbon dated to between 510 and 380 Cal BC (98% confidence, 2350+/-40 BP, Beta-275415).

Two postholes to the west, [1197] and [1201], set 1.50m apart may have been doorposts at a western entrance. To the east there is a single possible doorpost, [1147], while a posthole adjacent to the ring ditch terminal, [1191], might suggest the provision of a gate across the ring ditch opening. The distance between the doorposts and the ring ditch indicate that the roundhouse had been only 5.5m in diameter.

Other postholes within the ring ditch probably represent internal partitions and structures. The majority of them were between 0.27m and 0.65m in diameter, from 0.19m to 0.43m deep and generally had steeply sloping sides and a flat base. A small pit [1151] was larger than the other internal features with a diameter of 0.90m. Possible packing stones were found in posthole [1197]. The fills varied little and generally comprised mid to dark grey-brown silty clay.

Roundhouse RD13
This ring ditch had an internal diameter of 9.50m, defined by a partially eroded ring gully [1032], and a 2.50m wide south-east facing entrance (Figs 12 and 14). The gully had an average width of 0.37m and was no deeper than 0.21m, with steep sides and a narrow concave base. The fill comprised grey to orange-brown silty clay.

There were three postholes within the ring ditch. These were between 0.56m and 0.70m in diameter, 0.18m to 0.33m deep with steep edges and a flat base, and were filled with mid greyish-brown silty clay. Posthole [1117] may have been the southern doorpost of an eastern entrance. A posthole [1185] to the north-east was 0.70m in diameter by 0.15m deep, and the mid yellow-brown silty clay fill contained numerous heat-cracked cobbles. Posthole [1034], within the ring ditch, produced a single sherd of Roman pottery.

Roundhouse RD14
This ring ditch cut both ring ditches RD12 and RD13 (Fig 12). The ring ditch had an internal diameter of 9.50m, and was defined by a largely eroded ring gully comprising two arcs, [1127] and [1256]. The northern arc [1127] was 0.24-0.30m wide by 0.10-0.20m deep with a V-shaped profile. The southern arc [1256] had been recut once, was up to 0.90m wide by 0.19-0.30m deep. The primary gully had a similar profile to the northern arc while the recut [1250] had gradual sloping edges and a broad flat base. Both parts of the gully were filled with mid grey-brown silty clay.

Roundhouse RD15
At 13.0m in diameter with a 5m-wide western entrance, this was the largest ring ditch of the southern group (Fig 15). Along the northern side a primary gully [1478], 0.37-0.55m wide and 0.20m deep, partly survived. The later gully [990], was 0.46-0.72m wide and up to 0.33m deep, and generally had a broad V-shaped profile. The mid to dark grey-brown silty clay fill contained concentrations of Iron Age pottery, animal bone and burnt flint in the south-western terminal.

The doorway of the roundhouse was defined by a pair of postholes, [1026] and [1028], set 2.0m apart and 1.0m inside the ring ditch. This suggests that the roundhouse was 9.0m in diameter. The postholes were between 0.50m and 0.66m in diameter and from 0.21m to 0.33m deep with steep sides. Another posthole [1056] with similar dimensions lay within the building. All the postholes were filled with mid grey-brown silty clay, with possible packing stones in posthole [1028].

Structure S5
Situated to the north-east of RD15, this structure had a diameter of 7.0m, defined by a small horseshoe-shaped gully [1157] open on its south-east side (Fig 15). The gully was 0.27-0.46m wide and 0.08-0.14m deep. The profile varied from gradual sloping edges to almost vertical and the fill comprised mid greyish-brown silty clay. It surrounded a four-post structure, PS8.

Post-built structure PS8
Situated within structure S5 this four-post structure, measuring 2.5m by 2.2m, comprised sub-circular and oval postholes between 0.64-0.68m in diameter and 0.26-0.38m deep (Figs 15 and 16). They were steep-sided and filled with a mid to dark grey-brown silty clay. The arc of gully is on the up slope side of the structure and therefore would have helped to prevent water gathering around the wooden posts.

Structure S6
A north-east to south-west aligned curvilinear gully [1187] 5.50m long, 0.33-0.52m wide and 0.18-0.25m deep (Fig 15). It had steep, almost vertical sides and was filled with mid grey silty clay. There was a posthole, [1189], within the south-west terminal of the gully. This had a diameter of 0.20m and was 0.17m deep.

Structure S7
To the east of structure S6 this was a north to south aligned curvilinear gully [1253], 7.10m long, 0.40-0.68m wide and 0.16-0.23m deep (Fig 15). It had steep sloping sides with flat base and was filled with mid brown-grey silty clay.

Post-built structure PS4
Located to the west of roundhouse RD11 this four-post structure, measuring 1.6m by 1.4m, comprised four circular or oval postholes, 0.40-0.67m in diameter and 0.13-0.29m deep, and filled with mid brown-grey silty clay (Fig 12).

Post-built structure PS5
This four-post structure measuring 2.5m by 2.5m, was located to the north-west of roundhouse RD12 (Fig 12). It comprised four sub-circular postholes, 0.60-0.85m in diameter and 0.20-0.45m deep. A fifth post [1161] which lay immediately to the north may have been part of the structure. All of the postholes were filled with mid grey silty clay.

Post-built structure PS6
This structure probably comprised a four-poster with an extension to the north formed by a further pair of slightly smaller postholes (Fig 15). The four-poster was 2.4m square, and the extension gave it a total length of 4.0m. The postholes were 0.28-0.78m in diameter and 0.20-0.36m deep. There were two instances of possible packing stones in [1004] and [1109]. All the postholes were filled with mid greyish-brown silty clay.

Post-built structure PS7
To the east of roundhouse RD14 this four-post structure measured 2.50m to 2.70m (Fig 15). The postholes were 0.50-0.65m in diameter and 0.23-0.45m deep. They were steep-sided and filled with mid grey silty clay, with one example of possible packing stones in [1234].

Other pits and postholes
Apart from the structures described above there were a further 21 postholes and pits. Most were located near to roundhouses or post-built structures.

To the south and west of roundhouse RD11 and near post-built structure PS4 there were six sub-circular and oval postholes and three pits (Fig 12). The postholes were 0.30-1.00m in diameter and 0.12-0.27m deep. There were two pairs of intercutting postholes, [1170], [1172] and [1113], [1111]. They generally had steep sides and were filled with mid dark grey-brown silty clay. The pits ranged in diameter from 1.25m to 2.55m, were between 0.20m and 0.68m deep and had varying profiles.

To the south-west of roundhouse RD12 there was a group of six sub-circular postholes (Fig 12). These were 0.37-0.67m in diameter and 0.21-0.33m deep. They generally had steep sides and were filled with light to dark grey-brown silty clay. In posthole [1248] there were possible packing stones and in [1207] there was a concentration of charcoal, animal bone and pottery, presumably domestic waste from roundhouse RD12.

To north of roundhouse RD15 there were two pits or large postholes [1164] and [1220] which were 0.78-0.90m in diameter and 0.49m deep (Fig 15). These were steep-sided and filled with mottled orange and grey silty clay. To the west of the postholes there was an elongated pit or slot [1205]. This was 3.00m long, 0.65m wide and 0.25m deep. To the south-east of these features there was a pit [1282] which was 1.50m in diameter and 0.34m deep, had gradual sloping sides and was filled with mid grey-brown silty clay.

To the north of structure S5 was an isolated pit, [1395] (Fig 15). This was irregular in plan, 0.60m long, 0.40m wide and 0.09m deep. It is possible that this was two intercutting postholes but this could not be determined due to erosion and the homogeneous grey-brown silty clay fill.

The southern structures (S12 and S13), pits and postholes

Structure S12
To the south of ring ditch RD11 this structure was defined by an arc of east-west aligned curvilinear gully [1230] (Figs 3 and 17). This was 0.25m wide, no deeper than 0.18m, with steeply sloping sides and a broad flat base. It was filled with homogeneous greyish-brown silty clay.

Pit [1313]
South of structure [1313], this shallow circular pit was 0.67m in diameter, 0.20m deep with steep straight edges and a flat base (Fig 17). It was filled with charcoal-flecked bluish-grey silty clay.

Structure S13
This southernmost structure comprised two concentric arcs of curvilinear gully open to the south-east with a diameter of 9.0m (Fig 17). The earlier gully [1238] was 0.50m wide, 0.20m deep with steep sloping sides and a broad flat base. The later gully, [1159], was of a similar size with a varied profile from steep sloping straight sides and flat base to concave edges and base. Both gullies were filled with greyish-brown silty clay.

Pit [1309]
An isolated oval pit in the extreme south of the site, this was 1.07m long, 0.98m wide, 0.22m deep with gradually sloping straight sides and a flat base (Fig 17). It was filled with a dark grey black, charcoal stained silty clay which contained occasional fire-cracked stones.

The eastern structures (S9, S10 and S11) pits and postholes
To the east of the main settlement area there was a group of three structures defined by arcs of curvilinear gully (S9, S10 and S11) and eight associated pits and postholes (Fig 18). The fills of the curvilinear gullies and the pits and postholes frequently contained charcoal and fire-cracked stone which may be related to the copper alloy casting which took place on the site as indicated by crucible fragments in ditch B7 to the north of these features.

Structure S9
This structure, which had an internal diameter of 7.0m and was open on its eastern side, was defined by a small semicircular gully [1506]. The gully was 0.25-0.45m wide and 0.12-0.27m deep. The profile was generally steep-sided with a concave base and the fill comprised mid greyish-brown silty clay.

In the middle of part of the gully there was an earlier pit, [1578], which was 1.20m in diameter, 0.30m deep with steep sloping sides and a concave base. The dark greyish-brown silty clay fill contained large amounts of charcoal.

To the south of structure S9 there were sub-circular and oval pits, which were between 0.70m and 1.05m in diameter and from 0.15m to 0.30m deep, with steep sides and flat bases. The fills varied from yellowish-brown to greyish-brown silty clay. All contained charcoal staining or burnt stone. The largest pit [1544] produced large amounts of oak charcoal.

Structure S10
A north-west to south-east curvilinear gully [1492] which was 7.0m long, 0.31- 0.40m wide and 0.19-0.26m deep (Fig 18). It had steep sides, a flat base and was filled with a charcoal flecked mid grey silty clay which had occasional burnt stone inclusions.

On the north-eastern side of the gully there were three circular or oval pits [1508], [1510] and [1513]. These were 0.67-1.0m in diameter and 0.18-0.42m deep with generally steep sloping sides. The grey-brown silty clay fills had frequent charcoal and burnt stone inclusions.

Structure S11
To the north-west of structure S10 this was a north-west to south-east aligned curvilinear gully [1546], 4.0m long, 0.33-0.72m wide and 0.17-0.30m deep (Fig 18). It had gradually sloping sides with a flat base and was filled with mid brownish-grey silty clay.

Pits and postholes
To the east and north-east of structures S9 to S11 there was a dispersed group of seventeen circular or oval pits and postholes (Fig 18). Pit [1458] contained a human cremation burial (C5), which is discussed below.

These pits and postholes were 0.30-1.05m in diameter, 0.11-0.35m deep and had steeply sloping sides and flat bases. Their fills varied little, generally comprising light to mid brownish-grey silty clays with frequent incidences of charcoal flecking. Four of the postholes [1460], [1472], [1474] and [1460] formed an 8.0m long north-east to south-west alignment, whilst the others formed no discernable pattern.

The northern post-built structures (PS1 to PS3), roundhouse RD23, structure S13, pits and postholes

Post-built structure PS1
Located to the north of roundhouse RD16, this four-post structure measured 2.5m by 3.0m (Fig 19). The circular or oval postholes were 0.72-1.19m in diameter, 0.30-0.41m deep and were filled with mid brown-grey silty clay.

Post-built structure PS2
Lying to the south-east of PS1, this four-post structure measured 2.5m by 2.5m (Fig 19). The circular and oval postholes were 0.55-0.85m in diameter and 0.10-0.26m deep. There was evidence of post replacement at the northern corner where the posthole had been recut at least once.

Structure S13
A largely eroded ring gully [034], 10m in diameter, surrounded PS2 (Fig 19). The gully was 0.50-1.0m wide and 0.15-0.39m deep. It had a varying profile and was filled with a mid greyish-brown silty clay.

Post-built structure PS3
This post-built structure, measuring 2.5m by 3.0m, was located to the south-east of structure PS1 (Fig 19). The circular and oval postholes, with additional posts at the northern and southern corners, were 0.25-0.65m in diameter and 0.06-0.15m deep and were filled with a dark greyish-brown silty clay.

Roundhouse RD23
Situated to the north-east of post-built structure PS2, this roundhouse, 10.0m in diameter, was defined by an east to west aligned arc of gully, [693], 0.40m to 0.70m wide and 0.25m deep (Fig 19). It had steep sloping sides, a flat base and filled with mid to dark brown silty clay. The gully was only partially exposed by the limit of the excavation and the eastern side was truncated by a post-medieval animal burial. The terminal at the western end suggests an entrance on this side. A posthole near to the terminal, [634], may have been a door post. This was 0.75m in diameter, 0.10m deep with steep straight sides and a flat base. To the east of this there was a pit, [597], which at least 1.10m in diameter and 0.25m deep.

An arc of gully, [630], which was heavily truncated by later features may have represented a predecessor of roundhouse RD23.

Pits and postholes
To the west and east of structure PS1 there were two pairs of postholes [970], [972] and [1016], [1018] 1.3m apart, which may have been simple two-post structures such as drying racks (Fig 19). The postholes were between 0.25m and 1.10m in diameter and from 0.19m to 0.27m deep. They all had steeply sloping edges and were generally filled with greyish-brown silty clay.

To the south-east of structure PS2 there were a dispersed group of 13 postholes which formed no discernable pattern. They were 0.50-0.69m in diameter, 0.09-0.25m deep and generally had steep sloping sides with flat or slightly concave bases. The fills comprised homogeneous mid to dark greyish-brown silty clay with occasional instances of charcoal flecking and a single example of possible stone packing in posthole [097].

To the north-east of roundhouse RD6 there was a dispersed group of 12 pits and postholes which formed no recognisable pattern (Fig 9). The pits were between 0.85m and 1.80m in diameter and no deeper than 0.20m deep, while postholes ranged in diameter from 0.16m to 0.60m and were 0.09-0.34m deep. Two short sections of gully 1.95m and 1.0m long, 0.23m and 0.17m deep were also part of this group of features.

Beyond the northern boundary ditch B6 there were four circular and oval postholes. These were between 0.50m and 0.60m in diameter and 0.10m to 0.22m deep. They were filled with a mid to dark greyish brown silty clay.

5.2 The Middle Iron Age enclosure and boundary system

A substantial boundary ditch, B6, with a narrow ditch, B7, 7m to the south and running parallel, probably formed the northern boundary of the settlement, with an open-ended enclosure to the south formed by L-shaped ditch B1 (Fig 20). The structures to the north of roundhouse RD2 were abandoned (RD16, RD17 and S13). Occupation of the dwellings to the south of the enclosure continued during this period with only three structures being abandoned for the creation of the enclosure. Although the enclosure ditch truncated the ring gully surrounding RD2 it is likely that the

dwelling was still in use during this time. The ditch would have adequately replaced the functions of drainage and protection afforded by the ring gully. Although purely speculative, it is possible that the grain storage area represented by post-built structures PS1 to PS3 and structure S13 may have gone out of use and the area to the south of roundhouse RD1 became the focus of this activity. Crucible fragments retrieved from eastern end of ditch B7 attest that small scale copper alloy casting was taking place at the margins of the settlement.

Boundary B6
This north-west to south-east aligned ditch was the most substantial of all the boundary features on the site, at 3.60m wide and 1.25m deep (Figs 20 and 21). The fills were indicative of natural silting and displayed no evidence of re-cutting (Fig 25, section 499). The ditch was most probably a long-lived and extensive land boundary, which also defined the northern limit of the settlement throughout its lifetime.

An eastward continuation of this ditch was located within the smaller watching brief area within Area D (Fig 2, 5011). Here, a 50m length was uncovered, with the ditch 3.0-4.0m wide and 1.0m deep. Two sherds of pottery from the ditch could be only broadly dated to the 4th-1st centuries BC.

The two excavated lengths give a recorded length of 170m, with the ditch continuing to both the west and east. To the east the ditch would have continued across the main part of Area D, which might have provided an opportunity to establish its course for up to a further 500m (Fig 1). However, the larger part of Area D was only investigated by trial trenching and a watching brief limited to the access roads, and these investigations did not locate the ditch, even though two trial trenches intersected its probable course. However, one of the areas of detailed geophysical survey located a broad ditch, which may have been a continuation of the Iron Age boundary (Fig 1). This would give a total length of 400m with the boundary continuing on a linear, if slightly meandering, course. The ditch was also running at near right angles to the contours, with the ground rising steadily from the eastern corner of the development area, where the stream is slightly under 100m aOD, to a high point in the north-west, adjacent to the Iron Age settlement, at 123m aOD.

The location of middle to late Iron Age open settlements at such landscape boundaries has been seen at a number of Midland sites. At Newport Pagnell, Rocla pipeworks, a linear boundary ditch of possible late Iron Age origins was traced for a length of 163m, and this too run near perpendicular to the contours (Morris and Carlyle forthcoming). In neighbouring Northamptonshire similar long boundaries have been seen at Swan Valley, Northampton, at the Daventry International Rail Freight Terminal, and at Coton Park, Warwickshire (A Chapman pers comm)

The partial boundary ditch B1
This comprised an L-shaped ditch, the north-western part of which was 50m long and aligned at right angles to the substantial land boundary ditch B6 and ditch B7, the south-western arm was parallel to B6 and 55m long. It had been recut at least twice, was up to 2.10m wide, 1.0m deep with generally steep sides and a concave base. The fill varied little throughout its length comprising a mid greyish-brown silty clay with occasional charcoal flecking.

The ditch appears to have formed a large partial enclosure, with ditch B7 as the northern boundary, which was open to the south-east.

Enclosure E2
This was a small sub-rectangular enclosure in the angle of the L-shaped ditch B1. It occupied an area of approximately 14m by 16m and was defined by a curvilinear ditch, 1.40-2.00m wide and 0.40-0.75m deep. The profile was generally steep-sided with a flat or irregular base and it was filled with mid to dark brownish-grey silty clay. It was cut at its northern end by a large pit, which was truncated by the latest recut of ditch B1.

Boundary B7
This ditch was aligned parallel to and 7m to the south of ditch B6. This was a far less substantial feature, between 0.90m and 1.50m wide and 0.42m to 0.62m deep. The fills comprised mid grey silty clay which were indicative of natural silting and displayed no evidence of re-cutting. At the south-east end of the ditch, fragments of crucibles used for copper alloy casting suggest that a workshop area devoted to this activity was set well to the north-east of the main occupation area. At the north-west end of the ditch there was an opening which was at least 1m wide. The south-eastern terminal was shallow and rounded whilst the north-western terminal had been truncated by roundhouse RD 18. Boundary B7 may have been part of the partial enclosure system to the south formed by ditch B1 or part of the longer boundary system perhaps even defining the provision of a track or droveway alongside the land boundary B6.

5.3 Middle Iron Age settlement at the northern boundary

The enclosure system went out of use and at least five roundhouses were established along and adjacent to the silted north-west to south-east arm of ditch B7 (Fig 22). Ditch B6 still appeared to have marked the northern boundary of the settlement during this period. Some of the dwellings in and around the settlement nucleus were likely to have still been occupied, in particular the long-lived roundhouses RD1 and RD2. Although the enclosure had gone out of use, the section of ditch which passed close to RD2 was recut a number of times, suggesting it was maintained. It is unclear if the northern roundhouses represent a drift of the settlement towards the boundary or expansion to accommodate a growing population.

By the end of this period the settlement was abandoned and no more occupation occurred at the site.

The northern roundhouses RD17 to RD21
This group of five roundhouses in the northern part of the site formed the latest phase of settlement (Fig 23). The houses post-date the linear boundary ditch B7 and the partial enclosure ditch B1. Roundhouses RD18, RD19 and RD20 were aligned parallel to the large boundary ditch B6 which would support the idea that this was a long-lived landscape feature.

Roundhouse RD17
This ring ditch, with an internal diameter of 8.5m, was defined by a narrow ring gully [653] with a 4.5m-wide south-eastern entrance. The gully was 0.21-0.51m wide and 0.08-0.21m deep. In profile the sides were generally steep and the fill comprised greyish-brown-orange silty clay. On the southern side of the main gully there was a short spur [565]. This was 3.30m long, 0.40m wide and 0.07-0.19m deep.

Within the roundhouse there were four sub-circular postholes. The smallest of these, [801], was 0.30m in diameter and 0.11m deep with steeply sloping sides and a flat base. It was located adjacent to and 2.0m from, the northern terminal of the entrance

and may have been a surviving doorpost. The other postholes were towards the rear of the ring ditch and were between 0.57m and 0.80m in diameter and 0.14m to 0.25m deep with varying profiles. They were filled with dark to mid greyish-brown silty clay. Near to these postholes there were two intercutting pits [615] and [613]. The earliest pit [615] had been almost completely truncated by the later [613] which was 1.00m in diameter and 0.28m deep.

Roundhouse RD18
This was the most northern of all the ring ditches with an internal estimated diameter of 14m (Fig 23). Any entrance must have been on the western side. The ditch [1429] was the most substantial of all, being up to 1.58m wide and between 0.27m and 0.73m deep with steeply sloping sides. The fill comprised homogeneous mid to dark greyish-brown silty clay. On the southern inside edge of the ditch there was a short concentric arc of gully [1453]. This was 0.58m wide and 0.27m deep.

Roundhouse RD19
Situated to the east of roundhouse RD18 this ring ditch was 11.5m in diameter, defined by a partially eroded ring gully and a 3.4m-wide eastern entrance (Fig 23). The northern arc [1484] was 0.35m wide and 0.15m deep, the southern arc [1356] was 0.30m and 0.63m wide and no deeper than 0.27m. Both sections of gully generally had gradual sloping sides and were filled with mid to dark greyish-brown silty clay.

Within the eastern entrance there was a small circular posthole [1432], 0.35m in diameter and 0.10m deep with steep sloping sides. Within the roundhouse there was a pair of postholes [1381] and [1389]. These were 0.70-0.80m in diameter and up to 0.47m deep. Towards the centre of the roundhouse was a further posthole [1490] which was 0.65m in diameter and 0.12m deep. All of the internal features had fills of mid to dark greyish-brown silty clay.

Roundhouse RD20
This ring ditch had an internal diameter of 13.5m, defined by a penannular ring gully [1346] and a 7.5m wide north-west facing entrance (Fig 23). The gully was 0.37-1.00m wide and 0.10-0.40m deep. The profile varied from V-shaped to steep sides with a broad flat base. It was filled with a mid to dark grey silty clay.

Roundhouse RD21
This ring ditch, to the south-west of roundhouse RD20, had an internal diameter of 10.0m with a 4m-wide eastern entrance, defined by a partly eroded ring gully [1326] (Fig 23). The gully was 0.26-0.45m wide, no deeper than 0.27m and the profile varied from V-shaped to 45º sloping sides and a broad concave base. The fill comprised mid brownish-orange silty clay which contained concentrations of Iron Age pottery in both entrance terminals. Charcoal from the terminals indicates hawthorn, blackthorn and possibly field maple were used as domestic fuel. Radiocarbon analysis of the charcoal returned dates of 360 to 280 BC and 260 to 60 BC (95% confidence, 2150+/-40 BP, Beta-27541).

Within the ring ditch, adjacent to the entrance was a probable door posthole [1419], 0.59m in diameter and 0.26m deep. To the north-west of this another posthole or small pit [1427] contained a human cremation burial which is discussed below (section 7).

To the rear of the building there was a north-east to south-west line of three postholes [1421], [1440] and [1512]. These were 0.35-0.55m in diameter, 0.16-0.29m deep and

had varying profiles. They were filled with mid grey silty clay from which small amounts of burnt clay/daub and pottery were retrieved.

Other features
To the east of roundhouse RD21 an L-shaped gully [1381] appears to have marked the south-eastern limit of the northern house group (Fig 23). The east-west arm of the gully was almost parallel to the major boundary B6 and appears to respect roundhouse RD20, forming an entrance into the group of buildings. The gully was between 0.23m and 0.42m wide and 0.07m to 0.16m deep. In profile the gully generally had steep sides and the fill comprised a dark to mid brown silty clay.

To the north-west of gully [1381] there was an arc of curvilinear gully [1486] which was 8.50m long, between 0.23m and 0.45m wide and 0.05m to 0.33m deep. It had a varying profile and the fill comprised mid grey silty clay. It is possible that this may have been the remnants of another ring gully.

5.4 Later Iron Age and Roman activity

Sparse activity continued at the site for hundreds of years after the abandonment of the middle Iron Age settlement (Fig 24). Linear drainage ditches were dug suggesting the land had returned to open fields and surface sherds of later Iron Age and Roman pottery became deposited in some of the more substantial earlier pits which were still partially open. The corner of the enclosure ditch B1 was respected by the later boundary ditch B2 perhaps indicating that the earlier ditch was still visible and even incorporated into the later field system.

Pit [1409]
A substantial oval pit, [1409] lay to the north of roundhouse RD21 (Figs 24 and 25, section 557). It was 5.50m long, 1.17m deep with steep sides and a slightly concave base. This pit contained the only late Iron Age pottery assemblage and is likely to date to the 1st century BC.

Pit [1083]
This pit lay to the south of roundhouse RD7, it was sub-circular in plan, 2.55m in diameter and 0.68m deep (Fig 24). This pit contained both Roman and Iron Age pottery.

Pits and postholes
Pits [87] and [1034] were located within roundhouses RD16 and RD13 respectively (Fig 24). These may be later features but it is more likely that they are contemporary with the roundhouses with surface scatters of Roman pottery having been deposited in their upper fills. The same can be said of a shallow pit, [942] which cut the ring gully of roundhouse RD10.

The linear boundary features B2 to B5
The linear boundary features of varying alignments were established after the abandonment of the main settlement area (Fig 24). Of note is ditch B2 and a similarly aligned ditch to its south which appeared to trace the archaeologically invisible northern boundary along which the linear arrangement of the western roundhouses was aligned. The ditch which extended 59m from the corner of the partial enclosure B6, was between 0.44m and 0.51m wide and 0.12m to 0.17m deep. A rim from a wheel thrown bowl from the terminal of ditch B2 would suggest that the final silting occurred during the late Iron Age or Roman period.

Also worthy of mention are two parallel ditches, B4 and B5, 110m apart. Their north-north-west to south-south-east alignment disregarded the established pattern of the earlier boundary and settlement features. They followed the topographical slope of the land and probably served the duel purposes of drainage and division. These were between 0.35m and 0.75m wide and from 0.17m and 0.50m deep.

The cremations

Several cremations were interred at the site often within or close to former dwellings. The earliest may have occurred within years or a few decades of abandonment, as burial at the former family home, perhaps, but others date to the late Roman period, some three or four hundred years after abandonment, perhaps suggesting that there was social memory of the former ancestral home (Fig 24).

Cremation C1

This was located within the open side of roundhouse RD3 and comprised an urned deposit of cremated bone within a small pit. The circular pit [423] was 0.44m in diameter, 0.18m deep with straight, steep sloping sides and a flat base. The urn (see section 7.2) was incomplete but appeared to have been a late Iron Age open bowl form which once stood upright within the pit. This contained 13g of cremated human bone which could not be aged or sexed.

Cremation C2

This unurned cremation was south of RD9 within a bowl-shaped circular pit, [945], 0.50m in diameter and 0.22m deep. The small quantity of cremated bone (1g) was highly fragmented and could not be positively identified as human (see section 7.1). Radiocarbon analysis has dated this material to 140-380 Cal AD (95% confidence, 1770+/- 40 BP, Beta-275413). A significant number of iron nails and nail fragments of varying size totalling 210g in weight were recovered from the cremated deposit. The smaller nails are likely to be hobnails while the larger nails may have been used to secure the substantial planks of a coffin (see section 7.3). However, the charcoal mostly comprised hawthorn/sorbus group, a species from which planks are unlikely to have been cut (see section 7.4). Overlying the cremated material there was layer of redeposited natural clay which was likely to have been upcast from the digging of the pit.

Cremation C3

This lay within roundhouse RD21 and comprised an unurned cremation within a sub-circular pit [1427], 0.45m in diameter and 0.18m deep with steep sides and a flat base. This contained by far the largest amount of cremated bone (528g), coming from an individual of at least 15 years of age (see section 7.1). Charcoal consisting of roundwood from hawthorn/sorbus group retrieved from the cremated material has been dated to 210-390 Cal AD (95% confidence, 1750 +/-40 BP, Beta-274418).

Cremation C4

This isolated, unurned cremation was located some 80m to south of the main settlement. The pit, [062], was 0.35m in diameter, 0.10m deep steep concave sides and broad concave base. The cremated bone, from a probable adult weighed 81.5g (see section 7.1). Within this deposit were 122 nails and nail fragments of varying sizes (see section 7.3).

Cremation C5

Located to the east of ditch B5, this comprised an urn, containing a small quantity of cremated bone, placed within a small pit [1458], 0.45m in diameter by 0.11m deep with gently sloping concave sides and a flat base. The fragmentary urn, a medium-sized jar or bowl with a flat bottom, was broadly comparable to much of the pottery

from the Middle Iron Age settlement (see section 7.2). The cremated bone, weighing 1g was from an individual of at least 14 years of age (see section 7.1). Sparse charcoal from the cremated material indicated the use of oak (Quercus sp.) (see section 7.4).

6 THE FINDS

6.1 The worked flint by Andy Chapman

A total of 46 flints was recovered from the site, with 13 of these unstratifed. The raw material is a brown to grey vitreous flint with a pale off-white to light brown cortext. A few pieces have a pale blue-grey surface patination, and a few pieces are in a brown or grey granular, opaque flint. There are two burnt flints.

The group is dominated by miscellaneous struck flakes, which include many squat and irregular flakes that have been hard-hammer struck and do not come from well prepared cores. Other large irregular flakes may be the result of fortuitous damage to flint nodules, rather than the product of deliberate striking. There are also many large irregular shattered pieces or part pebbles with a few flakes removed that could be similarly the product of accidental impacts.

The earliest piece from the site is a long, slender blade, 39mm long (broken) and up to 9mm wide, from a well-prepared core. It is patinated a uniform white. This is a microlithic blade, indicative of a Mesolithic date.

Three flakes have been retouched. Two show lengths of retouched edge while a large flake has both a retouched edge and a broad retouched notch. These can be given a broad probable Neolithic to early Bronze Age date.

There are two further retouched pieces that might be a product of the casual and opportunistic exploitation of flint in the Iron Age. One edge of an irregular chunk of flint struck from small nodule has also been roughly retouched to form a blunt and rounded projection with slight notches on either side (Fig 27, 1).The ends and sides of a large elongated piece of flint from a small flint nodule, 78mm long by 33mm wide and up to 30mm high, have been roughly retouched to make what is in effect an end and side scraper, and the flaked edges are worn through use (Fig 27, 2).

Neither of these two large retouched pieces fits within any recognised implement category from the Neoltihic and early Bronze Age, and they appear to derive from the opportunistic use of small fractured nodules to form improvised implements. These might date to the Neolitihic or Bronze Ages, but it is possible that they could be implements of Iron Age date.

6.2 The Iron Age pottery by Andy Chapman

A total of some 4100 sherds of hand-built pottery, weighing 20.86kg, and attributable to the middle to late Iron Age, was recovered during the excavation.

This material comes from 306 individual contexts, so there is an average of only 68g per context and, given the presence of some larger groups, the typical small assemblage weighs even less than this (Table 2), with over two-thirds of the contexts containing only 10-50g of pottery, somewhere between 1 and 10 sherds. These small

groups, about which little can be said, make up nearly 20% of the total assemblage by weight.

Table 2: Distribution of pottery per context by weight (g)

Weight per context (g)	Number of contexts	Percentage of contexts	Percentage by weight
10-50	211	69%	19.3%
50-100	40	13%	12.8%
100-150	26	8%	14.3%
150-200	7	2%	5.4%
200-250	9	3%	9.0%
>250	13	4%	39.2%
Totals	**306**	**100%**	**100.0%**

In contrast, only 13 contexts produced 39% of the total assemblage by weight. The majority of these larger groups come from at or near the terminals of several of the roundhouse ring ditches, RDs 1, 2, 7, 8, 12 and 21 (a detailed analysis of the pottery distribution is provided below, section 6.3). It has been, therefore, the material from the roundhouse ring ditches (RDs) that has been analysed first, followed by the smaller groups of material from the lesser roundhouses and the four-post structures (S and PS structures) and then the enclosure boundary systems (B) and the few scattered pits that produced any significant amount of pottery (Table 3).

In addition, we can also note that the average sherd weight is only 5.1g, showing that the material is highly fragmented, indicating that much of it is a product of at least secondary deposition. Even in some of the larger groups where only a single or a limited number of vessels are present, indicating that they were a product of primary deposition, it has still not been possible to take reconstruction very far due to the small size of so many of the sherds.

Table 3: Quantification of pottery by structural groups

Structural group	Sherd count	% by sherd	Total weight (g)	% by weight
Roundhouse Ring ditches (RD)	2146	52.4	11895	57.0
Other structures (S)	338	8.3	1158	5.6
Four-post structures (PS)	93	2.3	388	1.9
Enclosures and boundaries (E & B)	382	9.3	1599	7.7
Unassigned (scattered pits)	1134	27.8	5821	27.9
Total	**4093**		**20861**	

The fabrics

The proportion of the assemblage that has been assigned to individual structures or structure groups has been quantified to fabric type, while the small groups of material from isolated contexts has only been scanned to confirm that it has the same broad characteristics as the bulk of the assemblage. The fabric types have been examined by visual examination and a simple five-fold typology has been provided. Fabric quantification is based on the examination of 2981 sherds, 73% of the total assemblage.

1 Sandy: containing dense rounded quartz giving a coarse surface texture, typically hard and well fired. 83.4%

2 Shelly: containing varying quantities of crushed shell, and lesser quantities of fine quartz. 6.1%

3 Grog: containing sparse to frequent pellets of soft red or hard dark grey grog, and also either fine quartz grains to give a coarse surface or some crushed shell. 2.5%

4 Calcareous: generally sandy but also containing scattered larger rounded calcareous inclusions and rounded grit, up to 4mm, and some smaller angular flint. 3.7%

5 Fine sandy: with few visible mineral or other inclusions, often with smoothed or burnished outer surface. 4.4%

The vast majority of the assemblage, 83.4%, is in a fabric containing quantities of coarse sand. These sherds are typically evident by feel alone, as the density and size of the quartz inclusions forms a coarse, sandpaper-like, surface texture. These sherds are typically quite hard and well fired. Two further fabric types, 3 and 4, can be regarded as sub-divisions of the sandy wares. Some 2.5% of the assemblage has been classified as containing grog, visible as small, 1-2mm diameter, rounded pellets of soft ceramic, most typically red to red-brown in colour, although a small proportion contain harder black inclusions, but the majority of these sherds also contain coarse sand and have the same rough surface as the sandy fabric. A further 3.7% of the assemblage has been classed as calcareous due to the presence of scattered larger inclusions of calcareous, chalk-like, material, up to 4mm in diameter. These sherds sometimes also contain small pieces of sub-angular flint, and they are also typically sandy with a coarse surface texture. A few sherds also contain some shell in addition to sand and other inclusions.

The indication is that nearly 90% of the assemblage is in a coarse sandy fabric, but with a proportion of these vessels also containing other inclusions, such as grog or calcareous minerals, in varying quantities. It is suggested that the occurrence of various other inclusions is not indicative of the presence of a range of deliberately created fabrics, but the very opposite: a lack of interest in the precise nature of the mix of inclusions beyond a preference for sandy fabrics. The other inclusions may therefore be general detritus that happened to be included during the working of the clay prior to manufacturing.

Another fabric group, 5: fine sandy ware, provides a further variation, but in this case it is certainly a deliberate creation as it correlates with vessel type. These vessels, 4.4% of the assemblage, are in a fine fabric containing few if any visible inclusions, although in some fine quartz grains are visible, and are almost invariably uniformly dark grey in colour with the surfaces smoothed or burnished. The fine mineral inclusions are therefore a direct result of a conscious desire to create vessels with smoothed or burnished surfaces; in our terms, better quality vessels; what would be called tableware in later periods. The presence of some of these vessels, particularly globular bowls with bead rims, does have a chronological bias to the later Iron Age, but a few finer sherds occur throughout the assemblage.

Finally, a small proportion of the assemblage, 6.1%, are in fabrics containing quantities of crushed shell, varying from large and dense shell fragments to finer and

sparser shell inclusions, group 2. Such shelly fabrics typically dominate assemblages to the north of Milton Keynes, in the Nene and Welland valleys across Northamptonshire and south Leicestershire. In the Milton Keynes area they are typically present, but at a low level.

The predominance of sandy fabrics in Iron Age assemblages from the Milton Keynes area has long been noted, with this being the pattern seen at the Hartigans Iron Age enclosure excavated at the end of the 1970s (Knight 1993b, 230-231). A recently published site, a middle Iron Age settlement at Kingsmead South, shows a similarly high proportion of sandy fabrics, and a similar overall breakdown of fabric types, including a low level of shelly ware, apart from an absence of calcareous wares (Blinkhorn 2009, 82). At Oxley Park West, there was a similar dominance of sandy fabrics over shelly ware, although here the dominant fabric was apparently a 'soapy' fabric containing mudstone (Webley 2009, 53). This pattern is not invariable, however, as the assemblage from the Pennyland Iron Age settlement, excavated in the 1970s, was dominated by shelly ware (Knight 1993a, 219-220).

Decoration and vessel form

No estimate has been made through rim sherd analysis of the number of vessels represented in the assemblage, estimated vessel equivalent (EVE), as the majority of the rims present are too short to enable the rim diameters to be accurately calculated. The number of Sherd Families, the accumulated total of the estimated number of different vessels within each context group, has been estimated at 398.

The majority of the sherds are 7-10mm thick, and the hand-built nature of these vessels is often evident in the oblique edges of sherds, where vessels had broken along weak coil joins. The nature of the firing in bonfires or simple clamp kilns is evident in the surface colourations. The sherds typically have dark grey cores, while both the inner and outer surfaces are highly variable, ranging from bright orange, through red-brown and brown to grey-brown and dark grey, with the external surfaces showing the greatest variation.

While the balance of colour ranges has not been quantified, the frequent occurrence of oxidised colours, from orange to red-brown, is a probable indication that the assemblage belongs to the earlier middle Iron Age, as work on Northamptonshire assemblages has shown that there was a broad trend towards darker colours through the middle Iron Age (Dennis Jackson pers com).

Rim forms are typically simple, with flat-topped rims predominating, 30 out of 50 examples (Fig 28, 2, 4 and 5), followed by simple rounded rims, 14 out of 50 (Fig 28, 1 and 3). In addition, there are four rounded rims from small and exceptionally thin-walled vessels, 3-4mm thick, a single rim with an external chamfer and a single bead rim. There is also a single thickened, T-shaped rim, with a concave top, which comes from a distinctive open bowl form (Fig 28, 8). This form is unusual, but very similar vessels have been seen elsewhere, suggesting that they may have had a specific function (Chapman 2001, 22-23, fig 13, 15). Four flat-topped rims are decorated; two with fingernail impressions and two with shallow finger impressions.

The figures for rim forms quoted above exclude the assemblage from a pit, [1409], at the northern end of the site, where the pottery assemblage dates to the late Iron Age. In this group there was a single flat-topped rim, eight rounded rims and a bead rim.

The bases are typically flat and plain, with the body rising directly from the base with no elaboration, although in a few instances there are slight finger marks from the

moulding of the external angle of base and wall. The measurable bases are between 110-140mm in diameter, and they are always thicker than the body, 10-15mm thick.

There are only five scored ware sherds from Tattenhoe Park, and these are all small single body sherds within larger groups, indicating the presence of a very small number of such vessels. Scored ware always forms a much lower percentage of any middle Iron Age assemblage in the Ouse valley around Milton Keynes than it does in the scored ware 'homeland' of the Nene and Welland valleys of Northamptonshire and south Leicestershire, to the north and north-east.

At Tattenhoe, there are individual scored ware sherds from three roundhouses, RD1, RD2 and RD6, while the other two sherds come from two pits dated to the late Iron Age or later. Pit [1409], at the northern end of the site, has a distinctive assemblage quite different to the material, from the rest of the site, and has been dated to the 1st century BC. Pit [1083], towards the southern end of the site, produced both a scored ware sherd and the handle of a Roman flagon from its upper fill. While the numbers are small, this suggests a chronological bias to the late Iron Age in the occurrence and deposition of scored ware. It is possible to speculate that while scored ware vessels had certainly appeared in the Nene and Welland valleys by the 3rd century and most probably in the 4th century BC, it was perhaps only reaching or being manufactured in the Milton Keynes areas later in the middle Iron Age, perhaps only from the 2nd century BC or even later. The main occupation at Tattenhoe Park may therefore largely pre-date the occurrence of scored ware in the Ouse valley.

Apart from the few decorated rims and the scored ware, all other vessels are plain and undecorated, as is typical of most middle Iron Age assemblages. There are four lugs or fragments of lugs within the assemblage, with one from roundhouse RD1, two from roundhouse RD7 (Fig 28, 6) and one from roundhouse RD8.

Given the typical small sherd size and the small size of the majority of the pottery groups, there are no complete vessel profiles. In broad terms, the curvature of the sherds, and the few partially reconstructed vessels indicate that they have come from small to medium-sized vessels. Sherds from large thick-walled storage jars are rare, indicating that few such vessels were in use. It is also evident that in the majority of cases the vessels are closed forms, jars, with the diameter of body exceeding the diameter of the rim and with the base diameter a little less than that of the rim.

The jars are in a range of shouldered and slack-shouldered forms, with rim diameters of 160-180mm. There are several with a pronounced shoulder, forming a distinct and concave neck, with a neck height of 30-35mm, from the shoulder to the top of the rim (Fig 28, 1). In others, the shoulder is less pronounced, although in one particularly well-preserved vessel there is a transition from a pronounced shoulder and neck to a neckless profile within an angle of 90 degrees (Fig 28, 2).

There are a few vessels with significantly larger diameters of 250-280mm diameter, and these all appear to be bowl forms, either with near vertical sides (Fig 28, 5) or fully open bowls, as in the unusual example with a thickened, T-shaped rim (Fig 28, 8).

There is a small number of vessels in the fine sandy fabric, and these are dark grey to grey-black throughout and have smoothed and sometimes burnished surfaces. In only one example can the profile be even partially reconstructed, and this has an upper profile that is more rounded than most of the jar forms, although it is not complete enough to indicate whether this was a fully globular form.

Chronology

The radiocarbon dates for Tattenhoe indicate that the main period of settlement belongs to the earlier middle Iron Age, 400-200 BC. The broad characteristics of the pottery assemblage are consistent with this date range. There are a few exceptionally thin-walled small bowls, which are characteristic of the early Iron Age to middle Iron Age transition, 500-400 BC. The vessels with pronounced shoulders and well-defined necks belong in the early middle Iron Age, with neckless vessels predominating in later assemblages; and the high frequency of vessels with orange to brown surfaces is also an early characteristic.

Generally, vessels in finer fabrics, dark grey throughout are characteristic of the late Iron Age, 2nd into 1st centuries BC. However, there are a few such sherds widely spread through the assemblage, suggesting that such vessels are not exclusively late Iron Age in date. However, there is a vessel of this form with a bead rim within one of the few groups that can be shown to be late in date, suggesting that the specific bead rim and globular bowl form is of a late date.

The large group of pottery from pit [1409], 168 sherds, weighing 1.3kg, is quite distinct from the rest of the assemblage. It contains a higher than average proportion of shelly fabrics, a predominance of rounded rims, plus one of only two bead rims from the site, and one of only five sherds of scored ware. On the basis of the bead rim and the presence of another vessel in a fine black fabric with a burnished surface, this group is considered most likely to date to the late Iron Age, the 1st century BC.

The presence of activity on the site in the Roman period is indicated by a sparse scatter of Roman pottery, mainly from pits. A large pit [1083] towards the southern end of the site contained a small assemblage of Iron Age pottery and a handle from a Roman flagon. Single Roman sherds also came from small pits within roundhouses RD13 and RD16, a pit cutting the terminal of ditch RD10, and from the terminal of linear ditch B2. This complements the evidence from two cremation deposits that have been radiocarbon dated to the late Roman period, in indicating continuing low-level activity at this site long after the abandonment of the middle Iron Age settlement.

The presence of Roman pottery in part of the boundary ditch system, B2, indicates that at least parts of this system were still open after the abandonment of the settlement, and perhaps imply that the creation of many of the these linear boundaries also occurred late in the lifetime of the settlement. At the northern end of the site, pit [1409] is dated to the late Iron Age, but there is too little pottery from the roundhouse ring ditches in this area to determine whether the northern group of roundhouses were similarly late Iron Age in date, although the radiocarbon date from RD21 suggests that these roundhouses were in use as late as the 2nd century, perhaps through to the mid 1st century BC.

Illustrated vessels (Fig 28)

1) Shouldered jar, with rounded rim: Rim diameter *c* 180mm. Grey core, grey-brown inner surface, orange-brown external surface; grog and sandy fabric.
(1009), RD1, west side

2) High shouldered jar with flat-topped rim: Rim diameter 160mm; maximum diameter 190mm; flat base 110mm diameter; *c* 180mm high. Grey core, grey to brown inner surface orange-brown exterior with grey patches towards base; sandy calcareous fabric,
(1039)/(1041)/[1040/42], RD1, south side, west of terminals.

3) High shouldered jar with a simple rounded rim and rounded body, perhaps quite a squat jar: Rim diameter *c*170, max diameter *c*190mm, base *c*140mm, estimated height *c* 120-150mm. Grey throughout Sandy fabric, uniform grey
(144)/[145], RD2, northern terminal eastern side

4) Open bowl with flat-topped rim: Rim diameter *c* 250mm; Base (not certainly same vessel) *c*130mm diameter. Grey core, grey-brown internal (burnished below rim), and buff to orange brown external surface; sandy calcareous fabric,
(144)/[145], RD2, northern terminal eastern side

5) Large diameter, slack shouldered bowl/jar with a simple flattened rim: Rim diameter 280mm; maximum diameter 300mm. Grey core and internal surface, orange external surface; sandy fabric.
(893)/ [894], RD7, northern terminal west side.

6) Lug. Body of lug 30mm thick, 16mm diameter aperture. Dark grey core and inner surface, orange brown external surface; sandy fabric.
(893)/ [894], RD7, northern terminal west side.

7) A slack shouldered jar/bowl with a flat-topped rim. Rim diameter *c* 250mm. Dark grey core and inner surface, outer surface smoothed and brown to dark grey; sandy fabric
(1285)/[1286], RD21, southern terminal.

8) T-shaped rim, with concave top, on open bowl form. Rim diameter 250mm. Dark grey core and external surface, brown internal; sandy.
(376), RD5.

6.3 **The distribution of the pottery** by Andy Chapman

The roundhouse ring ditches produced more than a half of the pottery from the entire site. Much of this was as small groups of sherds, not significantly larger than the groups coming from the minor roundhouse structures (S1-S14), the four-post buildings (PS1-PS8) or the ditch systems (B1-B7 and E1-E2). However, the totals for the roundhouse are boosted by several instances of deposition in or near the ring ditch terminals that comprised larger assemblages, typically or larger sherds, from limited numbers of vessels (Table 4).

Table 4: Pottery quantification by roundhouse (RD)

Ring ditch	Pottery sherd count	Pottery weight (g)
RD1	386	2548
RD2	310	2559
RD7	367	1892
RD8	285	1577
RD12	108	772
RD21	114	667
RD15	124	394
RD11	73	298
RD9	57	247
RD18	68	243
RD19	91	240
RD5	36	217
RD17	39	107
RD16	5	50
RD4	6	44
RD20	9	42
Totals	**2146**	**11895**

The totals for the ring ditch terminals for seven roundhouses, including the six instances of exceptional deposition, have been catalogued in detail in order to examine the nature of the deposition and whether there was any special selectively in the choice of location beyond a general preference for ring ditch terminals (Table 5).

Table 5: Weight of pottery (g) from Ring Ditch terminals

Ring ditch	Northern terminal		Southern terminal	
RD1	494g		23g	W of terminal 926g
RD2	1946g		0	
RD7	(E side) 39g	(W side) 902g	(E side) 137g	(W side) 57g
RD8	(W side) 153g		(W side) 925g	
RD12	(E side) 3g	(W side) 9g	(E side) 685g	(West) 3g
RD15	(W side) 53g		(E side) 49g	
RD21	16g		632g	

Catalogue of deposits in terminals

The fill (1039) and the very similar overlaying fill (1041), both lying to the west of the southern terminal of RD1, produced a total of 87 sherds, weighing 926g. The majority of these are from a single vessel that can be partly reconstructed (Fig 28, 2). The deposited material probably comprises around a third of the vessel, with about a quarter the rim surviving and around half of the base. It was probably deposited in the ditch as an intact portion of the vessel and was later crushed *in situ*.

The fill (144) of the northern terminal on the eastern side of RD2 contained numerous sherds (195 sherds, weighing 1946g) from a limited number of vessels, largely in a single compact deposit with an adjacent deposit of animal bone. There are perhaps four vessels in some quantity but the material is too fragmented for reconstruction. In particular, there are the rims, one flat-topped and one rounded, and the flat bases of two vessels in sandy fabrics (Fig 28, 3 & 4). There are also a few sherds from a

vessel that was black throughout, in a fine fabric with a burnished external surface, and a single sherd of scored ware in a shelly fabric.

The fill (893) of the northern terminal on the western side of RD7 contained an assemblage, comprising 59 sherds weighing, 795g, which includes parts of several vessels, but with insufficient sherds from any one vessel to provide a full profile. There is a flat-topped rim from a shouldered jar (Fig 28, 5), a complete lug (Fig 28, 6) and a fragment of a second lug, and a flat base, 90mm in diameter. There was also animal bone from this deposit.

The majority of the sherds (171, weighing 925g) from the fill (780) at the terminal of RD8 came from perhaps only two vessels, although as they were both highly fragmented it is not possible to determine how much of each is present, although it cannot be as much as a half in either case given the limited presence of rim and base sherds. In addition, there are smaller numbers of sherds from perhaps a further four vessels. The assemblage includes three flat-topped rims, one with oblique fingernail decoration, one rounded rim, a flat base and the stump of a lug on a large body sherd. One of the flat-topped rims comes from a small globular bowl in an oxidised fabric, with a rim diameter of only 100mm.

The fill (978) from the southern terminal of RD12 contained 89 sherds, weighing 685g, from the body of single vessel. It is in a hard sandy fabric with a brown core and orange to light brown surfaces. It was probably a large diameter open bowl but there is only a single small rim sherd, thinner than the body, only 5mm thick, with an expanded flat-topped rim, and no base sherds.

The fill (1285) of the southern terminal of RD21 contained 93 sherds, weighing 632g, from a single vessel, a slack-shouldered jar with a flat-topped rim, which had been crushed *in situ*. The deposited portion comprised part of the rim and body, but none of the base (Fig 28, 7).

The nature of the deposition

From the six instances of exceptional deposition a clear pattern emerges. In three examples (RD1, RD12 and RD21) the deposit comprised numerous sherds from a single vessel, while in a fourth (RD8) the pottery appears to come from two vessels. In each of these cases only a part of the vessel is present perhaps around a quarter to a third, but this is difficult to estimate as it has only been possible to partially reconstruct one vessel. This is not, therefore, the burial of complete pots but the burial or disposal of a proportion of a vessel or vessels broken elsewhere. It is likely that these were all deposited as one or more large pieces that became further fragmented whilst in the ground.

In the other two examples (RD2 and RD3), there are a number of vessels, perhaps between four and six, which are each represented by a few sherds. In one instance (RD2), there is a complete lug and a partial lug from a thick-walled jar, but no other sherds from the same vessel; and in both groups there are examples of rim and base sherds. It may, therefore, be tentatively suggested that in the more mixed groups there was a preference for selecting rim, base or other characteristic sherds for deposition. In these two more mixed deposits there were also quantities of animal bone from the same contexts.

The location of special deposits

The tabulated data (Table 5) shows the presence of pottery concentrations in two northern terminals (RD2 and RD7), one of which was on the western side of a roundhouse with both western and eastern openings (RD7). There are three

instances of pottery concentrations in southern ditch terminals (RD8, RD12 and RD 21), with one of these on the western side of a roundhouse with only a western facing entrance (RD8), while in RD1 the pottery concentration lay within the ditch a little to the west of the southern terminal. The values for RD15 have been provided to show an example of a ring ditch that had not attracted any exceptional deposition of pottery, which is typical for most of the other roundhouses as well.

These figures show that there was no particular preference for either the northern or southern terminal or even for the eastern side in the occasional instance when a western entrance was also available (RD7).

Conclusion

The evidence from Tattenhoe Park shows that the deposition of pottery from parts of single vessels at or near the terminals of the roundhouse ring ditches was a frequent occurrence. It occurs in the two examples of roundhouse ring ditches where the size and the degree of recutting is itself indicative that these contained structures of particular importance, RD1 and RD2, and a third example, RD7, is also one of the larger and more complex ring ditch systems. In the other examples, RD8, RD12 and RD21, there are other structures of similar size that have not produced significant groups of pottery. In these instances we may only speculate that the acts of pottery deposition may mark these structures out as also being houses of special importance or function.

Whether these acts of pottery deposition had a ritualistic element or were merely acts of disposal of waste is open to question. However, there are now extensively documented examples of special deposition on Iron Age sites of a wide range of materials, encompassing inhumation burials in pits, the deposition of animal carcases or parts of animal carcases, and the deposition of certain material items, certainly including querns and loomweights. There is, therefore, no reason to doubt that pottery could also be subject to similar structured acts of disposal.

However, while attention has been drawn to the particularly large pottery groups associated with the larger roundhouse ring ditches, there are also a number of other small-scale instances of the deposition of parts of single vessels, with little or no mixing with sherds from other vessels. The southern terminal of a C-shaped ring ditch, S8, contained eight sherds, weighing 133g, from the base and wall of a single vessel, while the fill of a posthole in a four-post structure, PS7, contained 13 sherds weighing 102g, from the body and rim of a small bowl. In addition, there was part of a base, 40 sherds weighing 200g, from a pit at the northern end of structure S2, although in this instance there were also a few sherds from other vessels.

While the motives underlying these instances may continue to be a subject for debate, the evidence from Tattenhoe Park provides a body of data that may be considered alongside similar studies of pottery deposition at other sites.

6.4 Other finds

The crucibles by Andy Chapman

A single context, (1499), a fill of the most south-easterly section dug through the inner and lesser north-west to south-east boundary ditch B7 (Fig 20), produced five sherds weighing 44g from crucibles used for copper alloy casting.

The sherds are in a sandy fabric containing fine quartz grains, and are light to medium grey in colour and quite soft. They contain frequent small voids presumably

derived from gases given off during heating. On one sherd the inner surface is encrusted with a blob of vesicular residue, presumably derived from impurities within the molten copper alloy.

Four of the fragments are body sherds 7-9mm thick, and three are light grey and the other dark grey. The other fragment is a rim sherd from a thinner-walled crucible, 4-7mm thick. This suggests that the fragments come from a minimum of three separate crucibles.

Whilst fragmentary, the recovered sherds are all consistent with having come from the typical Iron Age crucible of triangular plan with a conical base (English Heritage 2001, fig 22.1). They can be compared to the classic assemblage from Gussage All Saints, Dorset (Spratling in Wainwright 1979, fig 99) and a similar smaller assemblage from Coton Park, Rugby, Warwickshire (A Chapman forthcoming). At Coton Park the crucibles ranged in size from 45-70mm deep, with the three sides 55-56mm long, with a complete crucible weighing 90-100g (A Chapman pers comm).

The crucibles would have been used in the lost-wax casting process, where objects, often horse-harness fittings, were modelled in wax with a clay investment mould formed around the wax model and then dried and heated to solidify the mould and remove the wax. The copper alloy was heated in the crucible and poured into the mould through a shaped-cup at the top. On cooling the moulds would be broken open to retrieve the cast objects. As a result, fragments of mould are more rarely found than crucibles, and none were retrieved at Tattenhoe.

The material from Tattenhoe comes from the eastern side of the site, some distance from the main focus of activity. This indicates that there may have been a distinct and marginal area of the site devoted to this activity.

Fired clay by Pat Chapman

There are 307 fragments of fired clay, weighing 1557g, coming from 24 contexts. The majority of the fragments are small and all have been well-fired. They are generally in a slightly coarse sandy red brown to pink clay with creamy streaks and only occasionally with inclusions of flint or shell. Fragments from six contexts comprising pits and ring ditch terminals, had been heated towards vitrification.

The only fragments to show any structural details are those from the large pit, [1409] to the north of RD 21, which have some smoothed surfaces and one possible wattle impression. Their fabric is a slightly streaky, bright orange, fine sandy clay with gravel and grog inclusions.

The fact that all the fired clay exhibit signs of being well to highly heated, suggests that they have been in the proximity of high temperatures, but not as structural elements.

Loomweight

A corner from a loomweight with the partial impression of a probable perforation, 15mm in diameter, came from context (1013), a terminal of RD1. The fabric is fine hard red clay. There was also another very small possible corner fragment, this time fired to white with a black core and flint inclusions. The remaining 34 fragments from this context were blackened and laminated, and may have been part of the same artefact. As the only loomweight from the site, it might suggest the location of a specific building devoted to weaving.

Spindlewhorl
A ceramic spindlewhorl (SF2) came from context (368) (roundhouse RD3). It is made from hard fine clay, fired to black with an orange oxidised surface. Although discoidal in shape the spindlewhorl was handmade not lathe-turned as it is not perfectly circular, between 39mm and 42mm in diameter and 17-18mm thick, and has an uneven surface. The spindle hole, 6mm in diameter, is also slightly off centre.

The Iron Age coin by Steve Critchley
A single coin was retrieved from the latest re-cut of roundhouse RD1. It was a *Potin* issue attributed to the Cantiaci, a Celtic tribe whose territory lay in the south-east of England centred on Kent.

These are cast high tin bronze coins with a putative issue of *c* 100 BC. They comprise an abstract design with a left facing Head of Apollo on the obverse and a butting bull to the right on the reverse. Over time these features became more degraded with a loss of definition of key elements of the design through the use of existing coins as the mould for new ones, (a bit like a photocopy of a photocopy and so on).

The model for these issues were the *Massalia* imitations used in central Gaul which in turn imitated the cast bronzes of the Greek colony of *Massalia,* now modern day Marseilles. Those found in the UK are now termed the Thurrock types, named from a large hoard of such coins found near Thurrock in Essex which has provided much of the numismatic research data for the issue.

The principal distribution is centred on the lower Thames basin, the Essex coast and east Hertfordshire though the systematic recording of find spots of metal detector found examples via the Portable Antiquities Scheme and the Celtic Coin Index, has significantly modified this distribution. Recent examples have been recovered from as far away as Lincolnshire and East Anglia, and the location of the Tattenhoe example is probably not now unusual.

The querns by Andy Chapman
There are five pieces of quern, but all are very fragmentary. Three of these are large naturally worn pebbles, probably glacial erratics, which have been opportunistically fashioned as saddle querns. Of the two small fragments of sandstone, one piece has probably come from a beehive rotary quern, but too little survives to further characterise this stone.

Two of the five pieces come from the principal house, RD1. Two fragments from a broken up saddle quern had been deposited in the northern doorpost, [1288], either as a foundation deposit or as packing stones (or perhaps fulfilling both functions), while the only fragment from a rotary quern is also from RD1. Further fragments of saddle quern come from the ring ditch of RD18, and the fill of a posthole in four-poster PS3. A small irregular fragment of fine-grained sandstone came from pit 661 within RD6.

The predominance of saddle querns, with only a single piece from a rotary quern, is consistent with the radiocarbon dating of the site, 4th-3rd centuries BC, as in the Midland counties rotary querns appear to have been introduced sometime during the middle Iron Age. A claimed date of introduction as early as the 5th-4th centuries BC at Fairfield Park, Bedfordshire (Shaffrey 2007), should be treated with caution as the date is derived from the pottery assemblage, while the radiocarbon dates from this site (Webley *et al* 2007, 56-59) suggest that the occupation was actually centred on the 4th to mid 1st centuries BC. This would be in better accord with the evidence from

the majority of middle Iron Age sites in the Midlands, which suggest a date of introduction in the 4th to 3rd centuries BC.

Other worked stone by Andy Chapman

Rubbing stones and mortars
Two non-joining fragments of a large quartzite pebble, from RD2, have a concave and heavily worn and very smooth upper surface, which may suggests use as a shallow mortar rather than as a quern.

Sharpening stone
An elongated rod of micaceous stone, possibly schist, 210mm long by 55mm and 45mm thick, from a ditch terminal of RD7, has three of its surfaces and one end worn smooth, most probably through use as a sharpening stone or large whetstone.

Limestone block
A large squared block of limestone, 340mm long by 290mm wide and 120mm thick, was recovered from the secondary fill of a large pit, [1083], to the south of RD7. This pit produced a handle from a Roman flagon, as well as residual Iron Age pottery, so the worked stone could be either Iron Age or Roman in date. The other surfaces are uneven but smoothed and rounded, and the complex fluted structure evident within the natural rock indicates that this is probably part of a fossilised tree trunk, and may perhaps have been selected for use because of this distinctive geology. The top surface of the stone is almost exactly square in plan, measuring 260mm in each direction, and has been heavily worn to form an almost perfectly flat surface. This would seem to be an unusual achievement for a stone in use for grinding or sharpening, which would create the necessary smoothing and wear but not the perfectly flat surface. The function of this stone is therefore unclear.

7 THE LATE IRON AGE AND ROMAN CREMATIONS

7.1 The human remains by Sarah Inskip and Mike Lally

Five cremated deposits of bone were subjected to macroscopic osteological examination. Cremations C1 and C5 were contained within urns possibly dating to the late Iron Age, while cremations C2 and C3 have been radiocarbon dated to the late Roman period (see section 4.2). Cremation C4 is undated.

Only one cremated deposit contained a substantial quantity of bone (Cremation C3, 534g) the other three cremations contained less than 100g, indeed cremated deposits C2 and C5 contained just 1g of material. It is uncertain as to whether cremation C2 is human. The very small amount of material suggests that a limited quantity of the remains were recovered from the pyre or were selectively placed elsewhere. The bone colour suggests a temperature above 600°C. Only three of the individuals have recoverable information about age and this only provided a wide age estimate of approximately 14 years or older. There was no information available for non-metric traits, sex or pathology.

Osteological methodology
Data was collected following the Institute of Field Archaeology's *The Guidelines to the Standards for Recording Human Remains* (Brickley and McKinley 2004) and English Heritage's *Human bones from Archaeological sites: Guidelines for Producing Assessment Documents and Analytical reports* (Mays, Brickley and Dodwell 2004).

Analysis

The material was received washed and dried. Large fragments of extraneous material were removed and, where it remained, an estimate of its percentage was made. The total weight of each cremation was recorded to the nearest 1g. The material was then sieved using 10mm, 5mm, 2mm and 1mm sieves and each fraction was then weighed. The material was sorted into element groups (skull, upper limbs, lower limbs, vertebrae, ribs and pelvis).

The colour of each element group was also recorded to assess for variation in pyre conditions. In addition the largest fragment was measured to the nearest 0.1mm. Identifiable bone fragments were noted and were assessed for information regarding age, sex, pathology and non-metric traits.

Fragmentation

Table 6 displays the level of bone fragmentation as sorted by sieve fraction. Few fragments were retained in the 10mm sieve and the majority of bone (50%) was in the 5mm sieve fraction. A substantial amount also remained in the 2mm sieve. It is clear from the results below that the bone is highly fragmented and this is reflected in the high level of unidentified long bone fragments and unidentified bone (Table 7). In fact the largest fragment (skull fragment from cremation C3) for the entire sample is only 36.6mm x 20mm. It was still possible to identify some small fragments of animal bone and some human tooth fragments. No duplicated elements were identified suggesting only remains from a single individual were included in the deposits.

Table 6: Fragmentation levels for the cremated deposits

Burial number (context number)	**Total weight (g)**	**Weight 10 mm**	**Weight 5 mm**	**Weight 2 mm**	**Weight 1 mm**	**Weight <1 mm**	**Max. frag. size (mm)**	**Other bones**
C1 (420)	18	4 (22%)	9 (50%)	5 (27%)	0	0	26 x 20	animal 5g (27%)
C2 (944)	1	0.5 (50%)	0.5 (50%)	0	0	0	11.5 x 7.4	
C3 (1426)	534	46 (8.6%)	307 (57%)	173 (32%)	1 (0.1%)	1 (0.1%)	37.8 x 10.9	animal 6g (1%)
C4 (061)	81.5	15 (18%)	44 (54%)	22 (27%)	0.5 (0.6%)	0	36.6 x 20	
C5 (1457)	1	0	0.7	0.3	0	0	13 x 5	?animal bone

Any identifiable fragments of bone were extracted from the deposits. These were then placed in approximate anatomical groups. Unfortunately it was not always possible to distinguish the origin of some long bones thus a group of unidentified long bones was created. Table 7 presents the weights of each element group. Upper limb refers to humerus, ulna, radius, scapula, clavicle and hand bones. Lower limb refers to femur, tibia, fibula and foot bones.

Table 7: Weights of the identified skeletal elements (g)

Burial number (context) number	Total weight (g)	Unident-ified fragments	Skull	Vert.	Ribs	Upper limb	Lower limb	Unident-ified long bone
C1 (420)	18	10	3	0.5	0.5	0	0	4
C2 (944)	1	1	0	0	0	0	0	0
C3 (1426)	534	288	68	5	2	18	29	95
C4 (061)	81.5	41	25.5	0	0	0	0	15
C5 (1457)	1	0.2	0	0	0	0.3	0	0.5

Cremated deposit C1 contained approximately 80 fragments, 8% were brown, 8% grey and 84% were white/cream. The cremation contained some human bone skull fragments which were white internally and externally. The long bone fragments were white/cream to grey. The cremation also contained a large animal rib fragment.

It is unclear whether the remains from cremated deposit C2 are actually human. It contained 24 small fragments of which 12% were black, 16% grey and 70% white.

Cremation C3 contained the most identifiable fragments. This is unsurprising as it contained, by far, the largest amount of material. There is some U-shaped splintering of long bone fragments. Skull elements included the frontal, occipital, temporal, zygomatic and the mandible. All these elements were white in colour ectocranially and endocranially. Many long bone shafts were present, including the humerus, radius, femur, tibia and fibula. The shafts were all white on the external surface, but in particular, the femoral fragments were grey on the inside. The distal end of a right humerus (trochlea) was grey in colour. A fragment of cervical and thoracic vertebrae were identified; both of which were white. Fragments of rib and the coracoid of the scapula were identified and were also white in colour.

Some teeth fragments were identified. This included tooth roots and a 1st lower permanent incisor. It is difficult to distinguish the exact tooth from which the roots originated, but from their morphology they appear to be permanent teeth.

Of the material in cremated deposit C4, 70% of the fragments are white/cream. There is some U-shaped splintering of long bone fragments. Among the skull fragments, pieces of occipital and temporal could be identified (which were white).

There are also three root fragments; they appear to be permanent tooth roots as indicated by thickness and size.

In cremated deposit C5 there are eight fragments, seven (85%) are cream/white and one (15%) is black. The identifiable fragments include the proximal joint surface of a first hand-phalanx. Some long bone fragments are also included.

Studies of modern cremations have demonstrated that bone weight for an adult falls between 1000g and 3600g (McKinley 2000, 404). Studies by Trotter and Hixon (1974) suggest that a 0-6 month child cremation should weigh approximately 54g, a 6 month to 3-year-old cremation should weigh an average of 185g and a child of 3 – 13 years should have, on average, 661g of bone. Cremations C4 and C3 have the greatest quantity of material (81.5g and 534g respectively) which seems low for the ages of

the individuals. Considering that three of the individuals have less than 20g, it seems highly likely that all of the cremated deposits are incomplete. Selective deposition of the remains may explain the low cremation weight, with the rest of the material being placed elsewhere.

Demographic Attributes

Age
Each deposit of cremated bone was analysed for evidence of age at death. Usual age indicators, such as auricular, pubic symphysis and dental wear could not be utilised due to the high level of bone fragmentation. However, the process of epiphyseal fusion and dental development provided some indication of age, albeit a very wide estimate.

There was no information available for cremations C1 and C2.

Cremation C3 contained a few indicators of age. Root completion on a lower incisor indicates an age of approximately 8 years at least (Ubelaker 1989). There were other tooth roots which are permanent, but it was difficult to ascertain which tooth they belonged to. A fused distal humeral indicates 15 years in girls and 17 years in boys (Scheuer and Black 2000). This individual is therefore a young adult onwards (maybe a mature adult).

Cremation C4 contained possible tooth roots and although it is difficult to be sure which teeth they came from, size suggests that they are probably adult. Two roots have cross sections that are suggestive of a canine or a premolar.

Cremation C5 contained a fused proximal hand phalanx suggesting an age of at least 14 if female and 16 if male (Scheuer and Black 2000).

Sex
None of the cremations had any remaining bones that could be osteologically sexed.

Pathology
Fragmentation and alterations in bone chemistry during the cremation process makes it very difficult to identify pathological changes. This was entirely true for the five cremated deposits from Tattenhoe Park, with none of the examined material displaying any pathological lesions.

Non-metric traits
It was not possible to identify any non-metric traits due to the efficient nature of the cremation.

Efficiency of the cremation
Cremation dehydrates and oxidises the organic portion of the human body, and this includes 30% of the organic skeleton (McKinley 2000). The macroscopic colour of cremated bone reflects the level of oxidation and may be an indicator of pyre conditions including temperature. The colours change from unburnt, charring/black (<300°C) to blue-grey, grey (<600°C) and fully oxidised white (>600°C) (Brickley and McKinley 2004).

The vast majority of the bone that was analysed was grey and, in particular white thus suggesting temperatures of 600°C and above. There were very few fragments of black bone. The skull fragments in particular were white endocranially and ectocranially. The fibula and ulna fragments in cremation C3 are white through the

bone, whereas femur fragments have a white external surface and are grey on the medullary surface. This is to be expected given the thicker nature of femoral cortical bone. It is difficult to comment on the uniformity of the pyre conditions due to the small amount of bone and the highly selective nature of the deposits.

Dehydration during cremation causes shrinkage, warping and fissuring of the bone. This was evident in the cremation C3 and C4, with characteristic U-shaped splintering of long bones (McKinley 2004).

7.2 The pottery by Andy Chapman

Cremation 1, (421)
This urn had been fragmented into some 259 sherds, weighing 1.3kg. The fabric is soft and contains dense large pieces of crushed shell, the majority of which have been lost to leaching, leaving large flat voids. It has a grey core and orange-brown internal and external surfaces. The fragmented state of this vessel leaves its form undefined, but the quantity of body sherds and their flat curvature indicate that it had a large diameter, perhaps an open bowl form. The body sherds are from 7-12mm thick and the fragmentary remains of the base are 16mm thick. There are only two rim sherds, indicating that it had stood upright and had been truncated. The rim is flat-topped, and expanded external.

There are few characteristics that provide a specific date for this vessel. The shelly fabric forms a small percentage of the assemblage from settlement features and appears to be more common in the single late Iron Age pit, and flat-topped rims do dominate the Iron Age assemblage. It may be tentatively suggested that it might be late Iron Age in date and therefore post-dating the abandonment of the main settlement, and therefore part of the broad pattern of sparse late Iron Age to late Roman activity, but on form alone it could date anywhere between the middle Bronze Age to late Iron Age.

Cremation 5, (1457)
The remains of this urn comprise 136 sherds weighing 217g. It is in a hard sandy fabric, with brown core and brown to orange surfaces. The sherds come from a small to medium jar or bowl with a flat base, but there are no rim sherds, and it was not possible to reconstruct even a partial profile. This fabric and form are, however, comparable to much of the material from the Middle Iron Age settlement.

7.3 The nails by Andy Chapman

Deposits of iron nails, to a total of at least 190 nails, were recovered in association with two Roman cremation deposits, C2 and C4.

Cremation C2
A total of 210g of nails and nail fragments was recovered and a count of evident nail heads indicates the presence of at least 110 nails. The group includes a range of sizes from small tacks up to larger nails.

Cremation C4
A total of 150g of nails and nail fragments was recovered and a count of evident nail heads indicates the presence of at least 80 nails. The group includes a range of sizes from small tacks up to larger nails.

The nails

Both assemblages of nails are closely similar in the range of sizes present. The nails can be divided into three groups, but there is a wide range of variation and this, along with the degree of fragmentation and rusting, makes it difficult to be certain whether there was a real grouping by size or whether there was just a continuous range of sizes.

In both groups smaller tacks make up some 40% of the assemblage by number. These have oval to sub-rectangular heads, measuring 7-10mm in diameter, which are asymmetrical to the shank. They are square-sectioned, approximately 2mm thick just below the head, and taper to slender point at lengths of 17-22mm. A few complete examples have been clenched at right-angles 8-11mm below the head, indicating that they had been driven through wood or some other material, which was around 10mm thick.

The group of medium-sized nails also make up about 40% of the assemblage by number. A complete example has a sub-rectangular flat head, 12mm long by 6mm wide, a square shank, 6mm thick below the head, and is 39mm long. The group as a whole have similar dimensions, although some have more circular heads. There are a few examples that are clenched over at 15-17mm below the head.

The largest nails make up about 20% of the assemblages by number. They have flat circular to sub-rectangular heads, typically 13-16mm in diameter, although the largest example measures 16m by 19mm. They have square-sectioned shanks, 7-8mm thick below the head. One example survives to 35mm long but is broken, and the majority of these larger nails were perhaps 50-60mm long. There are no surviving clenched examples.

The small nails weigh 0.5g, while the complete example of a medium sized nail weighs 4g.

Given the range of sizes, it is difficult to ascribe a single function to these nails. Some of the smaller nails are clenched, and have evidently been hammered through material around 10mm thick, perhaps a thin wooden board or the thick sole of a shoe, suggesting that these might have been boot hobnails. Some of the medium nails had been clenched after being hammered through boards 15-17mm thick and perhaps these and the larger nails had been used in the manufacturing of a wooden coffin.

These nails are broadly similar in weight, number and type to a group of 100-130 nails accompanying an early Roman cremation deposit just outside an Iron Age enclosure at Gayhurst, Buckinghamshire (Chapman 2008, 203). In this instance there was a higher proportion of the smaller nails, which were interpreted as coming from hobnailed boots, and only a handful of larger nails, interpreted as coffin nails.

7.4 The charcoal by Rowena Gale

Five cremations were deposited in pits (section 5.4) and each contained the partial remains of a single body (Inskip and Lally section 7.1). Charcoal was examined from C2 and C3 (both unurned), and C5 (probably urned).

Cremation C2 was located beside a ring ditch on the western boundary of the site. Only a minimal amount of bone was available for examination and it was not possible to verify whether the remains were human (Inskip and Lally section 7.1). Associated charcoal was also fairly sparse but included the hawthorn/*Sorbus* group (Pomoideae)

and ash (*Fraxinus excelsior*) sapwood (Table 8). The feature also included 70-80 iron nails varying in length from 17mm to about 50mm (Chapman section 7.3). While the smaller nails could have originated from hob-nailed boots, the larger nails are more likely to have been used to secure sizeable planks of wood, ie timber from substantial trees. It is not clear whether these planks formed part of the coffin or pyre structure or, but probably less likely, were present in re-cycled wood used in the construction of the pyre. The large number of nails recovered implies that several planks were involved. Oak would be the obvious timber for planks, although ash, elm and field maple could also have been used. Surprisingly, though, apart from a small piece of ash sapwood, these taxa were not recorded in the pyre debris. Since it is unlikely that members of the hawthorn/Sorbus group (the main species identified) would attain large enough dimensions for planks, the origin of the nails remains unexplained. Given the minimal amounts of bone and charcoal associated with this cremation deposit, the relative abundance of nails is curious. Perhaps their frequency can be attributed to their robust nature and more obvious presence amongst the general pyre debris. A similar deposit was associated with cremation C4 but charcoal was not available.

Table 8: Charcoal quantification by species and context, cremations

Sample	Context	Description	*Acer*	*Fraxinus*	Pomoideae	*Prunus*	*Quercus*
24	944	C2	-	2s	27	-	-
80	1426	C3	-	-	103	-	-
85	1457	C5	-	-	-	-	3h

Key. h = heartwood; r = roundwood (diameter <20mm); s = sapwood (diameter unknown).
The number of fragments identified is indicated

The burial of cremation C3, the remains of a young or mature adult, occurred within the entrance to ring ditch RD21. The charcoal-rich soil included some relatively large fragments. The 50% subsample examined appeared to consist entirely of roundwood (some probably fairly wide in diameter) from the hawthorn/*Sorbus* group (Pomoideae).

Cremation C5 was located on the eastern boundary of the site and, in common with C2, deposited pyre remains were minimal. Charcoal was very sparse (<10 fragments) but indicated the use of oak (*Quercus* sp.).

Little is known of Iron Age/Romano-British funerary customs, although there is some evidence to suggest that certain rituals pertained in Europe, as indicated, for example, by Tacitus (*Germania* 27), writing in the 1st century AD, who noted that the Gauls used particular fuel woods for high status cremations (although he did not specify which species). Thus the apparent selection of a single species for the pyre construction of C3 may be significant and perhaps related to gender, age or status. It may also be relevant to note that, in folklore, both hawthorn (*Crateagus*) and rowan (*Sorbus* aucuparia) were considered protective against evil, and rowan, in particular, to prevent the dead from rising (Grigson 1958). More convincing evidence for funerary ritual in the region was recorded at Gayhurst (just north of Milton Keynes), in this instance at a Bronze Age barrow cemetery where primary deposits from sequential burials of cremated remains placed centrally within the mounds consisted entirely of oak (*Quercus* sp.) charcoal, whereas deposits in the associated barrow ditches tended to include multiple species (oak, hawthorn/ *Sorbus* group, *Prunus* and hazel) (Gale 2007). Interestingly, though, a large deposit of charcoal from a single unurned cremation deposit in a pit near one of the barrow mounds consisted entirely of the hawthorn/*Sorbus* group (Pomoideae).

7.5 **The charred plant remains** by Val Fryer

Four samples (1, 23, 24 and 85) are from cremation deposits. Although small, the composition of the assemblages does appear to indicate that wood and/or charcoal were the principal fuels used for the cremation process. The weed seeds within the assemblages may be derived from plants burnt *in situ* beneath the pyres, although contemporary evidence from a number of other sites within lowland Britain would suggest that dried plant materials may have been used as kindling to ignite the pyres, or as supplementary fuels.

Table 9: Plant macrofossil data, cremations

Sample No.	**1**	**23**	**24**	**85**
Context No.	***O61***	***943***	***944***	***1457***
Feature type	**Crem C4**	**Crem.C2**	**Crem C2**	**Crem C5**
Cereals				
Cereal indet. (grains)	-	-	-	x
Herbs				
Fabaceae indet.	-	-	x	-
Fallopia convolvulus (L.)A.Love	x	-	-	-
Medicago/Trifolium/Lotus sp.	xcf	-	-	-
Rumex sp.	-	-	x	-
Vicia/Lathyrus sp.	-	x	-	-
Other plant macrofossils				
Charcoal <2mm	xx	xxx	xxxx	x
Charcoal >2mm	x	x	xx	x
Charred root/stem	-	-	x	-
Indet.seeds	-	x	x	-
Indet.tuber	-	-	x	-
Other materials				
Black porous 'cokey' material	x	x	x	-
Bone	xb	-	xb	-
Burnt stone	-	x	-	-
Volume of flot (litres)	<0.1	<0.1	<0.1	<0.1
% flot sorted	100%	100%	100%	100%

8 FAUNAL AND ENVIRONMENTAL EVIDENCE

8.1 **The animal bone** by Matilda Holmes

Methodology

Bones were identified using the author's reference collection, and further guidelines from Cohen and Serjeantson (1996), Hillson (1992) Prummel (1988) and Schmidt (1972). Due to anatomical similarities between sheep and goat, bones of this type were assigned to the category 'sheep/goat', unless a definite identification using guidelines from Prummel and Frisch (1986) or Payne (1985) could be made. Bones that could not be identified to species were, where possible, categorised according to the relative size of the animal represented (small–rodent/rabbit sized, medium–sheep/pig/dog sized, or large–cattle/horse size). Ribs were not identified to species. Due to the highly fragmentary nature and small size of the fragments from sieved material only bones that could be identified to species or anatomy were recorded from environmental samples.

Tooth wear and eruption were noted using guidelines from Grant (1982) and Silver (1969), as were bone fusion (Amorosi 1989, Silver 1969), metrical data (von den Driesch 1976), anatomy, side, zone (Serjeantson 1996), pathology, butchery, bone working and condition (Lyman 1994) of the bones.

Summary of results

The bones are fragmentary and very friable. The high number of loose teeth and tooth fragments (21% of assemblage) suggests that soil conditions were not conducive to good bone preservation. Teeth show the highest rate of preservation in the skeleton, and factors affecting them may be inferred to have destroyed bone to an even higher degree, therefore a good part of the faunal assemblage may have been lost post-deposition due to poor soil conditions. Other taphonomic factors affecting the material were recorded including burnt, gnawed, butchered and recently broken bones, of which less than 1% of the fragments recorded had been butchered, gnawed or showed signs of fresh breaks and 5% had been burnt. A total of 183 fragments were conjoined to make a total of 21 refitted fragments, and a complete cow skeleton was retrieved from context (793).

Despite the inclusion of fragments from sieved deposits, no bird or fish bones were recovered suggesting they were not an important part of the diet, and were not present in the immediate environment.

Table 10 shows the fragment count of species, of which cattle were found in greatest numbers. Sheep/goat were the next most common, of which a small proportion were positively identified as sheep. Pig and horse bones were identified in similar, but small quantities, and evidence for dog was also present both from bones and gnaw marks. See Appendices 1 and 2 for tables of animal bone retrieved by context.

Due to the friable nature of the material, there were no bones complete enough to be used for calculating wither heights from, with the exception of the cow skeleton (see below). A small amount of fusion, tooth-wear and eruption data was recorded from the assemblage that may be of limited use for ageing the animal populations on site.

Table 10: Animal species representation

Species	No.	%
Cattle	231	67
Sheep / Goat	63	18
Sheep	4	1
Pig	23	7
Horse	23	7
Dog	2	1
Articulated fragments	435	-
Total Identified	**781**	**-**
Unidentified mammal	503	-
Unidentified large mammal	232	-
Unidentified medium mammal	80	-
Total	**1596**	**-**

8.2 **The charred plant remains** by Val Fryer

Introduction

Samples of between 10 and 60 litres in volume for the retrieval of the plant macrofossil assemblages were taken from across the excavated area and ninety-six were submitted for assessment.

The samples were bulk floated by Northamptonshire Archaeology and the flots were collected in a 500 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x 16 and the plant macrofossils and other remains

noted are listed on Tables 11 and 12. Nomenclature within the table follows Stace (1997). All plant remains were charred. Of the 96 assemblages studied, 72 contained only charcoal/charred wood fragments and other materials. Modern contaminants including seeds, moss fronds and arthropods were present throughout and fibrous roots formed the major component of most of the assemblages.

Results

Cereal grains and seeds were recorded at an exceedingly low density, rarely occurring as more than one specimen within an assemblage. Preservation was generally poor, within many of the grains and seeds being puffed and distorted, possibly as a result of combustion at high temperatures.

Barley (*Hordeum* sp.) and wheat (*Triticum* sp.) grains were recorded along with a small number of grains which were too poorly preserved for close identification. Cereal chaff was entirely absent. A low density of seeds of common field weeds and grassland herbs was also recorded, with taxa noted including brome (*Bromus* sp.), fat hen (*Chenopodium album*), black bindweed (*Fallopia convolvulus*), goosegrass type (*Galium* sp.), persicaria (*Persicaria maculosa/lapathifolia*), dock (*Rumex* sp.) and vetch/vetchling (*Vicia/Lathyrus* sp.). Hazel (*Corylus avellana*) nutshell fragments were recorded from samples 16 (posthole [829] RD 3, Fig 9) and 89 (pit [1508], Fig 18) A single oak (*Quercus* sp.) cupule was noted within the assemblage from sample 5 (a medieval pit [313], Fig 26). Although charcoal fragments were present throughout, the density of material recorded was rarely high, with a large number of assemblages containing only one or two minute pieces. Other plant macrofossils were exceedingly scarce.

With the exception of mineralised soil concretions, which occurred naturally within certain of the features, other materials were present only at very low densities. The fragments of black porous and tarry material were possible residues of the combustion of organic remains at very high temperatures. Sample 77 from fill [1376] within the northern boundary ditch B6 was of particular note as it contained a high density of minute black tarry globules. The origin of this material was uncertain, although it may possibly have been related to a nearby find of fragmentary crucibles for the casting of copper alloy. Other material types included occasional fragments of bone (some of which were burnt) and pellets of burnt or fired clay.

Conclusions

The assemblages are from features including ditches/gullies, roundhouse gullies, pits and postholes. Given the range of contexts sampled, the assemblages are very uniform in composition, possibly indicating that the material within them has a common source, in this instance probably low density scatters of domestic hearth waste. Similar low density deposits have been noted at a number of contemporary settlements situated on clay soils within eastern England and the Midlands, for example at Stansted, Essex (Murphy 1990). The occupants of these sites were probably principally engaged in a pastoral economy, as effective agricultural production would have been difficult on such heavy ground. Their cereal requirements would have been met by batches of imported prime grain, which needed little or no further processing prior to consumption.

The habitation area at Tattenhoe Park would appear to have been kept relatively clean. It is perhaps of note that the only Iron Age assemblage (sample 93 from pit [1544], Fig 18) containing a higher density of charcoal is from a feature on the eastern edge of the settled area. This may indicate that much of the waste generated within the settlement was disposed of at the periphery of the site.

Table 11: Plant macrofossil data

Sample No.	**3**	**25**	**62**	**88**	**14**	**20**	**21**	**66**	**67**
Context No.	**144**	**946**	**1279**	**1499**	**780**	**893**	**926**	**1267**	**1265**
Feature No.	**145**	**948**	**1280**	**1500**	**781**	**894**	**927**	**1268**	**1266**
Type	**Gully**	**Gully**	**Ditch**	**Ditch**	**Gully**	**Gully**	**Gully**	**Gully**	**Gully**
Structure group	**RD2**	**-**	**B3**	**B7**	**RD8**	**RD7**	**RD14**	**RD1**	**RD1**
Cereals									
Triticum sp. (grains)	x	-	-	-	-	x	-	xcf	-
Cereal indet. (grains)	x	x		x	x	-	-	-	x
Herbs									
Fabaceae indet.	-	-	-	-	-	-	-	-	-
Fallopia convolvulus (L.)A.Love	-	-	-	-	-	-	-	-	-
Galium sp.	-	-	-	-	-	-	x	-	-
Medicago/*Trifolium*/*Lotus* sp.	-	-	-	--	-	-	-	-	-
Persicaria maculosa/*lapathifolia*	x	-	-	-	-	-	-	-	x
Rumex sp.	-	-	-	-	-	-	-	-	-
Vicia/*Lathyrus* sp.	-	-	xcf	-	-	-	-	-	-
Other plant macrofossils									
Charcoal <2mm	xx	xxx	xx	xxx	xxx	xx	xxx	xx	xxxx
Charcoal >2mm	xx	x	-	xx	x	x	-	x	x
Charred root/stem	x	-	-	-	x	-	-		x
Indet.seeds	x	-	-	-	-	-	-	-	-
Indet.tuber	-	-	-	-	-	-	-	-	-
Other materials									
Black porous 'cokey' material	x	x	-	-	x	x	-	x	-
Black tarry material	x	-	-	-	-	-	-	-	-
Bone	-	-	-	-	x	-	x	-	x xb
Burnt/fired clay	-	-	-	-	x	-	-	-	x
Burnt stone	-	-	-	-	-	-	-	-	-
Mineralised soil concretions	-	-	-	-	-	-	xxx	-	xxxx
Pottery	-	-	-	-	x	x	-	-	-
Sample Volume (litres)	30	40	40	30	20	60	30	10	
Volume of flot (litres)	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1
% flot sorted	100%	100%	100%	100%	100%	100%	100%	100%	100%

Table 12: Plant macrofossil data

Sample No.	**5**	**45**	**46**	**99**	**108**	**86**	**89**	**16**	**43**	**58**	**91**
Context No.	**312**	**1079**	**1081**	**312**	**1564**	**1408**	**1507**	**828**	**1053**	**1200**	**1531**
Feature No.	**313**	**1083**	**1083**	**313**	**1566**	**1409**	**1508**	**829**	**1054**	**1201**	**1532**
Type	**Pit**	**Pit**	**Pit**	**Pit**	**Pit**	**Pit**	**Pit**	**P/hole**	**P/hole**	**P/hole**	**P/hole**
Structure Group	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**RD3**	**RD1**	**RD12**	**-**
Cereals											
Hordeum sp. (grains)	-	x	-	-	-	-	-	-	-	-	x
Triticum sp. (grains)	-	xcf	-	-	-	-	-	-	-	-	-
Cereal indet. (grains)	-	-	x	-	x	-	x	-	-	-	-
Herbs											
Bromus sp.	-	x	-	-	-	-	-	-	-	x	-
Chenopodium album L.	-	-	-	-	-	-	-	-	x	-	-
Tree/shrub macrofossils											
Corylus avellana L.	-	-	-	-	-	-	x	xcf	-	-	-
Quercus sp. (cupule)	x	-	-	-	-	-	-	-	-	-	-
Other plant macrofossils											
Charcoal <2mm	xxxx	xxx	xx	xxxx	xxx	x	xxxx	xxxx	xxx	xx	xxxx
Charcoal >2mm	xxxx	x	-	x	x	-	x	xx	x	x	xx
Charred root/stem	x	-	-	x	-	-	x	-	x	-	-
Indet.bud	-	-	-	x	-	-	-	-	-	-	-
Indet.seeds	-	-	-	-	-	x	-	-	-	-	-
Other materials											
Black porous 'cokey' material	-	x	-	-	-	-	x	-	-	-	-
Black tarry material	-	-	-	-	-	-	-	-	-	-	x
Bone	-	-	-	-	-	-	-	x xb	-	-	-
Burnt/fired clay	x	-	-	-	-	-	x	-	-	-	-
Mineralised soil concretions	-	-	xxxx	-	-	-	xxxx	xxxx	-	-	-
Pottery	-	-	-	-	-	-	-	x	-	-	-
Sample Volume	60	40	40	20	40	20	40	10	10	10	10
Volume of flot (litres)	1.2	<0.1	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
% flot sorted	<10%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%

8.3 **The charcoal** by Rowena Gale

Introduction

Over a hundred environmental samples were collected from a range of contexts but most proved to be disappointingly sparse in terms of plant remains and charcoal. Even the largest samples tended to be very fragmented, with relatively few pieces suitable for identification. Fifteen samples of charcoal from roundhouses, pits and cremations were selected for full analysis. The charcoal is attributed to fuel debris

Species identification was undertaken to indicate the character of local woodland and its potential to supply timber, wood and fuel: and also to assess the type of fuel selected for domestic and industrial use and for pyre construction. The data collected are compared to those from other sites in the region.

Methodology

Bulk soil samples were processed in house by flotation and sieving using a 500 micron mesh. The resulting flots were dried, scanned under low magnification and the charcoal separated from plant macrofossils. Intact segments of narrow roundwood were infrequent. Charcoal fragments measuring >2mm in radial cross-section were considered for species identification. The large samples 4, 80, 101 and 102 were 50% subsampled prior to identification.

The condition of the charcoal was generally poor and friable. The samples were prepared using standard methods (Gale and Cutler 2000). The anatomical wood structures were examined using incident light on a Nikon Labophot-2 compound microscope at magnifications up to x400 and matched to prepared reference slides of modern wood. When possible, the maturity of the wood was assessed (ie heartwood/sapwood).

Results

The taxa identified are presented in Table 10. Classification follows that of *Flora Europaea* (Tutin, Heywood *et al* 1964-80). As anatomical differences between members of the Pomoideae (*Crataegus, Malus, Pyrus and Sorbus*) are too slight to secure identification to genus level, these are included as a group. When a genus is represented by a single species in the British flora, it is named as the most likely origin of the wood, given the provenance and period, but it should be noted that it is rarely possible to name individual species from wood features, and exotic species of trees and shrubs were introduced to Britain from an early period (Godwin 1956; Mitchell 1974). The anatomical structure of the charcoal was consistent with the following taxa or groups of taxa:

cf. Aceraceae. *Acer campestre* L., field maple
Fagaceae. *Quercus* sp., oak
Oleaceae. *Fraxinus excelsior* L., ash
Rosaceae. Subfamilies:
Pomoideae, which includes *Crataegus* sp., hawthorn; *Malus* sp., apple;
Pyrus sp., pear; *Sorbus* spp., rowan, service tree and whitebeam. These taxa are anatomically similar; one or more taxa may be represented in the charcoal.
Prunoideae. *Prunus spinosa* L., blackth

Discussion

The economy of the settlement, which consisted of at least 21 roundhouses, appears to have been mainly rural and pastoral, although an industrial element, albeit probably small-scale, is suggested by fragmentary remains of ceramic crucibles.

Most organic remains had been adversely affected by poor preservational conditions. Only on the south-east and north-west flanks of the site was charcoal recovered in reasonably large quantities. In view of the difficulty of cultivating the heavy clay soils and the overall paucity of charred grain residues in the contexts excavated, it is suggested that ready-processed cereals were bought into the settlement (Fryer, section 8.2). Four-post structures (possibly granaries) located on the northern edge of the settlement may have been used for storage.

Roundhouses

Small amounts of charcoal were examined from the gully terminals of RD1 (in the principal house group), from RD7 (the western roundhouses) and from RD21 (the northern roundhouse group, which may have been a later addition to the settlement). The charcoal almost certainly represents domestic fuel debris, either dumped or accumulated in the terminals of the ring ditches. Samples 67 (RD1), 20 (RD7) and 65 (RD21) indicated the use of multiple species, predominantly blackthorn (*Prunus spinosa*) and the hawthorn/ *Sorbus* group (Pomoideae) but also oak (*Quercus* sp.), ash (*Fraxinus excelsior*) and possibly field maple (*Acer campestre*) (Table 13). Although difficult to confirm, much of this probably originated from narrow roundwood.

Pits

Pits were numerous, frequently associated with roundhouses and other structures but sometimes in more discrete locations. These probably functioned mostly as depositaries for domestic waste, although some may have been linked to specific activities, eg food storage or industrial use. Apart from pit [1544], sited near ditch B1, the Iron Age pits yielded insignificant deposits of charcoal. The only other pits producing significant deposits of charcoal were of medieval date, [313] and [299].

Charcoal from samples 98 to 102 (pit [313]) was consistently identified as oak (*Quercus* sp.), mostly heartwood and, although very fragmented, it appeared to include a mixture of narrow and wider roundwood.

Sample 93, from pit [1544], also consisted exclusively of oak (*Quercus* sp.). The proximity of this pit (sited just south of the curvilinear structure S9 and west of ditch B5) to the area in which the crucible fragments were found, adds weight to the suggestion of industrial waste.

Environmental evidence

The site was based on heavy clay soils with a tributary of Loughton Brook flowing to the south. Agriculture at the settlement focused on pastoral farming and since there is little evidence to suggest that cereal crops were grown, it is probable that local woodland did not succumb to land clearance to the same extent as that on lighter and more easily cultivated soils.

Environmental evidence from the charcoal was, however, limited by poor preservational conditions and it is probable that a much wider range of woody taxa was present than that identified. In addition, the woods named are likely to reflect the economic aspect of species selection.

The frequency of oak (*Quercus* sp.) in the pits suggests that oak was readily available and probably formed the dominant component in local woodland. Other large woodland trees included ash (*Fraxinus excelsior*) and field maple (*Acer campestre*). Marginal woodland and scrub may have been colonized by members of the hawthorn/*Sorbus* group (Pomoideae) and blackthorn (*Prunus spinosa*), although both hawthorn and blackthorn may also grew in stock-proof hedgerows. The presence of hazel (*Corylus avellana*) was indicated by charred nutshell (Fryer, section 8.2).

Woodland resources

Woodland must have been sufficiently abundant in the locality to enable the community to construct and maintain the roundhouses, probably using oak timbers for major structural components and pliable stems/rods from hazel and other shrubby speciesfor hurdles. Provision of firewood would also have been essential and, as demonstrated by charcoal deposits from contexts associated with ring ditches (samples 20, 65 and 67), domestic fuel included roundwood from various species (Table 13), but particularly the hawthorn/*Sorbus* group (Pomoideae) and blackthorn (*Prunus spinosa*). These together with the remaining taxa named from the charcoal (oak, *Quercus*; ash, *Fraxinus excelsior*; and field maple, *Acer campestre*) all produce high quality firewood. The advantage of using narrow roundwood is that the high ratio of atmospheric oxygen to wood surface, quickly produces a hot, fast-burning fire.

During the ensuing centuries of occupation the settlement would have made considerable demands on woodland resources and it could be argued that suppplies could only have been sustained through woodland management. Unfortunately, owing to its poor condition and gross fragmentation, the charcoal did not provide sufficient evidence to support this suggestion. It was apparent, however, that growth rates in oak varied from medium to slow, which infers that some trees were growing in stressed conditions and were therefore unlikely to have originated from coppice.

Table 13: Charcoal quantification by species and context

Sample	Feature	Description	*Acer*	*Fraxinus*	Pomoideae	*Prunus*	*Quercus*
Roundhouses							
20	894	Roundhouse gully terminal,, RD 7	*cf.* 1	-	6	6	1
65	1286	Ring ditch 21, gully terminal	*cf.* 1	-	14	1	-
67	1266	Ring ditch 1, gully terminal	-	2	23	14	-
Iron Age pits							
4	299	Pit, west of ditch B1	-	-	-	-	95h
93	1544	Pit, west of ditch B5	-	-	-	-	56h, 2r
Medieval pits							
98	313	Pit, west of ditch B1	-	-	-	-	11h
99	313	Pit, west of ditch B1	-	-	-	-	31h, 1r
100	313	Pit, west of ditch B1	-	-	-	-	143h, 1r
101	313	Pit, west of ditch B1	-	-	-	-	68h, 1r
102	313	Pit, west of ditch B1	-	-	-	-	82h
103	299	Pit, west of ditch B1	-	-	-	-	110h
104	299	Pit, west of ditch B1	-	-	-	-	38h

Key. h = heartwood; r = roundwood (diameter <20mm); s = sapwood (diameter unknown). The number of fragments identified is indicated

Comparable sites
Environmental evidence from Tattenhoe Park is roughly comparable to that from Nova, Milton Keynes, a Roman site from which a small assemblage of charcoal collected from ditches included the hawthorn/*Sorbus* group (Pomoideae), oak (*Quercus* sp.) and willow (*Salix* sp.) or poplar (*Populus* sp.) (Gale unpub). Similar species were also named from the Bronze Age cemetery at Gayhurst (see Cremations, section 7.4).

Conclusion
Despite the paucity of charcoal available from the site, the analysis of 15 samples suggests that a varied woodland environment existed here in the Iron Age, probably with oak as the dominant taxon. Blackthorn and the hawthorn/*Sorbus* group were also prevalent and were an important source of firewood for the local community. More specifically, there was evidence to suggest that domestic fuel consisted of roundwood obtained from a range of taxa, whereas large deposits of probable industrial fuel consisted exclusively of oak. Species selection was also suggested by a charcoal-rich sample from one of the three cremation deposits examined and could be of ritual significance, in this instance through the use of the hawthorn/ *Sorbus* group.

Owing to the fragmented state of the charcoal, evidence of woodland management was inconclusive.

9 DISCUSSION

Settlement chronology

There would appear to have been little or no activity on the site prior to the middle or earlier middle Iron Age, although residual Neolithic and Bronze Age flints found at the Kingsmead South site 200m to the north attest to human presence in the area during these periods. Radiocarbon dates suggest that the main period of settlement occurred around 400 to 200 BC. This period of a couple of centuries would seem appropriate given the size of the settlement and the degree of repair and replacement displayed by many of the roundhouse groups.

The typically undiagnostic pottery is of no help in determining a more precise date. The majority of the assemblage comprises plain locally made shelly wares with only a few sherds being recognisable as perhaps slightly earlier middle Iron Age forms. A single pit associated with the northern group of roundhouses produced enough diagnostic sherds to be assigned to the late Iron Age but pottery from the structures themselves was insuffienct to assign them a similar date. It seems likely that the site was abandoned by the middle of the 1st century BC which is consistent with the local pattern of middle to late Iron Age abandonment. None of the six middle to late Iron Age sites excavated within a 3.5km radius of Tattenhoe Park: Cranbourne Avenue, Westcroft (Anthony 2003), Westcroft District Centre (Ford 2000), North Furzton Sites A and B (Williams 1988), Kingsmead South (Taylor 2009) and Oxley Park (Brown et *al* 2009) showed evidence of occupation into the Roman period. As Webley points out (Brown *et al* 2009), this would suggest a radical reorganisation of the local landscape during the 1st century AD, or slightly earlier given the evidence from Tattenhoe Park. At sites such as Wavendon Gate (Williams *et al* 1995) and Fenny Lock (Ford and Taylor 2001) where there was no break in the sequence of occupation, there was still an apparent need to re-site the settlement on new ground during early Roman times.

Continuity of occupation at Tattenhoe Park from its origin to abandonment is inferred by the re-siting of buildings on or slightly to the side of their predecessor's footprint. The small enclosure E2 surrounds the area once occupied by RD16 (Fig 20) and RD17 was built on the footprint of RD22 (Fig 23) perhaps a generation after its abandonment.

Settlement development and morphology

The lack of closely dateable pottery and other artefacts coupled with the few stratigraphic relationships other than within small groups of structures makes detailed narrative of the site's development problematic. With most of the roundhouse groups it is possible to identify a sequence of successive buildings through stratigraphic evidence, but there is no way of determining whether the groups were contemporary.

The principal houses RD1, RD2 are likely to be the earliest and most long lived structures of the settlement. Assuming the settlement did not extend too much further to the south-west of the excavation area, these buildings were central to it and show a long sequence of maintenance and rebuilding in the same location. This would suggest they were of some importance and their function perhaps was more than that of domestic occupation alone. From these origins the settlement grew and developed a linear arrangement similar to that seen at Oxley Park West (Brown *et al* 2009), Bancroft (Williams and Zeepvat 1994) and Salford (Dawson 2005). It is impossible to be certain if linearity was a result of settlement drift, two or three houses moving across the landscape, as has been suggested for Kingsmead South (Taylor 2009) or the zonal distribution of chronologically successive buildings. It is more likely that the principal house group remained the nucleus of the settlement, much like the enclosures at Pennylands (Williams 1993a) which formed the dominant focus of the settlement, around which the occupation may have periodically shifted as buildings fell into disrepair and new ones built.

Initially the settlement appeared to have been unenclosed, an archaeologically invisible boundary contained it to the north-west whilst the significant landscape boundary ditch B6 marked its northern extent. Although later pottery was retrieved from this ditch it is likely that it was a long-lived feature which was present in one form another throughout the lifetime of the settlement. Respecting and aligned with this ditch, the establishment of the open-ended enclosure formed ditches B1 and B7, saw the abandonment of structures RD16, RD17, RD24 and more than likely the four-post structures PS1, PS2 and PS3. Although purely speculative, it is possible that the residential and storage functions of this part of the site were relocated to the south of RD1.

Outside of the main settlement core there were a number of outlying features. Charcoal found in pits associated with structure S9 and fragments of copper alloy casting crucibles found in the eastern end of ditch B7 would suggest small scale activities were being carried out in more temporary structures at the periphery of the site.

Settlement Architecture

The types of structures present within the settlement comprised roundhouses, semi-circular, open-sided structures and four and six post-built structures. There were 23 roundhouses of which generally only the surrounding gullies survived. Internal features were present in 14 of the roundhouses, however, apart from convincing pairs of doorposts it is not possible to be certain that other features were contemporaneous with the occupation of the building.

The construction of the roundhouses appears to have been typical for the period, as has been suggested for buildings at Bancroft and Pennylands, this probably involved a mass construction technique, using turf, cob or wattle which left no subsurface trace. The large Bronze Age circular structure comprising three concentric rings of post-holes at Bancroft demonstrates that if substantial wooden post had been used in the construction of later buildings there is no reason why traces of them would not have survived.

The roundhouses at Tattenhoe Park had surrounding gullies ranging in diameter from 9m to 15m which is within the diameter range recorded at other sites in the region (Brown *et al* 2009, 61 fig 8). Most of the houses were built, as was customary for the period, with their entrances facing east to south-east. There was a high occurrence of buildings which did not conform to this and had either north-west facing entrances (RD8, RD15 and RD20). Or apparent double entrances (RD2 and RD7). The reason for this is unclear but it may be linked to the function of the building or simply the personal preference of the occupant.

There were number of semicircular structures on the site. These are not uncommon for the period but poorly understood. It has been suggested that they may represent small animal pens, stacking areas or wind breaks around craft activity areas, which may or may not have been roofed. At Tattenhoe Park structures S5 and S13 were surrounding four-post structures. Charcoal concentrations associated with structure S9 also suggest specialist activity areas. There were eight, four- and six-post structures situated close to roundhouses in the northern and southern parts of the site. These are generally interpreted as raised platforms for the storage of grain but their use as drying racks, small pens, shrines and ex-carnation platforms have all been suggested elsewhere.

Landscape and Economy

The evidence suggests a relatively short-lived, densely populated settlement. Situated on a boulder clay ridge, overlooking a tributary of Loughton Brooke, the site conforms to the pattern of middle to late Iron Age colonisation of the heavy clay soils which is likely to have occurred due to population pressures, the introduction of hardier cereal crops and developments in plough share technology (Williams 1993a: 1993b). Webley (2009) points out developments in settlement patterns are also likely to have been the result of a range of social and cultural factors.

The charred plant remains were scarce, which may be an indication that cereal production and processing did not occur at the site. However, clay soils have been shown to seriously hinder the recovery of charred plant remains (De Moulins 1996) and fluctuating wet and dry conditions in clay soils are likely to lead to the decomposition of fragile plant remains such as chaff (Webley 2009). Although Fryer (section 8.2) infers that low density assemblage suggests that the occupants of the settlement were principally engaged in a pastoral economy, the poorly preserved faunal assemblage and the general site morphology would not support this. At Oxley Park West (Brown *et al* 2009) a mixed farming economy was suggested by the charred plant remains, the faunal assemblage and the presence of a series of large enclosures. At Pennylands (Williams 1993a), the predominantly arable economy of the earlier phase is represented by a number of grain storage pits combined with three rectilinear enclosures interpreted as having defined areas of cultivated land. This later gave way to a more pastoral economy as suggested by the establishment of a number of stock enclosures and a droveway. Tattenhoe Park's neighbouring settlement, Kingsmead South, 200m to the north was characterised by a number of

roundhouses and stock management enclosures (Taylor 2009). The complete lack of stock enclosures at Tattenhoe Park would suggest that this was not an important part of the settlement's economy The large open-ended enclosure formed by ditches B1 and B7 may have defined an area of cultivated land which, combined with the numerous post-built granary structures, would suggest an arable economy predominated for at least part of the settlement's lifetime. The lack of grain seed and chaff is probably due to the problems of preservation and recovery of such ecofacts from heavy clay soils.

Prior to the establishment of the enclosure, crops are likely to have been grown on open land. Perhaps as a result of an increasingly populated landscape there was a need to formally define areas of land use or access rights by the digging of an enclosure ditch. It has been suggested that linear settlements may have been laid out along landscape boundaries of some kind. Lambrick and Allan (2004) have suggested that a group of linear early and middle Iron Age settlements were located at a division between areas of the landscape under arable and pastoral use (Webley 2009). This may apply to Tattenhoe Park where arable practises seem to dominate but the settlement immediately to the north, Kingsmead South, appears to have been largely designed for stock management.

There was sparse evidence of specialist activities on the site. A spindlewhorl and loomweight fragments attest to textile production; evidence of food preparation is represented by quern fragments and occasional incidence of animal bones with butchery marks. Fragments of crucible found in ditch B7 indicate that small scale copper alloy casting was being carried out.

The cremations

The seemingly intentional placement of cremations during Roman times within a former Iron Age settlement is unparalleled in Buckinghamshire. Too widely spaced to be considered a formal cemetery, it would appear that centuries after the middle Iron Age settlement was abandoned, people were impelled to visit the site and inter cremated remains. It seems unlikely, but not impossible, that the five cremations represent a chronological sequence of individual interments, perhaps of an ancestral line, each separated by one or two generations. The earliest being cremations C1 and C4 which were contained in broadly dateable Iron Age vessels and latest being cremations C2 and C3 which were radiocarbon dated to the 2nd-4th centuries. Cremation C5 was unurned and not subject to radiocarbon analysis and so remains undated.

Three of the cremations, C1, C2 and C3 were placed within or adjacent to former dwellings, suggesting these structures were still identifiable as such for many years after the site's abandonment. Given the perishable construction materials used in these buildings the surrounding gully must have been the recognisable feature, or perhaps the substantial timber doorposts which could have survived for many years. That the site was recognisable for centuries after abandonment would suggest the land was not ploughed but returned to open pasture.

There is no known Roman successor settlement but the presence of Roman cremations would suggest it was not a vast distance from it predecessor. People may have returned to the site to inter cremations as a statement of land ownership or ancestral rights to the land.

10 MEDIEVAL AND POST-MEDIEVAL

The majority of the area was common land, known as Tattenhoe Bare and only two fields on the eastern side, recorded in 1801 as Norrie Close and Great Ground, are recorded as having ridge and furrow, according to aerial photographs taken *c* 1946 (Brown *et al* 2005, 2-3). As common land, this would account for the lack of medieval and post-medieval features, particularly remnants of ridge and furrow field cultivation, across the excavated area.

10.1 Medieval pits (10th century): Site A

In the northern part of the site there were two pits, [299] and [313] (Fig 26). These were both shallow, no more than 0.18m deep, with diameters of 1.0m and 0.85m respectively. They had steep edges and flat bases which were scorched to a dark reddish/orange colour, suggesting *in situ* burning. Their fills were identical, comprising dark grey-black silty clay with abundant charcoal inclusions which has been identified as oak. A sample of charcoal from pit [313] has been radiocarbon dated to 900-1040 Cal AD (95% confidence, 1040+/-40 BP, Beta-275411) and given the similarities between the two pits, it is reasonable to assume that they were both dug during this period.

The charcoal from pit [299], which was exclusively oak, included both narrow and wider roundwood. This evident selection of a single species of high grade wood suggests that it was required to fuel a specific, although unknown, activity (Gale, section 8.3).

10.2 A post-medieval animal burial: Site A

In the corner of the field, parallel to the hedge which marked the modern boundary, there was a large pit which contained the articulated skeleton of a cow (Fig 26). The pit, [794], was rectangular, 2.43m long, 1m wide and 0.44m deep. The edges were straight and almost vertical and the base was broad and flat. The cow had been placed at the bottom of the pit on its left side with the head to the north. The overlying fill comprised a dark grey-brown silty clay loam much like the present day ploughsoil, mixed with patches of redeposited natural clay. Iron Age pottery was retrieved from this deposit but this is likely to have come from earlier features through which the pit had been dug.

The animal probably died from disease as the bones showed no evidence of slaughter

10.3 Bottle House post-medieval farmstead: Site B

Excavation of Site B revealed the remains of a post-medieval farmstead shown on the 1770 Jeffrey's Map and the 1801 Selby Estate map, known as Bottle House (Fig 29).

The house was located in the north-west corner of the excavated area. The remains comprised the majority of the southern gable end of a narrow rectangular structure aligned north-east to south-west. There were only very short sections surviving of the eastern and western walls.

The foundations of the building were of rough limestone blocks onto which red handmade bricks had been laid, bonded with a soft lime mortar. The southern wall survived up to four courses high in places, while the other walls survived only to one course or at foundation level. The floor surface had mostly been lost, but a single row of thick, red ceramic tiles on a mortar bed survived adjacent to the walls. There were no internal divisions within the building. To the west the line of a robber trench visible within the demolition rubble suggests that there had been a small walled yard here.

Approximately 100m to the south of the house there was an L-shaped length of wall, which survived only at the foundation level comprising fragmentary limestone pieces and a few larger blocks making the line of the wall traceable. In the internal angle there was a spread of small limestone fragments and the remnants of a possible cobbled surface. To the east there was a spread of slightly larger limestone fragments, probably demolition rubble. The cobbled surface might suggest that this wall was the only surviving part of a larger walled yard or paddock associated with the building to the north.

To the south-east of the house there were two circular brick-lined wells. These were excavated to a depth of 0.50m but their full depth was not ascertained. The wells were in close proximity to one another and had intercutting construction cuts. Both had been back filled with limestone fragments, mortar and roof tile.

To the south of the wells there was an irregular spread of gravel. This appeared too loose to be a metalled surface and was probably a dump of material used to fill a depression or area of wet ground. A few sherds of 18th-century pottery were retrieved from the excavation.

11 AREA C

Further investigations were carried out on a ditch, 1m wide by 0.20m deep, discovered in Trench 39 in the south-western part of the development area (Fig 1), during the trial trench evaluation (Brown *et al* 2005). The ditch was re-exposed and its line was traced 10m to the south and 10m to the north. In both directions the ditch became gradually shallower, narrower and eventually petered out. Rather than being an enclosure or boundary feature, it is more likely that it was either a natural channel or a shallow cutting to aid drainage. No dating evidence was retrieved from this feature.

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APPENDIX 1 Table of hand collected animal bone by context

Context	Structure	No	Species	Element
4	PS1	1	Unidentified mammal	Unidentified fragment
35	-	1	Cattle	Ulna
37	-	2	Unidentified medium mammal	Longbone fragment
37	-	1	Unidentified medium mammal	Rib
37	-	1	Unidentified large mammal	Scapula
37	-	1	Cattle	Upper molar
41	-	2	Unidentified medium mammal	Unidentified fragment
57	B1	3	Unidentified large mammal	Mandible
57	B1	3	Cattle	Tooth fragment
57	B1	1	Cattle	Upper molar 1/2
57	B1	1	Sheep/goat	Upper molar 1/2
57	B1	1	Unidentified mammal	Unidentified fragment
59	B1	1	Cattle	Femur
59	B1	5	Unidentified large mammal	Longbone fragment
59	B1	2	Cattle	Radius
59	B1	1	Unidentified mammal	Rib
59	B1	1	Unidentified mammal	Unidentified fragment
65	E2	1	Unidentified large mammal	Pelvis
67	E2	1	Unidentified large mammal	Unidentified fragment
67	E2	1	Pig	Ulna
77	-	1	Unidentified large mammal	Longbone fragment
77	-	2	Cattle	Mandible
77	-	7	Unidentified large mammal	Mandible
77	-	1	Cattle	Radius
77	-	4	Cattle	Tooth fragments
77	-	3	Horse	Incisor
130	E2	7	Unidentified large mammal	Longbone fragment
130	E2	1	Cattle	Lower molar 1/2
132	B1	1	Cattle	Metapodial
138	B1	1	Unidentified large mammal	Longbone fragment
142	E2	1	Cattle	Humerus
142	E2	2	Unidentified large mammal	Longbone fragment
142	E2	2	Unidentified medium mammal	Longbone fragment
142	E2	5	Unidentified large mammal	Rib
142	E2	1	Sheep/goat	Tibia
142	E2	1	Unidentified mammal	Unidentified fragment
144	RD2	12	Unidentified large mammal	Longbone fragment
144	RD2	1	Cattle	Mandible
144	RD2	24	Unidentified large mammal	Mandible
144	RD2	3	Cattle	Metapodial
144	RD2	1	Cattle	Phalange
144	RD2	1	Cattle	Radius
144	RD2	1	Cattle	Scapula
144	RD2	1	Unidentified large mammal	Skull fragment
144	RD2	1	Pig	Maxilla
144	RD2	2	Horse	Premolar/molar
144	RD2	2	Horse	2nd premolar/molar 3
144	RD2	19	Unidentified mammal	Unidentified fragment
144	RD2	1	Unidentified large mammal	Thoracic Vertebra
165	-	1	Horse	3rd phalange
165	-	2	Cattle	Lower molar 1/2
165	-	1	Cattle	Lower molar 3

Context	Structure	No	Species	Element
165	-	5	Cattle	Upper molar 1/2
165	-	1	Cattle	Upper molar 3
170	B1	1	Cattle	Pelvis
237	-	1	Sheep/goat	Pelvis
281	RD2	1	Cattle	Femur
281	RD2	5	Unidentified large mammal	Longbone fragment
281	RD2	3	Unidentified large mammal	Scapula
281	RD2	1	Unidentified mammal	Tooth fragment
281	RD2	1	Sheep/goat	Lower molar 1/2
281	RD2	1	Sheep/goat	Lower molar 3
281	RD2	1	Unidentified mammal	Unidentified fragment
281	RD2	1	Unidentified large mammal	Vertebra fragment
287	-	2	Unidentified large mammal	Longbone fragment
287	-	1	Cattle	Pelvis
287	-	1	Cattle	Tooth fragment
287	-	1	Unidentified medium	Tooth fragment
287	-	1	Sheep/goat	Lower molar 1/2
339	RD2	1	Cattle	Femur
339	RD2	1	Cattle	Scapula
339	RD2	1	Unidentified large mammal	Scapula
339	RD2	1	Cattle	Tibia
339	RD2	2	Unidentified large mammal	Vertebra fragment
347	-	1	Horse	Tooth fragment
347	-	3	Horse	Premolar/molar
347	-	1	Horse	2nd premolar/molar
351	RD2	1	Unidentified medium mammal	Rib
359	RD2	1	Cattle	Mandible
376	RD5	1	Unidentified large mammal	Longbone fragment
376	RD5	1	Unidentified medium mammal	Longbone fragment
385		1	Cattle	Femur
385	-	1	Cattle	Humerous
385	-	9	Unidentified large mammal	Longbone fragment
385	-	2	Unidentified large mammal	Mandible
385	-	2	Cattle	Tibia
393	RD5	1	Horse	Femur
393	RD5	4	Unidentified large mammal	Longbone fragment
393	RD5	5	Unidentified mammal	Tooth fragment
393	RD5	1	Unidentified mammal	Unidentified fragment
399	-	1	Sheep/goat	Tibia
420	C1	2	Unidentified large mammal	Longbone fragment
420	C1	1	Cattle	Tibia
442	B4	4	Unidentified medium mammal	Rib
442	B4	1	Unidentified mammal	Tooth fragment
446	RD2	1	Cattle	Tibia
450	RD2	1	Sheep	Humerus
460	-	2	Unidentified mammal	Unidentified fragment
497	B3	1	Unidentified large mammal	Mandible
515	-	1	Unidentified mammal	Tooth fragment
515	-	2	Unidentified mammal	Unidentified frag
523	-	1	Cattle	Humerus
523	-	1	Sheep/goat	Humerus
523	-	4	Unidentified medium	Longbone fragment
523	-	2	Unidentified mammal	Mandible
523	-	1	Cattle	1st phalange

Context	Structure	No	Species	Element
523	-	2	Unidentified large mammal	Rib
523	-	1	Sheep/goat	Tibia
523	-	1	Unidentified mammal	Unidentified fragment
523	-	1	Unidentified medium mammal	Unidentified fragment
525	RD6	1	Unidentified mammal	Rib
527	-	1	Unidentified medium mammal	Longbone fragment
529	-	1	Cattle	Femur
529	-	2	Unidentified large mammal	Longbone fragment
529	-	1	Sheep/goat	Tibia
531	-	1	Sheep	Lower 4th premolar
531	-	1	Sheep/goat	Lower molar1/2
535	RD6	1	Unidentified large mammal	Unidentified fragment
546	S1	1	Sheep/goat	Humerus
546	S1	2	Unidentified large mammal	Unidentified fragment
550	RD3	10	Cattle	Tooth Fragment
550	RD3	1	Unidentified mammal	Unidentified fragment
584	B4	11	Cattle	Tooth fragment
584	B4	1	Cattle	Lower molar
605	B4	2	Unidentified medium mammal	Longbone fragment
605	B4	1	Sheep/goat	1st phalange
605	B4	1	Unidentified mammal	Tooth fragment
605	B4	1	Unidentified mammal	Unidentified fragment
614	RD17	1	Horse	Tibia
616	RD4	1	Cattle	Femur
618	S1	3	Unidentified mammal	Longbone fragment
618	S1	3	Unidentified mammal	Mandible
618	S1	1	Pig	Upper molar 1/2
618	S1	1	Sheep/goat	Upper molar 3
622	RD2	1	Horse	Metatarsal
643	B3	1	Unidentified large mammal	Scapula
660	RD6	6	Unidentified large mammal	Longbone fragment
660	RD6	11	Unidentified mammal	Longbone fragment
660	RD6	1	Sheep/goat	Phalange
660	RD6	2	Cattle	Tibia
660	RD6	2	Unidentified mammal	Unidentified
667/669	S2	1	Sheep/goat	Calcaneum
685	-	5	Unidentified large mammal	Longbone fragment
685	-	2	Unidentified medium mammal	Longbone fragment
685	-	1	Pig	Mandible
685	-	1	Sheep/goat	Mandible
685	-	2	Sheep/goat	Tooth fragment
685	-	9	Unidentified mammal	Unidentified fragment
685	-	1	Sheep/goat	Vertebra fragment
722	-	1	Unidentified large mammal	Longbone fragment
728	B3	1	Unidentified large mammal	Astragalus
728	B3	1	Cattle	2nd Phalange
728	B3	3	Unidentified large mammal	Scapula
728	B3	1	Cattle	Tooth fragment
728	B3	2	Cattle	Lower molar 1/2
728	B3	2	Unidentified large mammal	Unidentified fragment
728	B3	62	Unidentified mammal	Unidentified fragment
766	RD7	1	Unidentified mammal	Tooth fragment
766	RD7	1	Cattle	Molar 1/2
766	RD7	2	Unidentified mammal	Unidentified fragment

Context	Structure	No	Species	Element
768	RD7	3	Unidentified medium mammal	Longbone fragment
768	RD7	10	Unidentified mammal	Tooth fragment
768	RD7	1	Sheep/goat	Lower molar 1/2
770	RD7	1	Sheep/goat	Metapodial
774	RD7	9	Unidentified large mammal	Longbone fragment
774	RD7	1	Cattle	Tibia
774	RD7	38	Unidentified mammal	Unidentified fragment
793	-	1	Cattle	Skeleton
812	RD7	2	Unidentified mammal	Unidentified fragment
867	RD7	2	Unidentified mammal	Unidentified fragment
867	RD7	3	Unidentified large mammal	Vertebra fragment
867	RD7	1	Cattle	Thoracic Vertebra
891	RD7	1	Cattle	Calcaneum
891	RD7	1	Cattle	Mandible
891	RD7	24	Unidentified large mammal	Mandible
891	RD7	1	Cattle	Scapula
891	RD7	6	Cattle	Tooth fragment
891	RD7	2	Cattle	Lower molar 1/2
891	RD7	1	Cattle	Lower molar 3
891	RD7	5	Cattle	Premolar
891	RD7	93	Unidentified mammal	Unidentified fragment
893	RD7	1	Cattle	Humerus
893	RD7	4	Unidentified large mammal	Longbone fragment
893	RD7	4	Unidentified mammal	Mandible
893	RD7	1	Unidentified mammal	Skull fragment
893	RD7	3	Unidentified mammal	Tooth fragment
893	RD7	1	Cattle	Lower molar 1/2
893	RD7	35	Unidentified mammal	Unidentified fragment
893	RD7	12	Unidentified medium mammal	Unidentified fragment
908	RD7	1	Unidentified mammal	Tooth fragment
908	RD7	6	Unidentified mammal	Unidentified fragment
926	RD7	5	Unidentified medium mammal	Longbone fragment
926	RD7	3	Unidentified mammal	Mandible
926	RD7	1	Cattle	Metacarpal
926	RD7	1	Unidentified large mammal	Rib
926	RD7	1	Unidentified mammal	Tooth fragment
926	RD7	1	Sheep/goat	Tibia
926	RD7	5	Unidentified mammal	Unidentified fragment
926	RD7	1	Unidentified medium mammal	Vertebra fragment
928	RD7	2	Sheep/goat	Humerus
928	RD7	2	Sheep	Humerus
928	RD7	9	Unidentified medium mammal	Longbone fragment
928	RD7	1	Dog	Mandible
928	RD7	4	Unidentified medium mammal	Mandible
928	RD7	1	Pig	2nd phalange
928	RD7	3	Unidentified mammal	Tooth fragment
928	RD7	1	Sheep/goat	Upper molar 1/2
928	RD7	13	Unidentified mammal	Unidentified fragment
930	RD7	1	Cattle	Femur
931	RD7	4	Unidentified large mammal	Longbone fragment
931	RD7	2	Unidentified medium mammal	Longbone fragment
933	B3	1	Pig	Incisor
935	RD10	1	Cattle	Horn core
935	RD10	2	Unidentified mammal	Longbone fragment

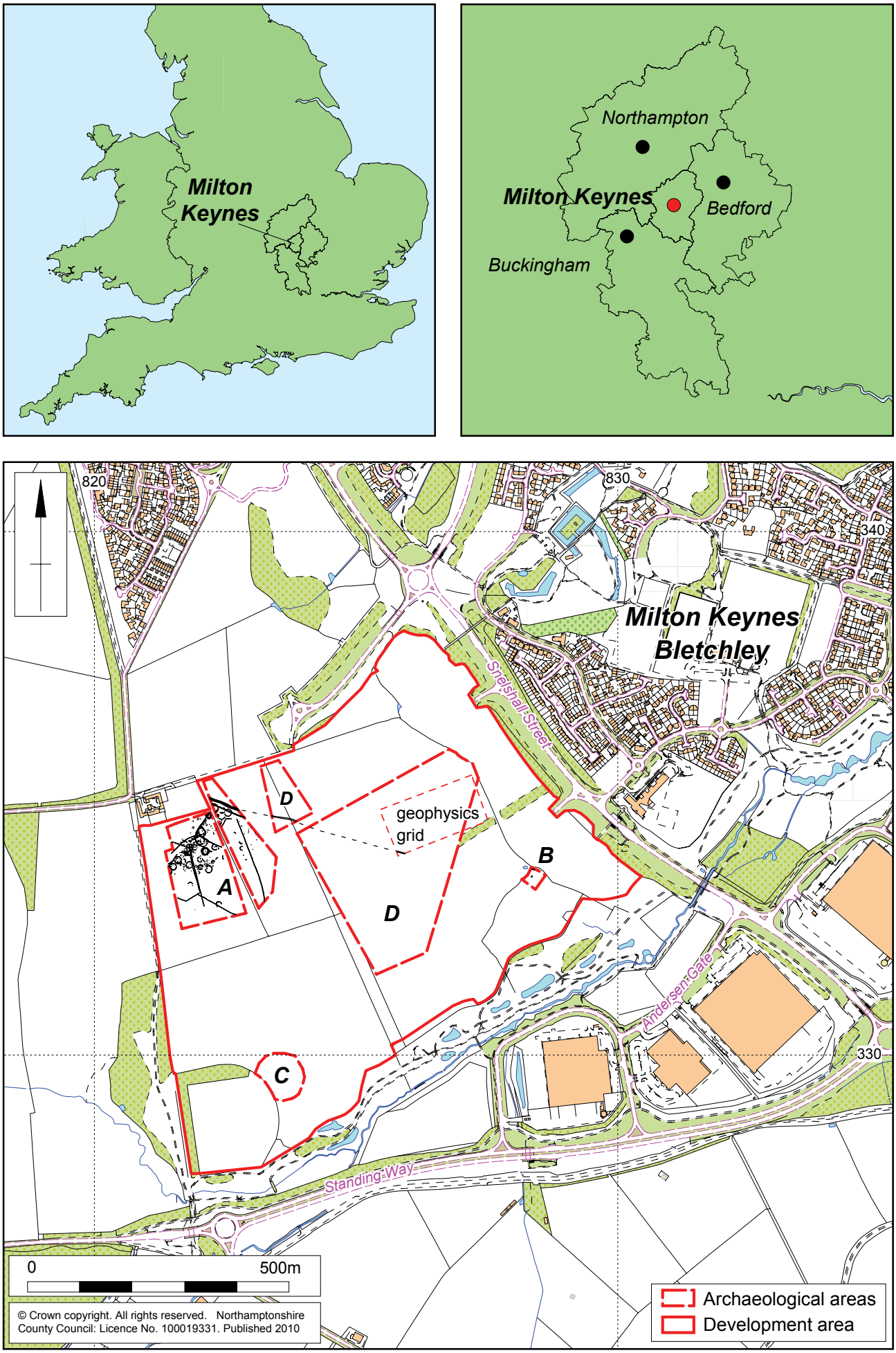
Context	Structure	No	Species	Element
946	-	1	Unidentified mammal	Horn core
946	-	1	Unidentified mammal	Rib
946	-	1	Cattle	Molar
946	-	1	Unidentified mammal	Unidentified fragment
975	PS2	1	Cattle	Upper molar 1/2
978	PS2	6	Unidentified large mammal	Unidentified fragment
985	RD1	1	Sheep/goat	Femur
985	RD1	2	Pig	Mandible
985	RD1	1	Cattle	Radius
985	RD1	2	Unidentified large mammal	Rib
985	RD1	4	Pig	Incisor
985	RD1	5	Unidentified mammal	Unidentified fragment
989	RD15	10	Cattle	Tooth fragment
989	RD15	2	Unidentified mammal	Unidentified fragment
1000-01	PS7	1	Unidentified large mammal	Longbone fragment
1003	PS7	1	pig	Mandible
1007	RD1	3	Unidentified large mammal	Longbone fragment
1007	RD1	1	Pig	Upper molar
1007	RD1	1	Sheep/goat	Upper molar 3
1009	RD1	1	Cattle	Humerus
1009	RD1	5	Unidentified large mammal	Longbone fragment
1009	RD1	1	Horse	Mandible
1009	RD1	1	Unidentified medium mammal	Mandible
1009	RD1	1	Sheep/goat	Metatarsal
1009	RD1	1	Horse	Incisor
1009	RD1	1	Cattle	Lower molar 1/2
1009	RD1	1	Sheep/goat	Lower premolar
1009	RD1	2	Cattle	Upper molar 1/2
1019	RD15	2	Sheep/goat	Tooth fragment
1019	RD15	1	Cattle	Tibia
1019	RD15	1	Sheep/goat	Upper molar 1/2
1021	RD15	1	Cattle	Tooth fragment
1025	-	1	Cattle	Premolar
1025	-	5	Unidentified mammal	Unidentified fragment
1027	RD15	1	Cattle	Tooth fragment
1029	RD15	16	Cattle	Tooth fragment
1029	RD15	5	Unidentified mammal	Unidentified fragment
1035	RD1	2	Unidentified large mammal	Longbone fragment
1035	RD1	1	Sheep/goat	Radius
1035	RD1	1	Unidentified medium mammal	Rib
1035	RD1	1	Cattle	Scapula
1035	RD1	1	Unidentified medium mammal	Unidentified Fragment
1039	RD1	1	Sheep/goat	Metepodial
1039	RD1	1	Unidentified medium mammal	Unidentified fragment
1039	RD1	1	Cattle	Atlas
1055	RD15	1	Unidentified medium mammal	Longbone fragment
1055	RD15	5	Unidentified mammal	Tooth fragment
1063	RD13	1	Cattle	Ulna
1075	-	1	Horse	Premolar/molar
1081	-	1	Cattle	Mandible
1086	RD15	1	Sheep/goat	Mandible
1092	RD15	3	Cattle	Tooth fragment
1092	RD15	1	Cattle	Lower molar 1/2
1098	RD1	3	Cattle	Tooth fragment

Context	Structure	No	Species	Element
1098	RD1	1	Horse	Premolar/molar
1104	RD13	1	Horse	Premolar/molar
1118	PS9	1	Unidentified medium mammal	Longbone fragment
1122	-	1	Unidentified large mammal	Longbone fragment
1122	-	1	Cattle	Metacarpal
1122	-	1	Unidentified large mammal	Rib
1155	-	1	Cattle	Molar
1175	S6	2	Unidentified large mammal	Mandible
1175	S6	1	Cattle	Molar
1177	RD1	2	Unidentified mammal	Longbone fragment
1206	-	4	Unidentified mammal	Unidentified fragment
1208	-	3	Unidentified large mammal	Rib
1208	-	1	Sheep/goat	Lower molar 1/2
1217	S7	3	Unidentified mammal	Unidentified fragment
1239	-	3	Unidentified large mammal	Longbone Fragment
1249	RD14	1	Pig	Metacarpal 3
1255	RD14	1	Unidentified mammal	Unidentified
1261	RD14	1	Cattle	Carpal/tarsal
1261	RD1	2	Cattle	Mandible
1261	RD1	1	Cattle	2nd phalange
1261	RD1	3	Unidentified mammal	Rib
1261	RD1	1	Pig	Skull fragment
1261	RD1	1	Pig	Incisor
1261	RD1	1	Cattle	Molar
1261	RD1	4	Unidentified mammal	Unidentified fragment
1265	RD1	1	Cattle	Mandible
1265	RD1	2	Cattle	Lower molar 1/2
1265	RD1	1	Cattle	Lower molar 3
1281	-	1	Cattle	Lower molar 3
1281	-	1	Sheep/goat	Upper molar 3
1287	RD1	1	Cattle	Mandible
1323	RD1	2	Unidentified large mammal	Longbone fragment
1323	RD1	1	Sheep/goat	Radius
1323	RD1	1	Sheep/goat	Atlas
1325	RD21	1	Sheep/goat	Mandible
1329	RD21	5	Unidentified medium mammal	Longbone fragment
1361	RD20	22	Unidentified mammal	Unidentified fragment
1408	-	3	Unidentified large mammal	Longbone fragment
1408	-	43	Cattle	Mandible
1408	-	1	Unidentified mammal	Mandible
1408	-	1	Horse	Metapodial
1408	-	1	Cattle	Occipitale
1408	-	1	Cattle	Phalange
1408	-	1	Unidentified large mammal	Rib
1408	-	1	Unidentified mammal	Rib
1408	-	5	Unidentified large mammal	Skull fragment
1408	-	1	Cattle	Lower molar 3
1408	-	4	Unidentified mammal	Unidentified fragment
1414	B7	2	Unidentified large mammal	Longbone fragment
1428	RD18	1	Cattle	Metapodial
1454	RD18	1	Cattle	Metacarpal
1455	RD18	5	Unidentified mammal	Unidentified fragment
1463	B7	1	Cattle	Mandible
1463	B7	1	Cattle	Lower molar 3

Context	Structure	No	Species	Element
1463	B7	1	Cattle	Molar
1465	-	9	Unidentified mammal	Unidentified
1481	-	1	Cattle	Scapula
1481	-	1	Unidentified medium mammal	Unidentified Fragment
1481	-	1	Cattle	Axis
1497	S10	10	Unidentified large mammal	Longbone fragment
1497	S10	7	Unidentified medium mammal	Longbone fragment
1518	-	2	Unidentified mammal	Unidentified fragment
1521	-	1	Pig	Molar

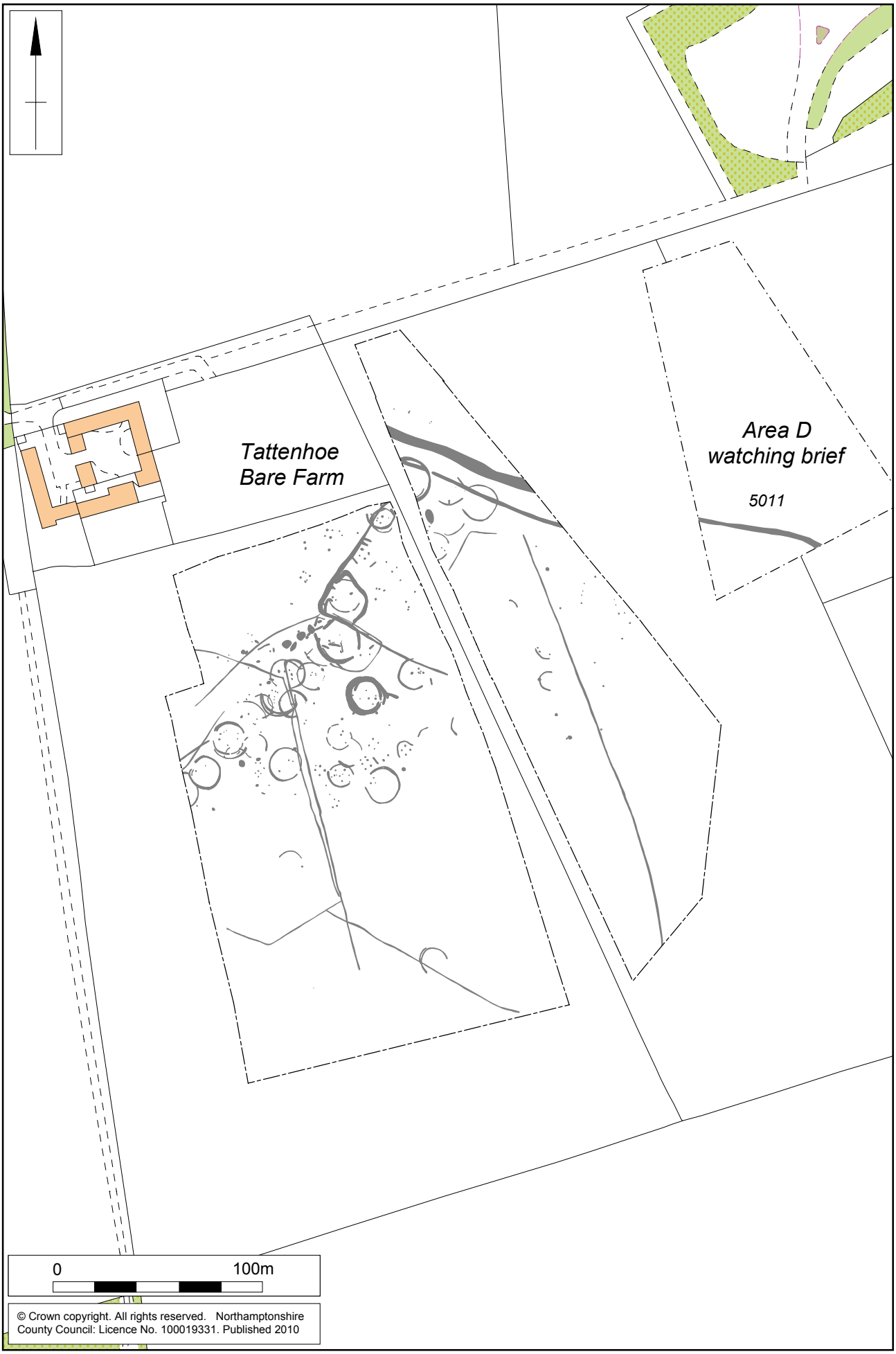
APPENDIX 2 Table of sieved animal bone by context

Context	Structure	No	Species	Element
144	RD2	1	Sheep/goat	Mandible
144	RD2	1	Sheep/goat	Metapodial
144	RD2	1	Sheep/goat	Metatarsal
144	RD2	1	Unidentified mediummammal	Scapula
144	RD2	3	Unidentified mammal	Skull fragment
144	RD2	1	Sheep/goat	Tarsal
155	B1	2	Unidentified large mammal	Scapula
155	B1	9	Unidentified mammal	Skull fragment
155	B1	1	Horse	Tooth fragment
654	RD5	1	Cattle	Tooth fragment
654	RD5	1	Pig	Molar 3
893	RD7	1	Cattle	Mandible
893	RD7	1	Cattle	Tooth fragment
985	RD1	1	Sheep/cattle	Lower molar 3
1029	RD15	1	Cattle	Femur
1029	RD15	11	Unidentified mammal	Tooth fragment
1053	RD1	1	Sheep/goat	Horn core
1079	-	1	Unidentified large mammal	Longbone fragment
1106	-	1	Sheep/goat	Humerus
1106	-	2	Unidentified mammal	Scapula
1106	-	1	Sheep/goat	Scapula
1106	-	1	Unidentified mammal	Tooth fragment
1106	-	1	Unidentified mammal	Vertebra fragment
1122	-	1	Sheep/goat	Femur
1261	RD1	1	Sheep/goat	Radius
1261	RD1	14	Unidentified mammal	Skull fragment
1261	RD1	1	Cattle	Tooth fragment
1261	RD1	4	Pig	Tooth fragment
1261	RD1	3	Unidentified mammal	Tooth fragment
1261	RD1	1	Sheep/goat	Ulna
1265	RD1	1	Unidentified large mammal	Mandible
1265	RD1	1	Sheep/goat	Tooth fragment
1265	RD1	1	Sheep/goat	Tibia
1279	B3	1	Sheep/goat	Lower molar1/2
1279	B3	2	Sheep/goat	Lower premolar
1285	RD21	1	Cattle	Tooth fragment
1323	RD1	1	Cattle	Radius
1325	RD21	1	Sheep/goat	Tooth fragment
1325	RD21	2	Sheep/goat	Upper molar1/2
1325	RD21	1	Sheep/goat	Upper molar 3
1355	RD19	1	Cattle	Tooth fragment
1373	B6	1	Unidentified large mammal	Skull fragment
1408	-	10	Unidentified mammal	Skull fragment
1408	-	1	Cattle	Ulna
1430	-	2	Sheep/goat	Metapodial
1481	-	1	Dog	Canine
1531	-	2	Unidentified mammal	Skull fragment



Scale 1:10,000

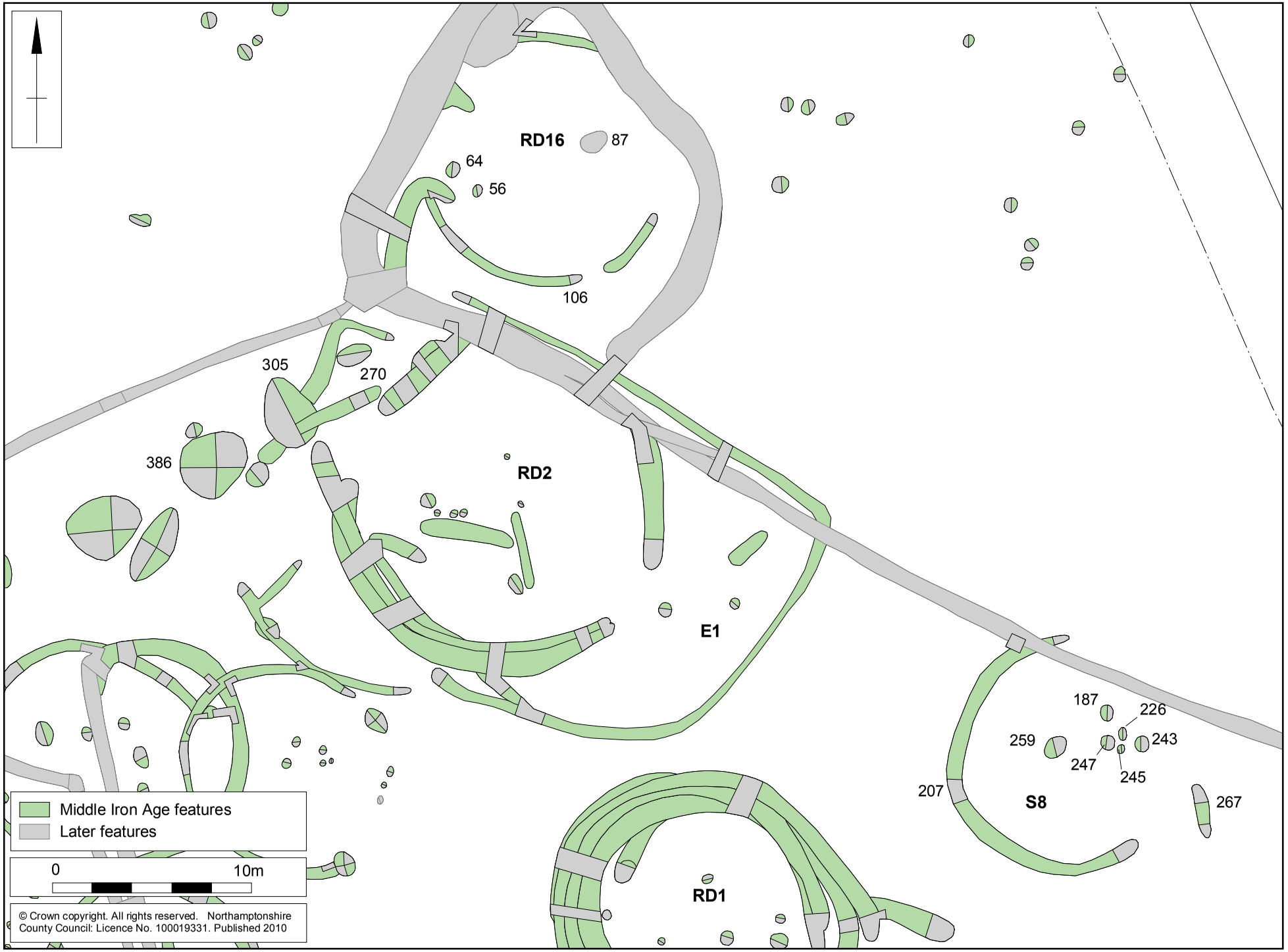
Site location Fig 1



Scale 1:2000

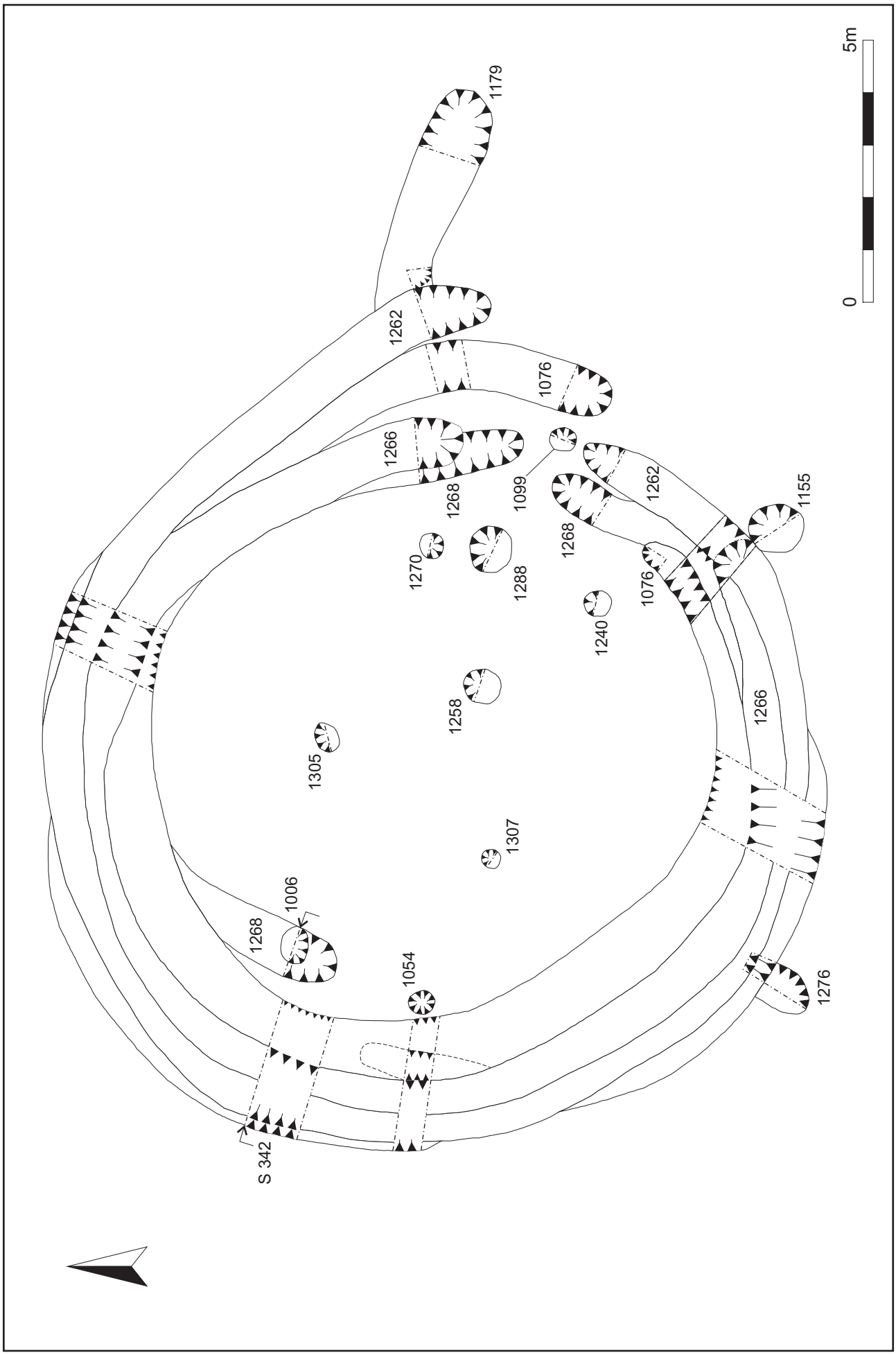
The Iron Age Settlement: general plan Fig 2

Scale 1:1000 The Middle Iron Age Settlement Fig 3



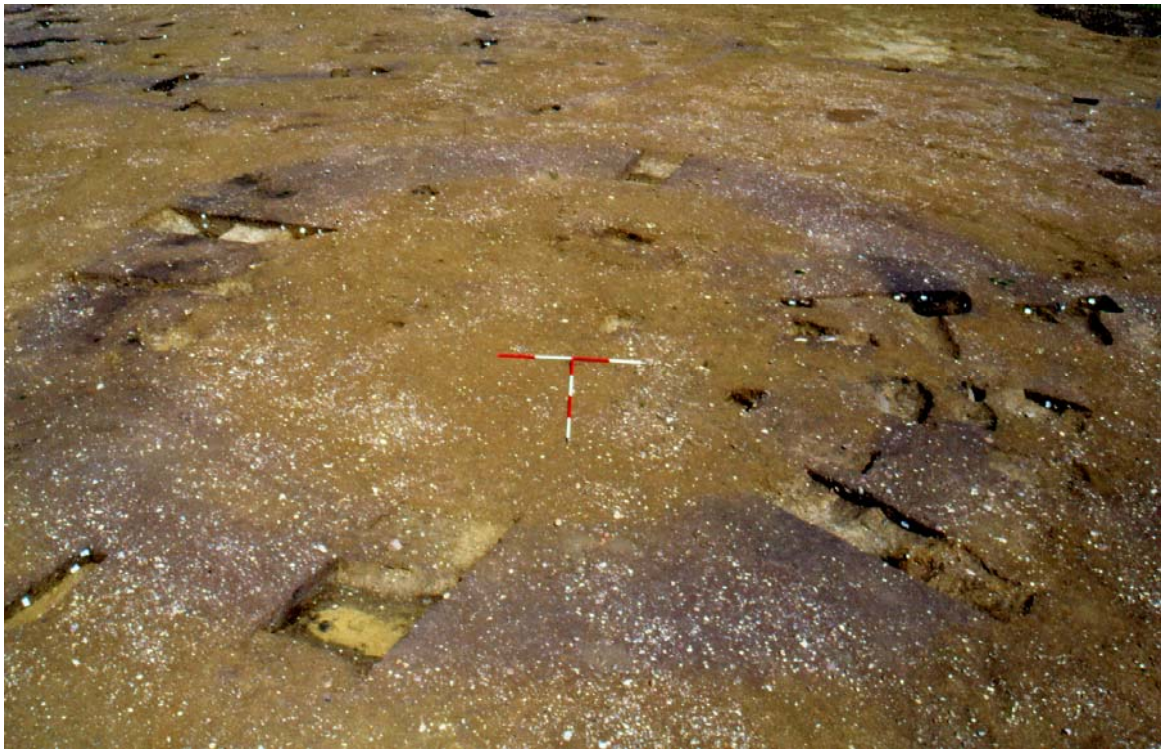
Scale 1:250

The principal roundhouse group (RD1 and RD2) Fig 4

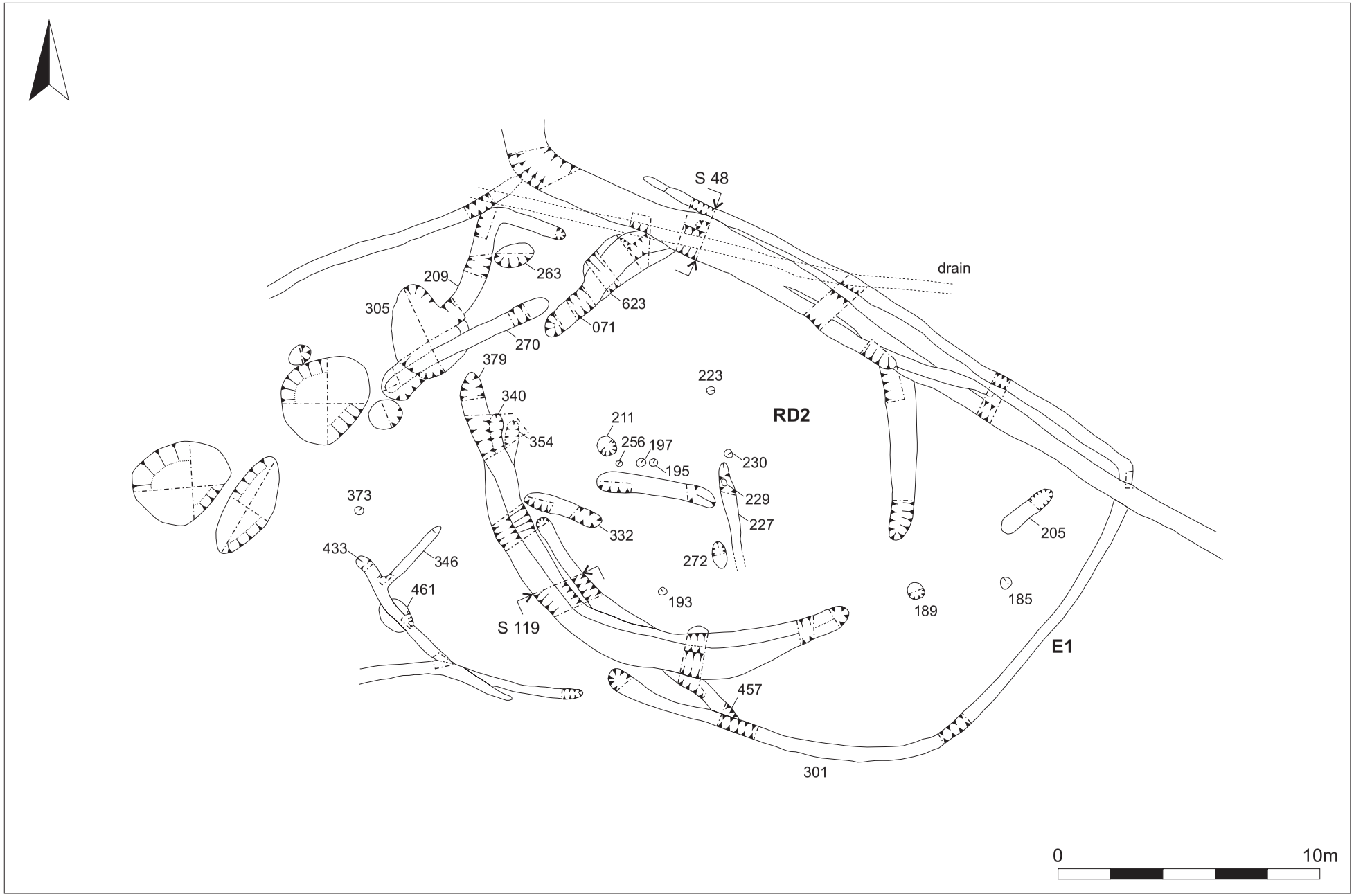


Scale 1:100

Roundhouse RD1 Fig 5



Roundhouse RD1, looking north Fig 6



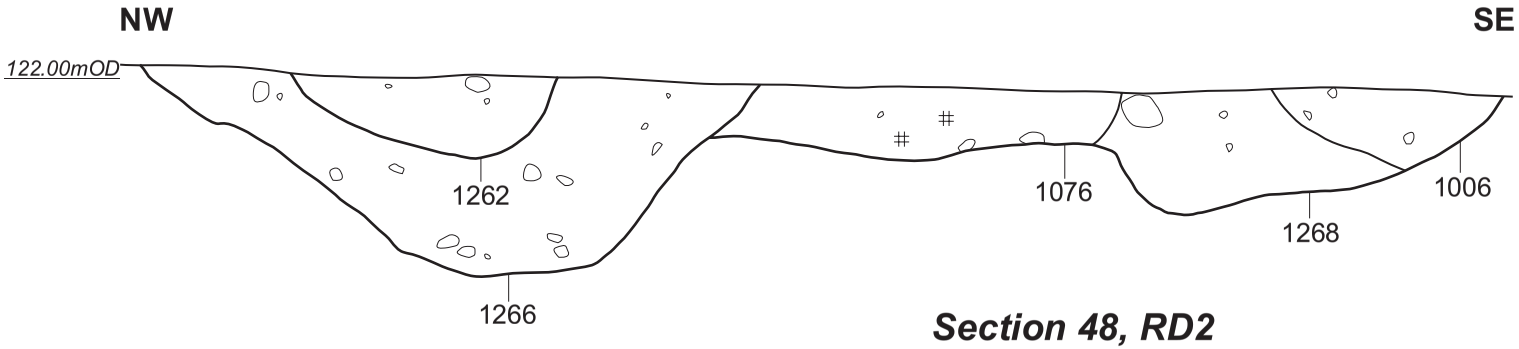
Scale 1:200

Roundhouse RD2 and Enclosure E1 Fig 7

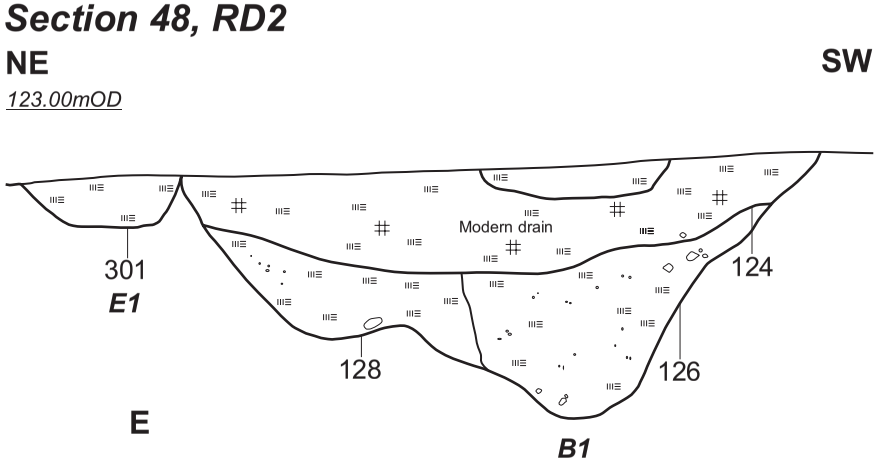
Scale 1:20

Sections of Roundhouses RD1 and RD2 Fig 8

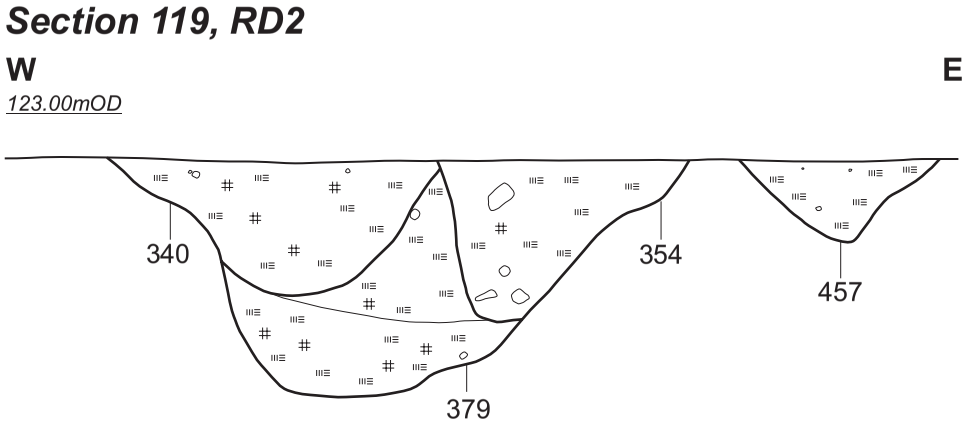
Section 342, RD1

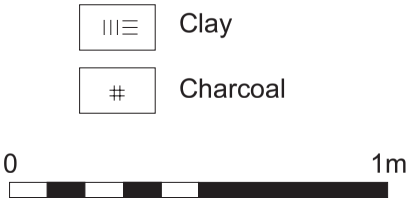


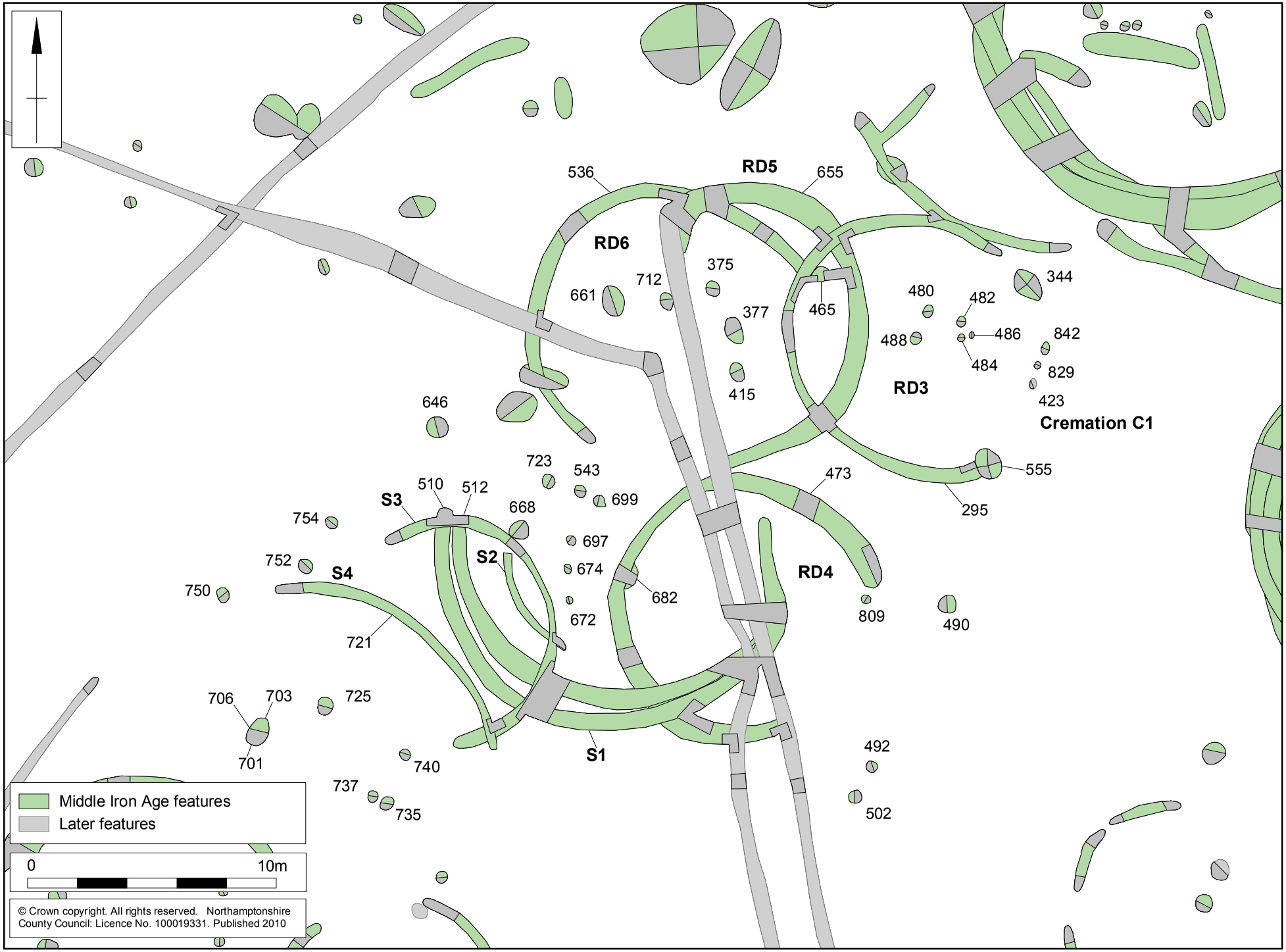
Section 48, RD2



Section 119, RD2






Scale 1:200
Roundhouses RD3-RD6 & Structures S1-S4
Fig 9
RD5
RD6
RD3
RD4
S1
S2
S3
S4
Cremation C1
536
655
661
712
375
377
465
344
480
482
488
486
484
842
829
423
415
646
723
543
699
510
512
668
754
697
752
674
750
682
672
721
809
490
555
473
295
706
703
725
701
740
737
735
492
502
Middle Iron Age features
Later features
0
10m
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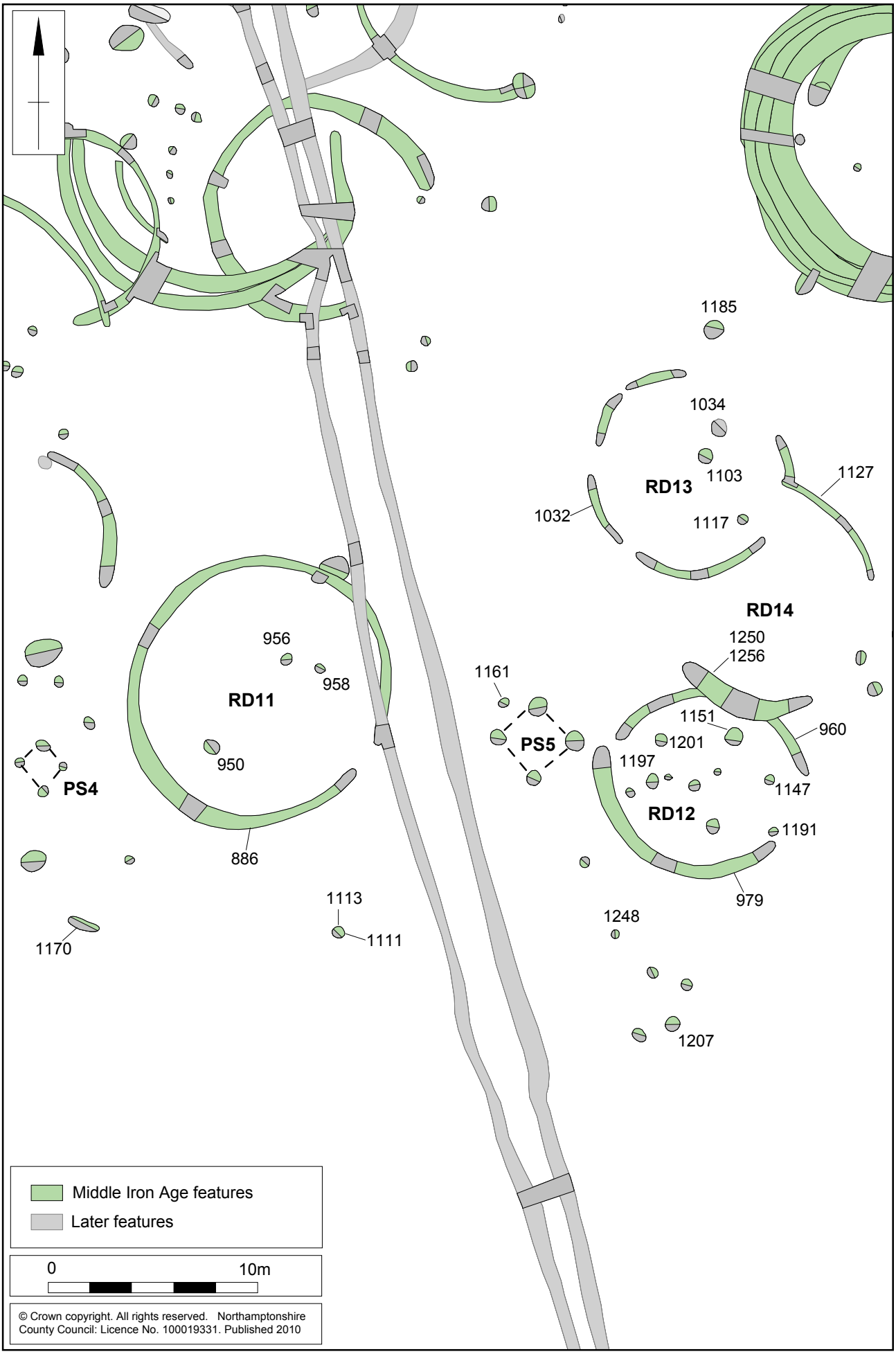
Scale 1:200

Roundhouses RD7-RD10, RD22 & post-built structure PS4 Fig 10

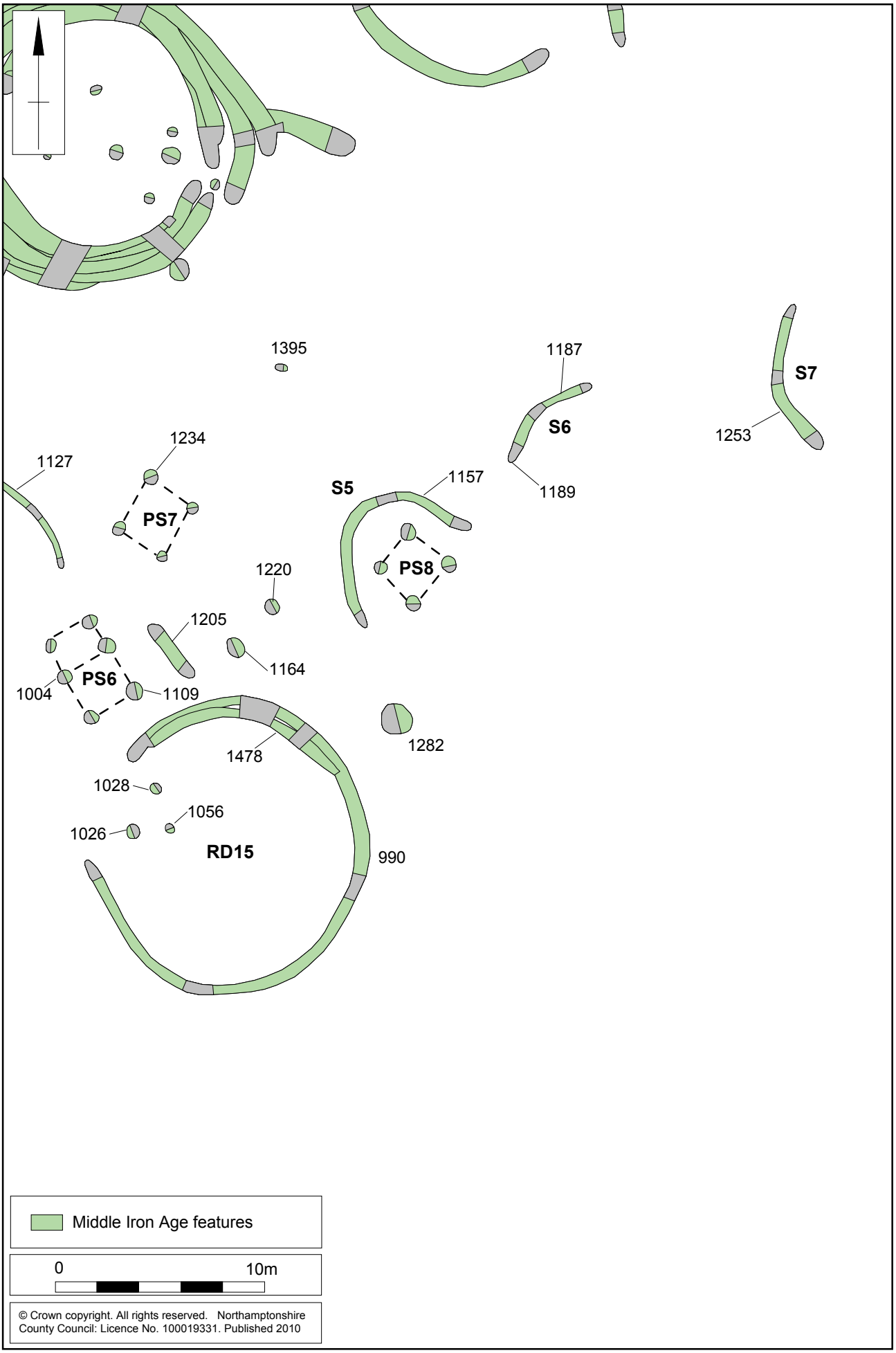
Roundhouse RD8, looking north Fig 11



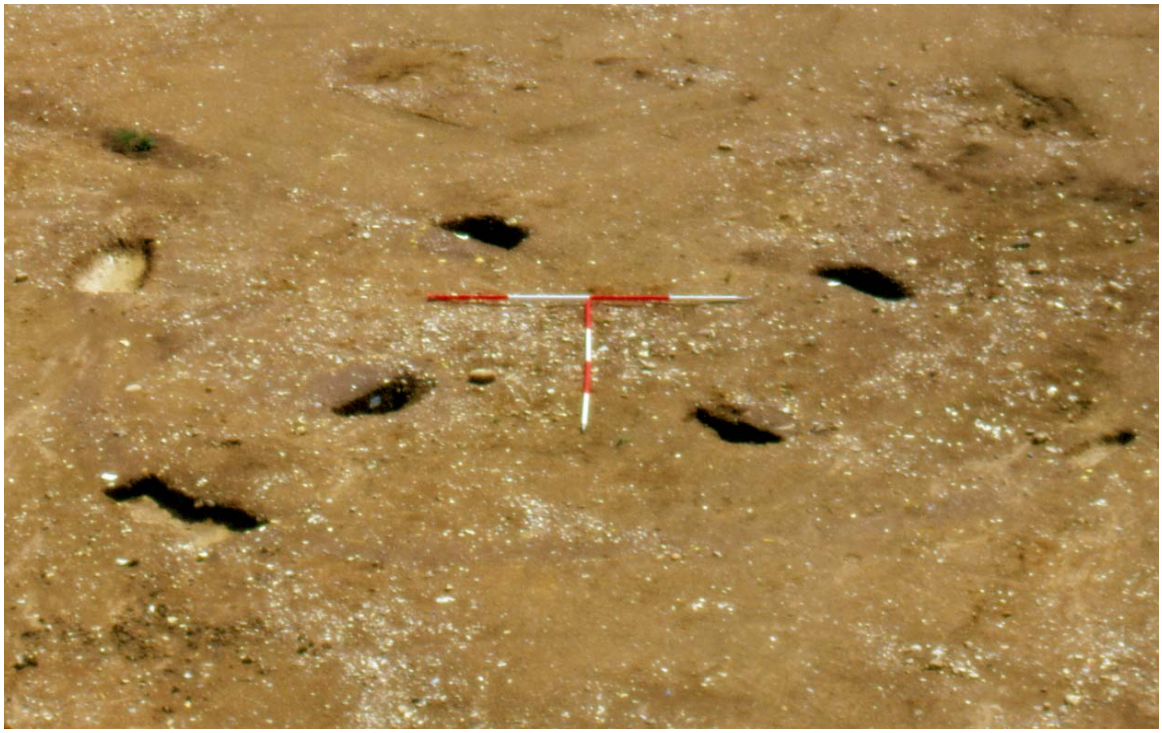
Scale 1:250 Roundhouses RD11-RD14 and post-built Structures PS4 & PS5 Fig 12

Roundhouse RD12, looking north-east Fig 13

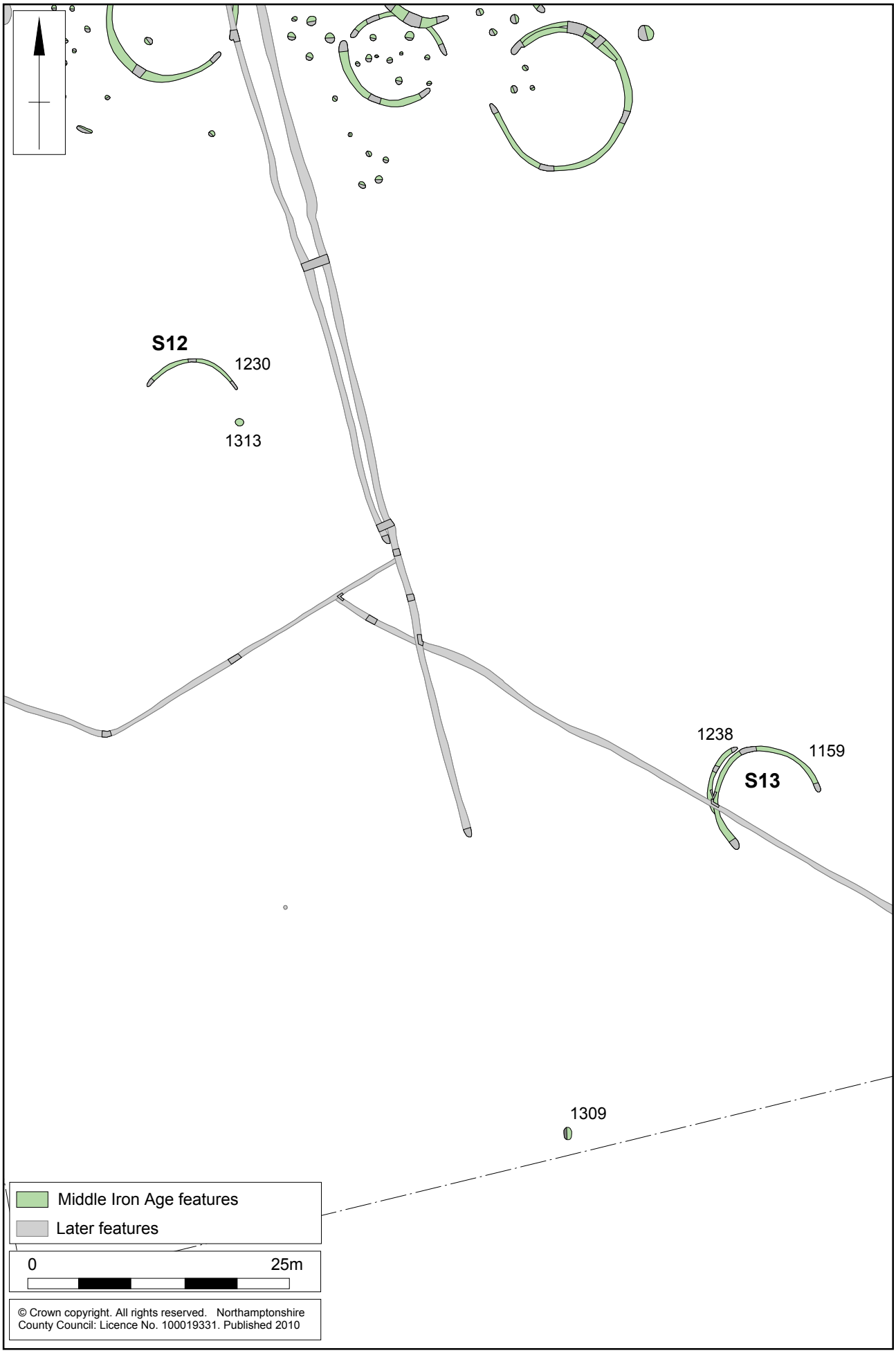
Roundhouse RD 13, looking west Fig 14



Scale 1:250 Roundhouse RD15, Structure S5-S7 and post-built structures PS6-PS8 Fig 15

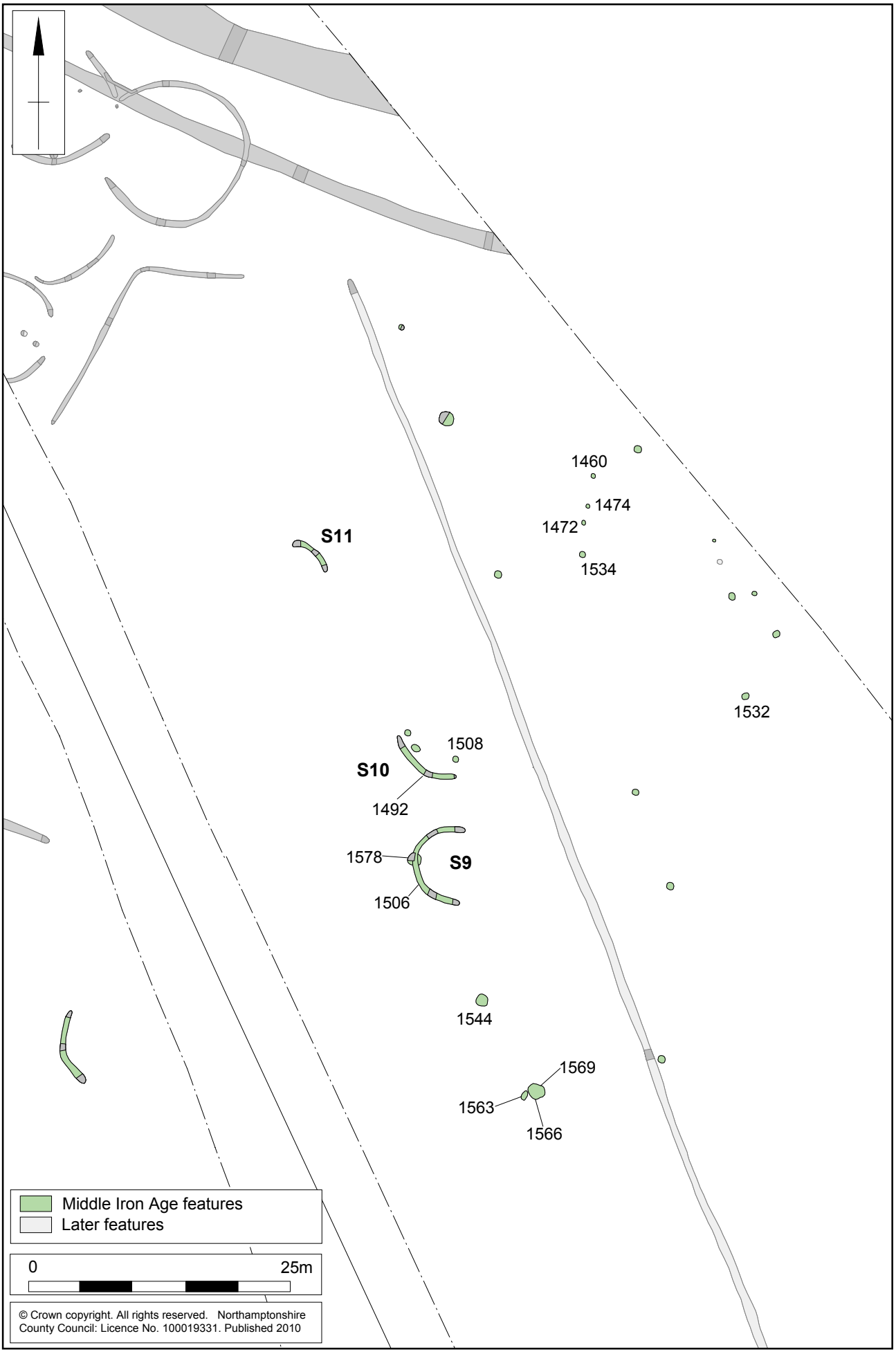


Four-post structure PS8 within ring ditch S5 Fig 16



Scale 1:500

Structures S12 and S13 Fig 17



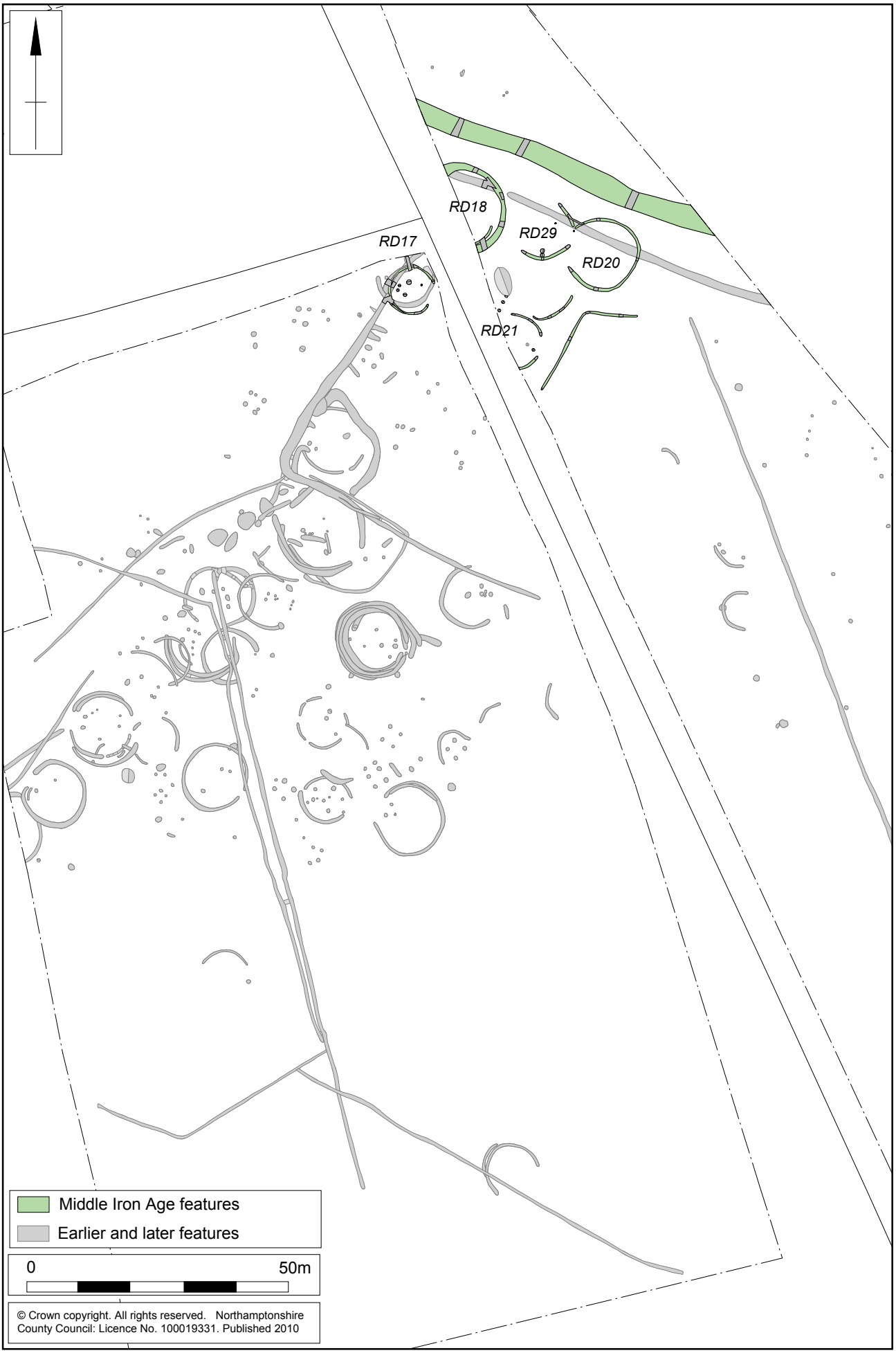
Scale 1:500 The eastern structures S9-S11, pits & postholes Fig 18

Scale 1:250 The northern post-built structures PS1-PS3, structures S13, pits and postholes Fig 19

Scale 1:500

The Northern Boundary and Enclosure Fig 20

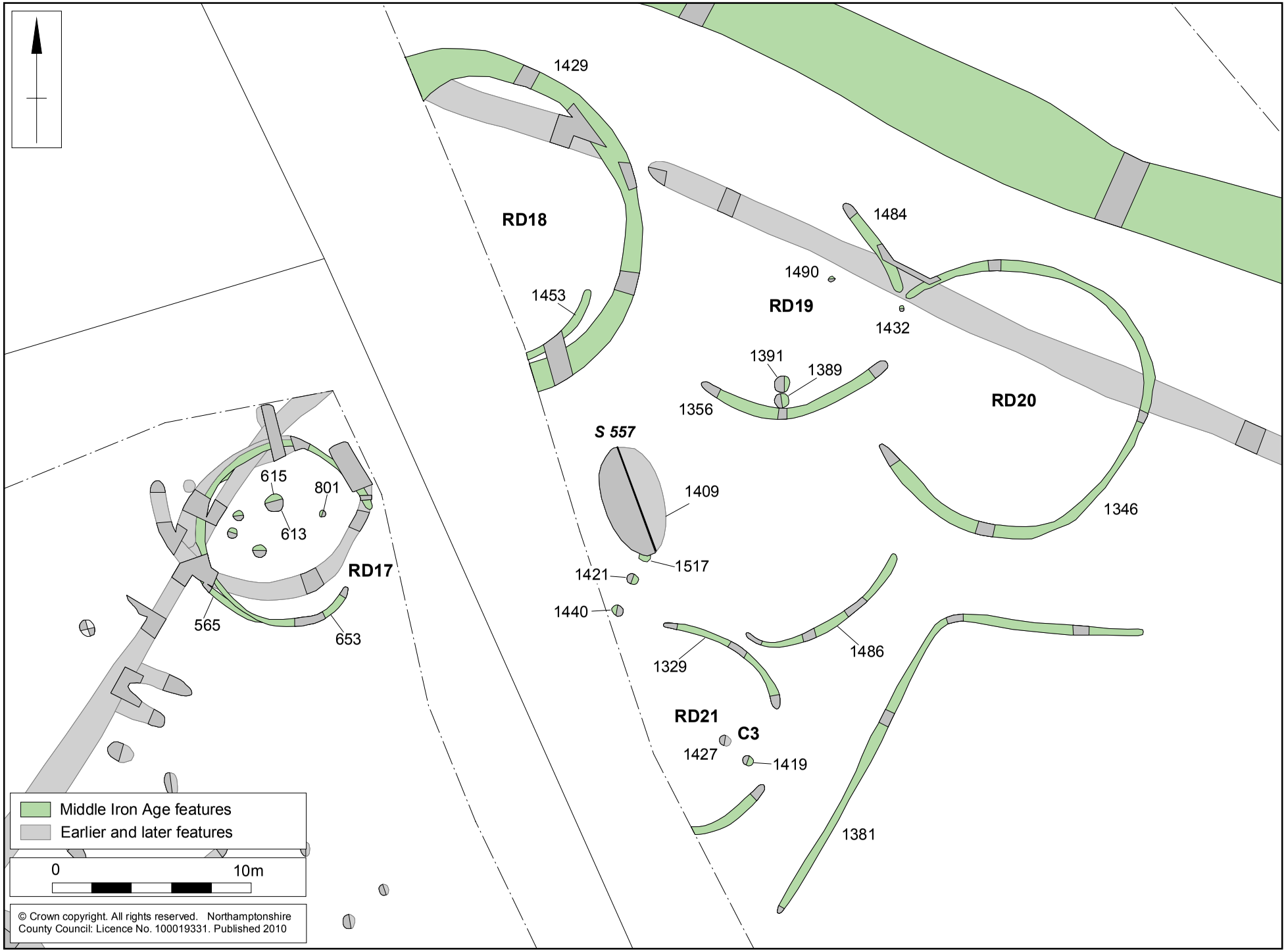
Linear boundary ditch B6, looking south-east Fig 21



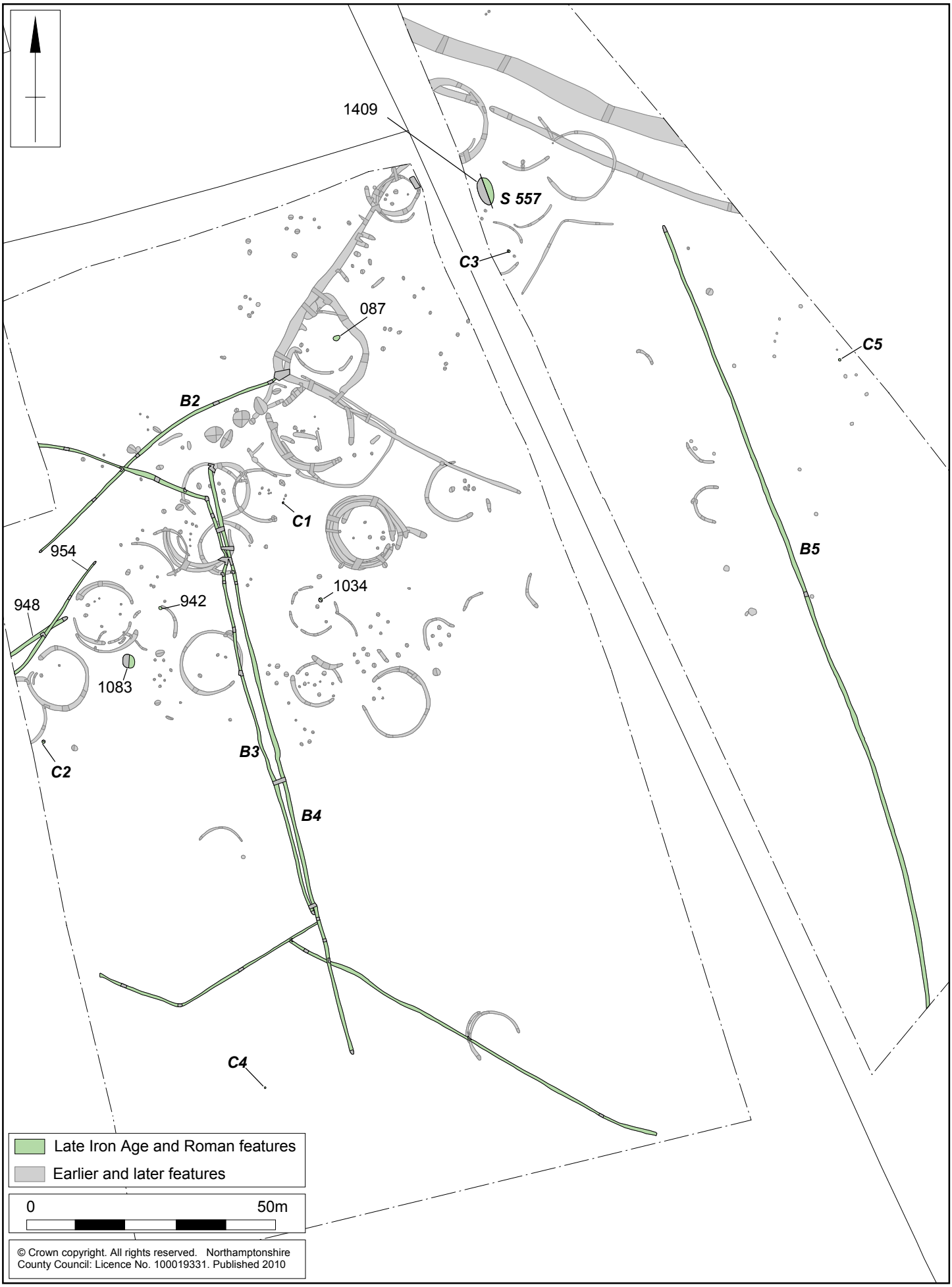
Scale 1:1000

Middle Iron Age occupation at the Northern boundary Fig 22

Scale 1:250



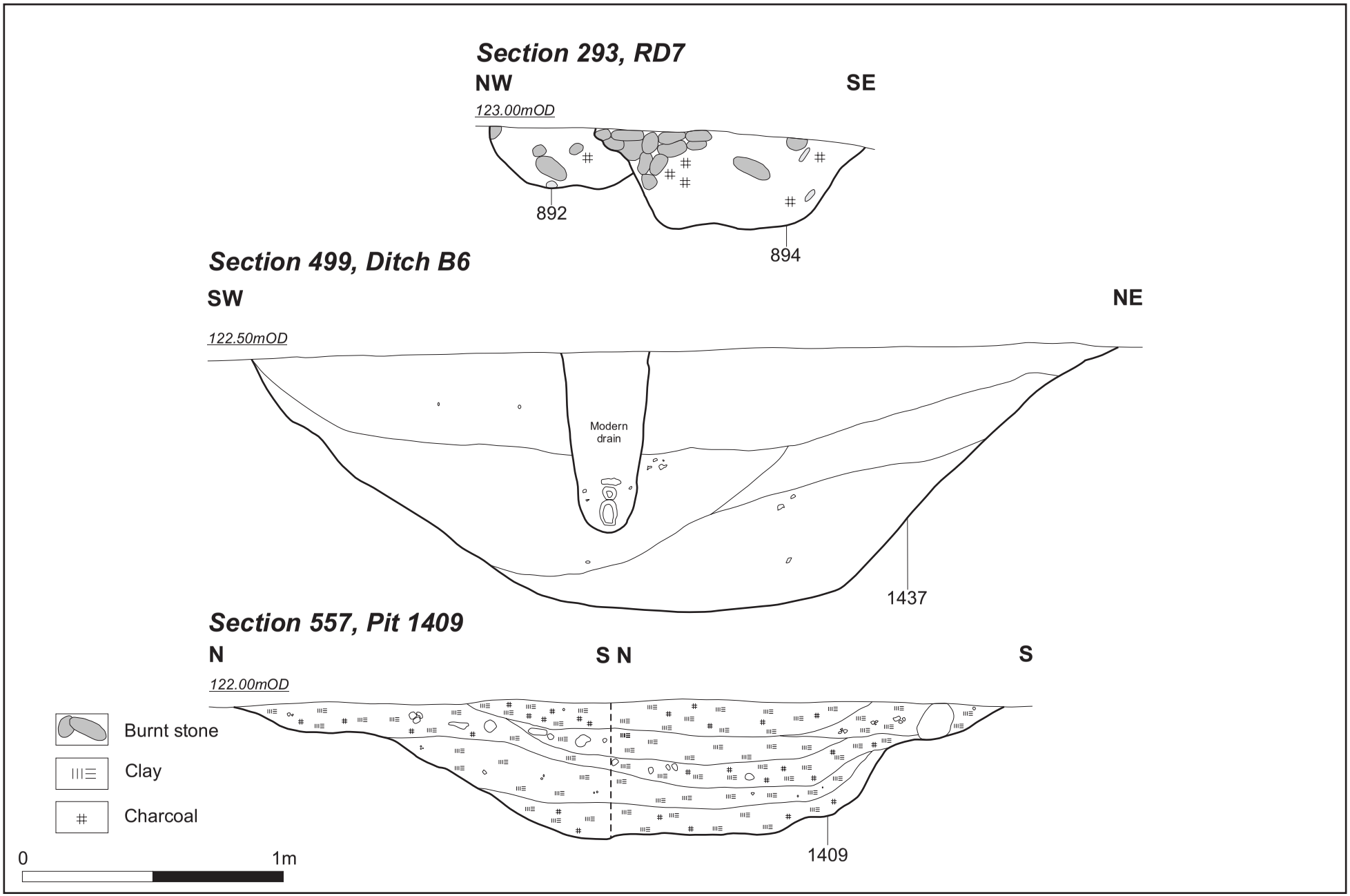
Roundhouses RD17- RD21 Fig 23



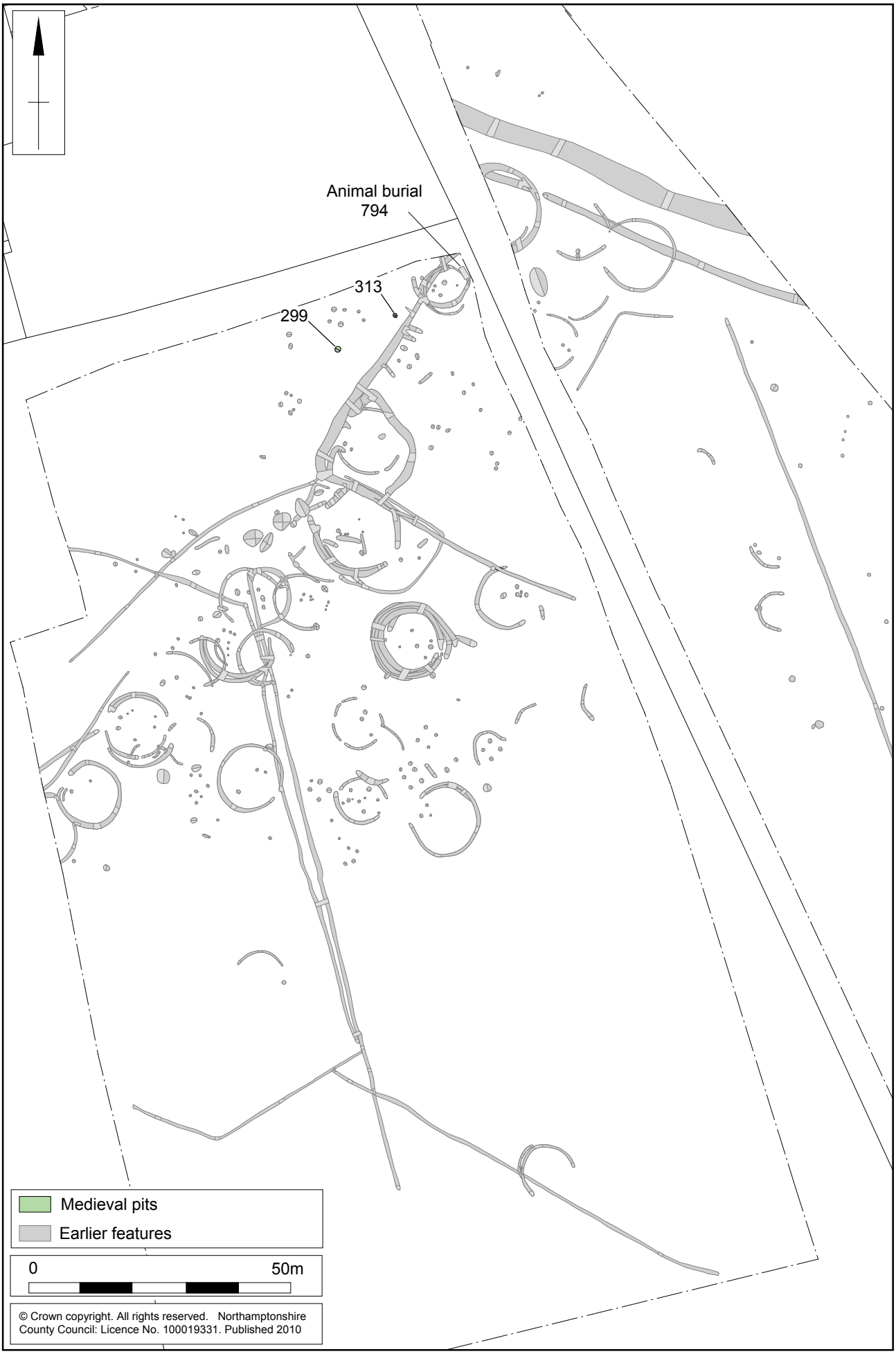
Scale 1:1000

Later Iron Age and Roman activity Fig 24

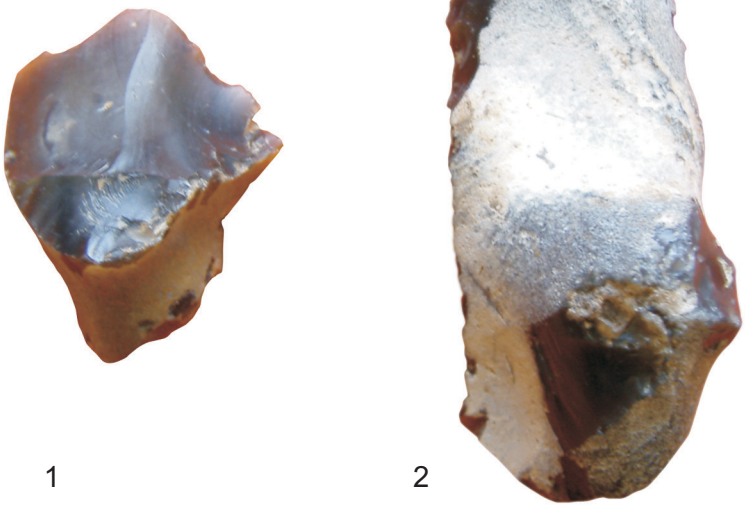
Scale 1:20



Sections 293, 499 and 557 Fig 25



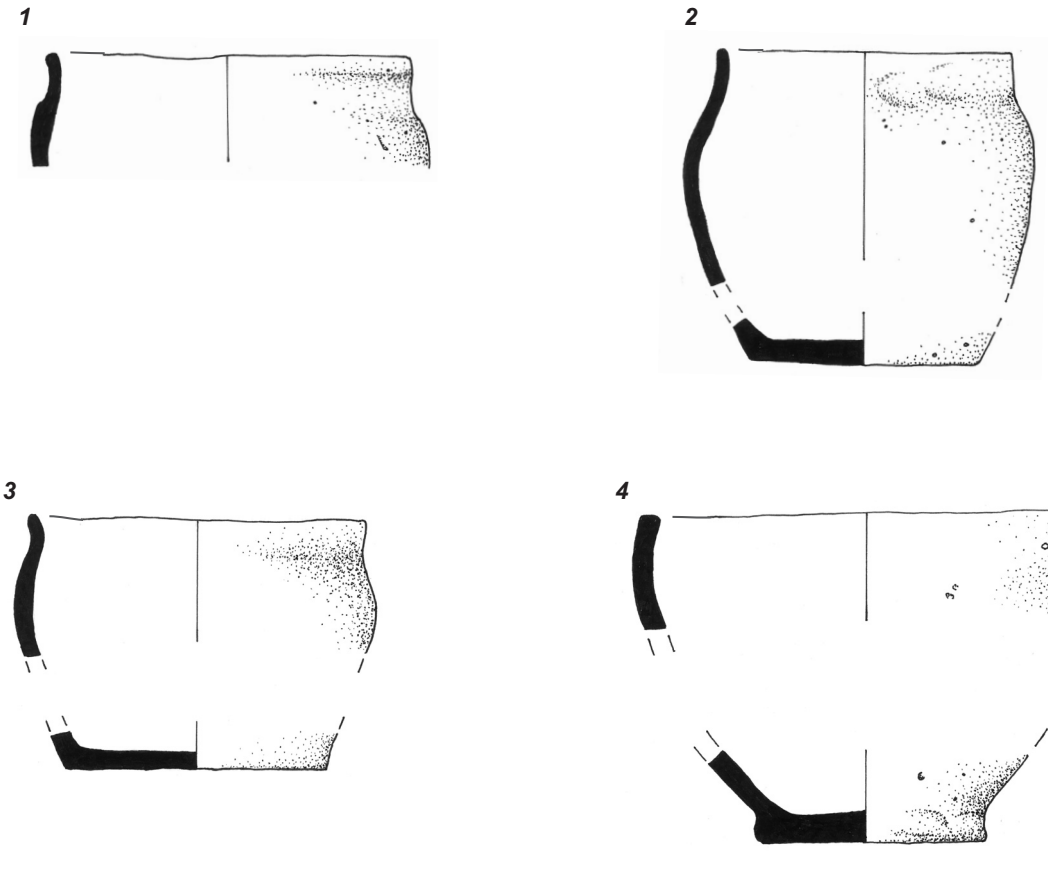
Scale 1:1000 Medieval pits (10th century) and a post-medieval animal burial Fig 26



1 2

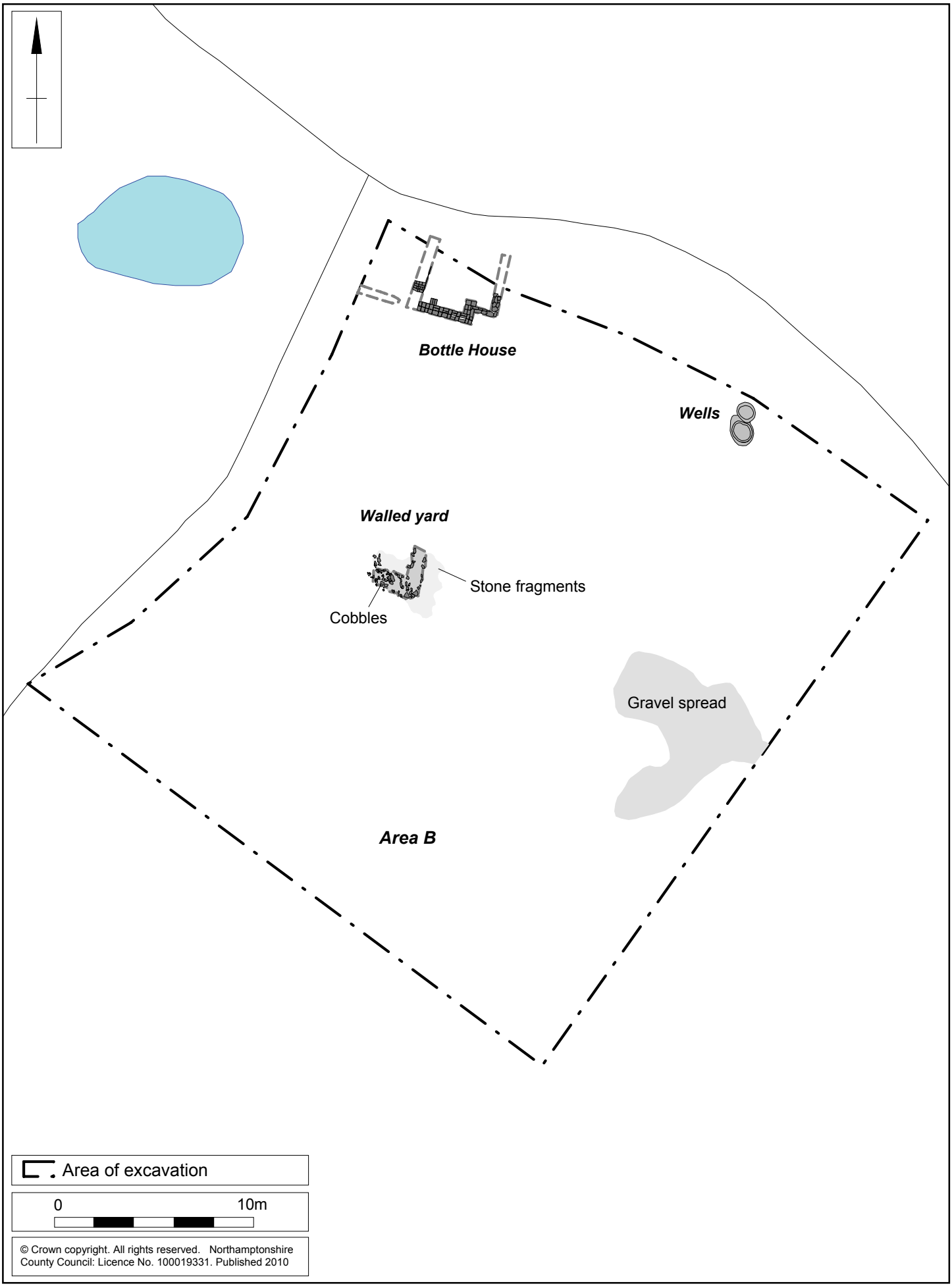
0 50mm

Scale 1:1 The worked flint, 1 and 2 Fig 27



Scale 1:4

Iron Age pottery, 1-8 Fig 28



Scale 1:250

Bottle House post-medieval farmstead: Area B Fig 29

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