



Archaeological Excavations on land at Rushden Hospital Rushden, Northamptonshire February 2014

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OASIS REPORT

PROJECT DETAILS	Oasis No. molanort1 - 185316	
Project name	Rushden Hospital, Rushden	
Short description	MOLA carried out a programme of archaeological mitigation works on land at Rushden Hospital, Rushden, Northamptonshire during February 2014. The excavation revealed a semi-circular gully and associated postholes which were of probable Iron Age date although no dating evidence was recovered. Two poorly preserved inhumation burials may have been of Roman or early medieval date. There were remnant furrows of medieval ridge and furrow cultivation and a ditch on the same alignment was probably of medieval origin. This ditch was retained as a boundary feature up to the middle of the 20th century even following the introduction of a system of ditches set at right angles to it.	
Project type	Excavation	
Site status	None	
Previous work	Trial Trench evaluation (Foard-Colby 2009), DBA (Ove Arup and Partners 2011)	
Current Land use	Hospital grounds	
Future work	None	
Monument type/ period	Iron Age	
Significant finds	Human Remains	
PROJECT LOCATION		
County	Northamptonshire	
Site address	Rushden Hospital, Wymington Road, Rushden, Northants	
Study area	3.9ha	
OS Easting & Northing	SP 95890 65930	
Height OD	75m-80m	
PROJECT CREATORS		
Organisation	MOLA	
Project brief originator	NCC Archaeological Advisor	
Project design originator	MOLA	
Director/Supervisor	Edmund Taylor	
Project Managers	Adam Yates	
Sponsor or funding body	CgMs Consulting Ltd	
PROJECT DATE		
Start date	February 2014	
End date	February 2014	
ARCHIVES	Location	Content
Physical	MOLA Northampton	Human bone, pottery
Paper		Site records, digital images
Digital		B+W contact sheets and negatives
BIBLIOGRAPHY	Journal/monograph, published or forthcoming, or unpublished client report	
Title	Archaeological excavations at Rushden Hospital, Rushden, Northamptonshire, February 2014	
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Contents

1	INTRODUCTION	1
2	BACKGROUND	1
	2.1 Location and geology	1
	2.2 Historical and archaeological background	3
3	AIMS AND OBJECTIVES	3
4	METHODOLOGY	4
5	THE EXCAVATED EVIDENCE	6
	5.1 Introduction	6
	5.2 The Iron Age features	6
	5.3 The inhumation burials	9
	5.4 Medieval ridge and furrow cultivation	11
	5.5 Undated features	11
	5.6 Post-medieval features	11
6	THE FINDS	12
	6.1 The Iron Age pottery by Andy Chapman	12
	6.2 The medieval pottery by Paul Blinkhorn	12
	6.3 The metalworking debris by Andy Chapman	12
7	THE HUMAN BONE by Chris Chinnock	13
8	THE CHARRED PLANT REMAINS by Val Fryer	14
9	DISCUSSION	15
	BIBLIOGRAPHY	16
	APPENDIX 1: Context summary	

Figures

Cover View of the site, looking north-east

Fig 1: Site location

Fig 2: The excavation areas

Fig 3: Area 1

Fig 4: Structure S1 and postholes [31], [33], [35] and [37]

Fig 5: Posthole group [100]

Fig 6: Burials HB1 and HB2, looking north-west

Fig 7: Area 2

Fig 8: Ditch [45], looking north-east

Archaeological excavations at Rushden Hospital, Rushden Northamptonshire February 2014

Abstract

MOLA carried out a programme of archaeological mitigation works on land at Rushden Hospital, Rushden, Northamptonshire during February 2014. The excavation revealed a semi-circular gully and associated postholes which were of probable Iron Age date although no dating evidence was recovered. Two poorly preserved inhumation burials may have been of Roman or early medieval date. There were remnant furrows of medieval ridge and furrow cultivation and a ditch on the same alignment was probably of medieval origin. This ditch was retained as a boundary feature up to the middle of the 20th century even following the introduction of a system of ditches set at right angles to it.

1 INTRODUCTION

MOLA was commissioned by CgMs Consulting, acting on behalf of their clients, to undertake a programme of archaeological mitigation works in advance of development at Rushden Hospital, Rushden, Northamptonshire (NGR SP95890 65930, Fig 1). The works were required as a condition on planning consent for residential development and were carried out accordance with the National Planning Policy Framework (NPPF; DCLG 2012).

The excavations were in accordance with a Brief issued by Northamptonshire County Council's Archaeological Advisor (Mather 2013) and followed an approved Written Schemes of Investigation prepared by Northamptonshire Archaeology (now MOLA, NA 2014). It adhered to the procedural documents *Management of Archaeological Projects* (MAP2) and *Management of Research Projects in the Historic Environment* (MoRPHE) (EH 1991; 2006).

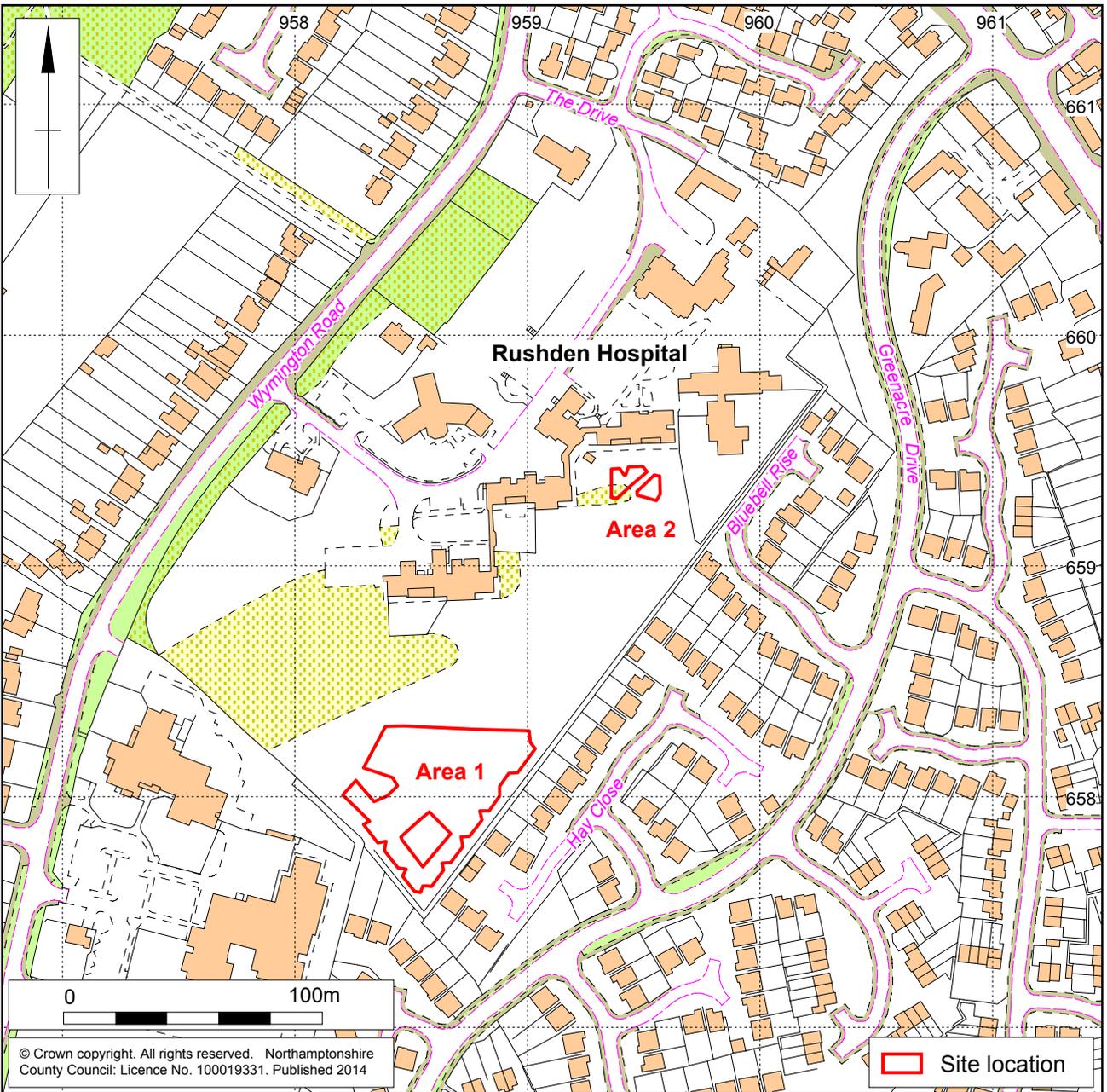
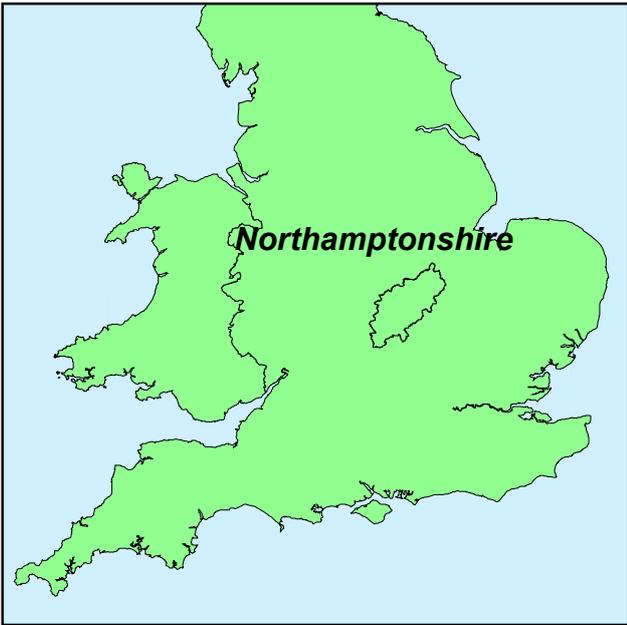
2 BACKGROUND

2.1 Location and geology

Rushden is located approximately 7.5km to the south-east of Wellingborough, and between the A45 to the north-west and the A6 to the east. The River Nene lies to the north-west of Rushden. The development site is situated to the south of Rushden town centre, within the precincts of Rushden Hospital, to the east of Wymington Road.

The site occupies c3.90ha of hospital grounds, consisting of grass with individually planted trees, on a generally flat plateau, sloping gently to the north and west, between 75 and 80m AOD. It is bounded to the north by the hospital buildings, to the east by housing, and to the south by a school.

The bedrock geology comprises Kellaways Formation and Oxford Clay Formation (undifferentiated). No superficial deposits are recorded (BGS 2014).



Scale 1:2500

Site location Fig 1

2.2 Historical and archaeological background

The layout of the medieval village of Rushden consisted of the church at the centre between two 'ends', north and south. The site lies to the south of the south end, within one of the great fields known as Long Field. Between 1400 and 1755 the furlong in which the site lies was known as Croftes, meaning land near village crofts (gardens). The field was an old enclosure and the east furlong boundary shown on the open fields map (Hall & Harding 1985) may be the ditch existing as an earthwork at the site.

The oldest of the present buildings on the site is the former Rushden House, built in 1871. This began life as a private dwelling, set in extensive gardens. It was subsequently employed as a prisoner of war camp (known locally as Ploughman's Camp) for German prisoners towards the end of the First World War, between 1918 and 1919. They lived in the coach house and stables and worked on the land. Approval for the development of the present hospital site began in 1920, when plans were drawn up for the building of Rushden Sanatorium for the treatment of consumption (RDHS 2009).

To the north-east is Rushden Hall, a Park which contains earthworks of unknown date, though probably predating the park (NHER: MNN104047).

Previous archaeological work comprised geophysical survey (Walford and Fisher 2009) undertaken and trial trench evaluation (Foard-Colby 2009). The geophysical survey observed substantial ridge and furrow earthworks, which produced clear magnetic anomalies. Other anomalies were attributed to various modern features, including a tennis court.

The trial trench evaluation identified archaeological remains. A series of features of probable Iron Age and Roman date were present within the southern part of the development area. A curvilinear ditch probably represented the remains of a ring ditch. The paucity of artefactual material indicated either a general low level of activity or that these features lie on the periphery of a more extensive settlement beyond the site boundaries. Medieval remains related to agricultural practices included a possible furlong boundary which survived as an earthwork, together with a single pit.

3 AIMS AND OBJECTIVES

The programme of works was designed to mitigate the impact of the development upon the archaeological resource. This will fulfil conditions on the planning consent and enable development to proceed. The objectives set out in the Written Scheme of Investigation (NA 2014) addressed the national framework for research (English Heritage 1997) and regional research frameworks set out Knight, Vyner and Allen (2012), replacing Cooper (2006)

The general aims of the investigation were to:

- Mitigate the potential impacts from the proposed development of the site through archaeological recording, analysis and dissemination;
- Refining the date, nature, character and extent of the activity on the development site;
- Recovering artefacts to assist in the development of type series within the region
- Recovering palaeo-environmental remains to determine past local environmental conditions;
- Creating an organised and indexed site archive;

- Analyse, interpret and report on the findings from the fieldwork.

4 METHODOLOGY

The two excavation areas totalling 3,360m² were positioned using a Leica Viva 1200 GPS and were excavated, under continuous archaeological supervision, using a 360° mechanical excavator fitted with a flat toothless bucket.

Area 1 and was located in the southern part of the development area (Fig 2). Two trees within the excavation area were to be retained so the ground around these was left unexcavated accordingly.

Area 2 was located in the north-eastern area of the development area (Fig 2). A strip of ground was left unexcavated in the middle of the area to avoid a BT cable identified during the trial trench identification.

The topsoil and subsoil were stacked separately and adjacent to the excavations. Mechanical excavation proceeded to the top of the archaeological deposits or to the natural substrate where no archaeology was encountered.

Where necessary archaeological remains were cleaned by hand. Each feature or deposit was given a unique context number and details of each context were recorded on pro-forma sheets.

The site was planned (scale 1:100 and 1:20) and section drawings were made at an appropriate scale (1:10 or 1:20). Levels were taken across the site at appropriate points, on section datum and on all major features and related to Ordnance Datum.

A photographic record was made of the excavation, using 35mm black and white negative and high quality digital images.

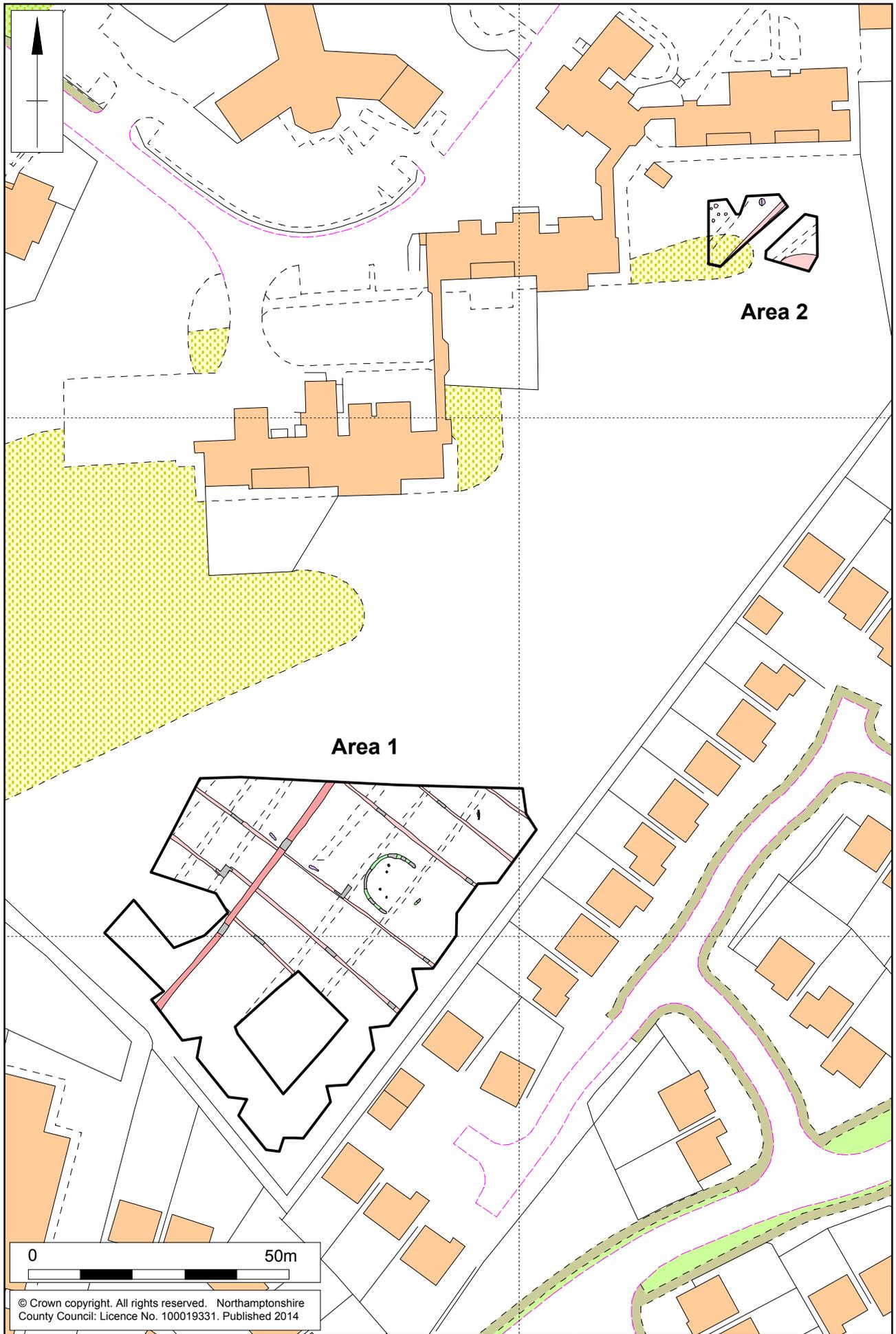
The spoil heaps and features were scanned with a metal detector to ensure maximum finds retrieval. The archive will be prepared in accordance with the requirements of the Museums and Galleries Commission (MGC 1992).

All works were carried out in accordance with the WSI prepared by Northamptonshire Archaeology (now MOLA) (NA 2014), the Institute for Archaeologists' *Code of Conduct* (IfA 2010) and *Standard and guidance for archaeological excavation* (IfA 2008).

5 THE EXCAVATED EVIDENCE

5.1 Introduction

The natural substrate across the site was encountered between 0.45m and 0.65m below present ground level. It comprised a glacial till of mid grey-brown silty clay with orange sandy patches, chalk pebbles and flint inclusions. The subsoil, 0.25m-0.35m thick, comprised a mid brown-orange silty clay with occasional flint and chalk pebbles. This was overlain by a dark grey-brown clay loam topsoil, 0.20m-0.30m thick.



Scale 1:1000

The excavation areas Fig 2

5.2 The Iron Age features

In Area 1 (Fig 3) pottery dating to the Iron Age was retrieved from posthole [84] from posthole group [100]. Structure S1 has been tentatively dated to the Iron Age. Although no pottery was recovered from it, curvilinear gullies with associated postholes are structural features common to the Iron Age period. No Iron Age features were encountered in Area 2.

Structure S1

This comprised a semicircular curvilinear gully, [15], 10m in diameter which was open to the south-east (Fig 4). Two pairs of postholes, [31], [33] and [35], [37] were enclosed by the gully and there was a short section of gully, [40], 3.50m to the south-east.

Gully [15]

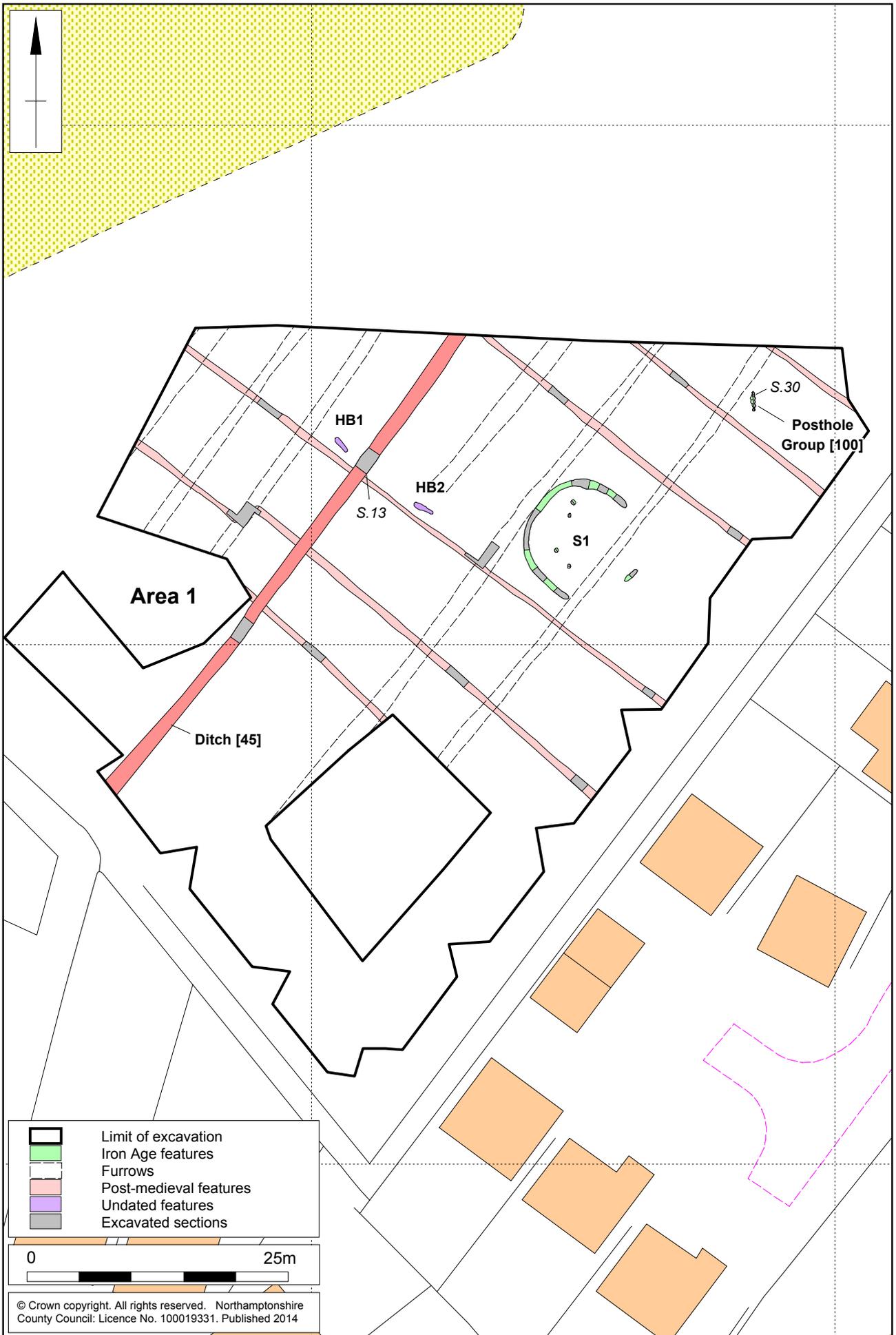
This was 0.41m-0.64m wide by 0.10m-0.26m deep with profiles ranging from gradually sloping concave sides and base at the north-east end to steep straight sides and a flat base at the south-east end (Fig 4, section 6). The fill comprised a dark grey-brown silty clay which produced no finds.

Postholes [31], [33], [35] and [37]

Paired postholes [31] and [33] were 0.80m apart and aligned approximately north to south while [35] and [37] were 1.50m apart and aligned north-west to south-east. All of the postholes were sub-circular in plan, 0.35m-0.45m in diameter and 0.10m-0.20m deep. All had steep, straight sides and a flat base apart from [33] which had gradual sloping concave sides and a flat base (Fig 4). They were filled with dark grey silty clay which produced no dating evidence.

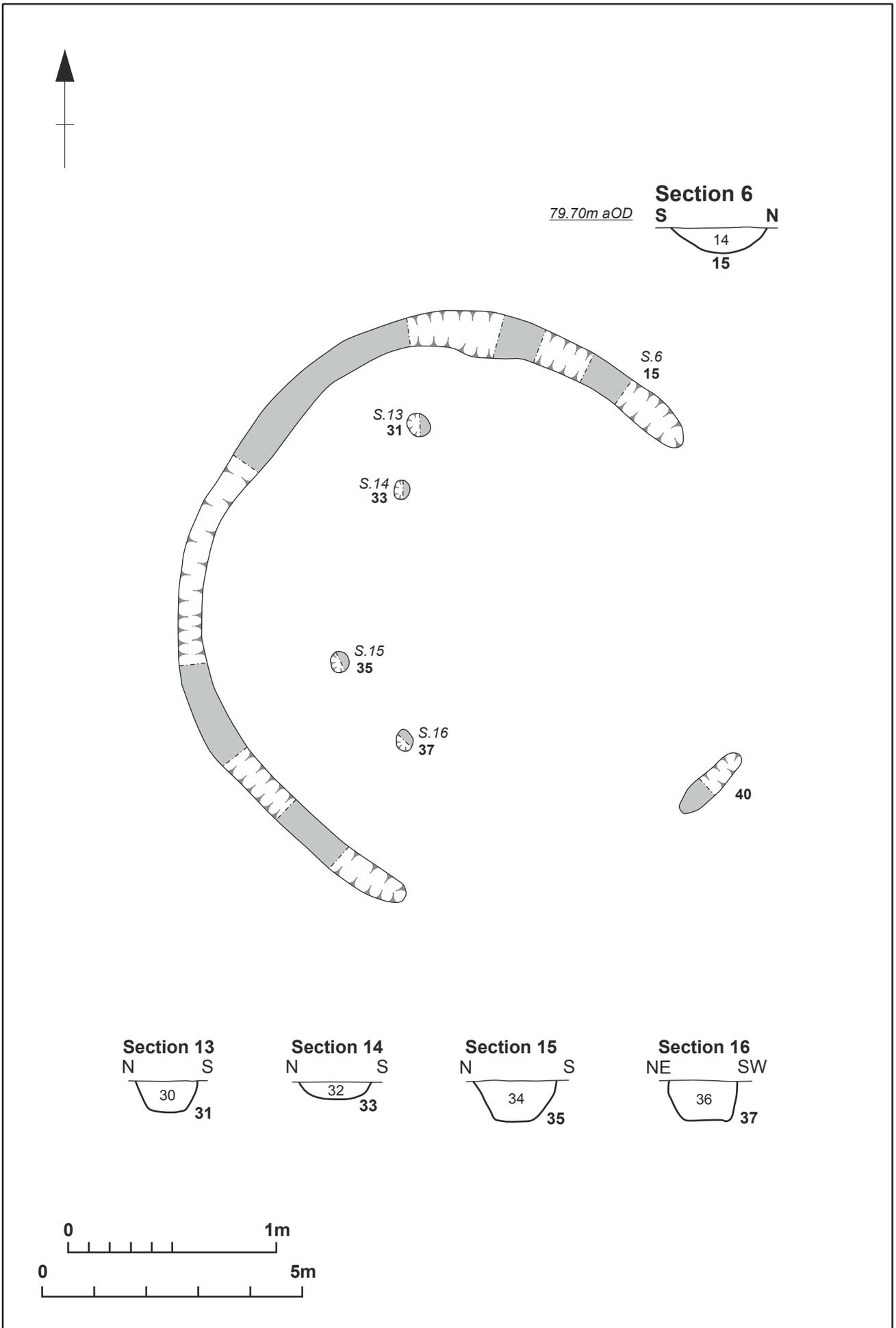
Gully [40]

A short section of gully aligned north-east to south west which was 1.50m long, 0.37m wide and 0.12m deep. It had a bowl-shaped profile and the dark grey silty clay fill produced no finds.



Scale 1:500

Area 1 Fig 3

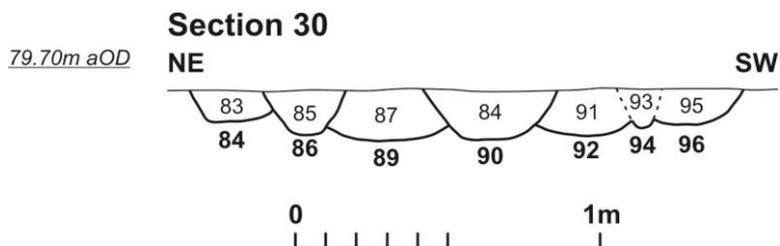


Scale 1:25 (sections) & 1:100 (plan) (A4)

Structure S1 Fig 4

Posthole group [100]

This was a linear arrangement of seven intercutting postholes aligned north-south 1.80m long (Figs 3 and 5) The group appeared to comprise four postholes, [84], [88], [92] and [96] which were later cut by [86], [90] and [94]. They were all sub circular or oval in plan, 0.15m-0.45m in diameter and 0.10m-0.15m deep. Generally the earlier phase of postholes appeared to have more gradually sloping sides and concave bases while the later phase had steeper straighter sides and flat bases. The fills comprised light to dark grey silty clay. Pottery dating to the Iron Age was retrieved from posthole [84].



Posthole group [100]

Fig 5

5.3 The inhumation burials

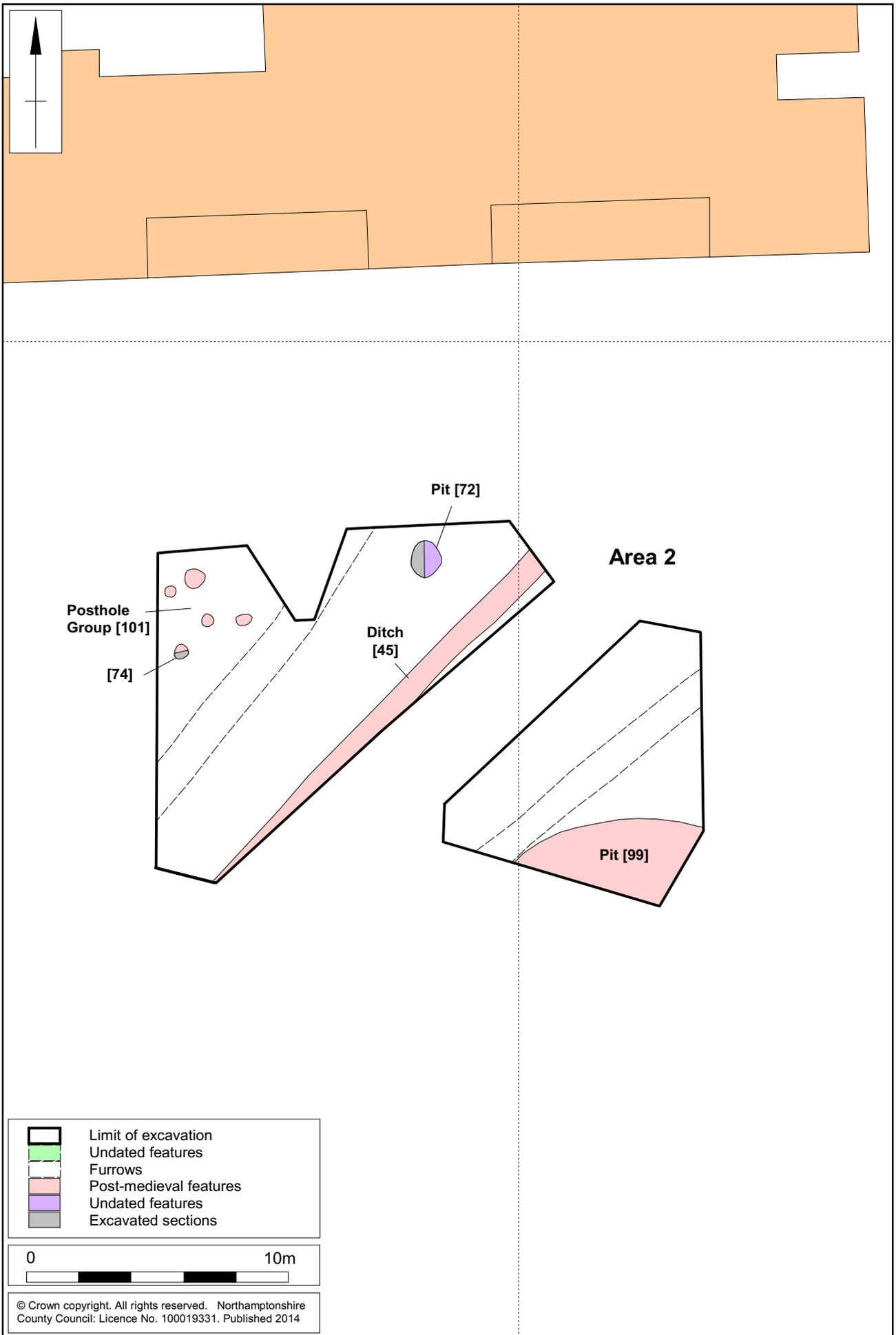
Two inhumation burials, HB1 and HB2 were situated in north-west part of Area 1 (see Section 7). They were both aligned north-west to south-east and the truncated grave cuts were almost imperceptible (Fig 6). The fills comprised mid grey silty clay with chalk pebbles which produced no dating evidence but a single piece of iron-rich stone, possibly unroasted ore, was retrieved from the fill of HB1. Both burials were in poor condition and had been heavily truncated. HB1 was the less complete of the two and appeared to have been disturbed by a medieval furrow which would suggest a pre-medieval date for the burials.



Burials HB1 and HB2, looking north-west



Fig 6



Scale 1:200

Area 2 Fig 7

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5.4 Medieval ridge and furrow cultivation

A number of furrows were encountered in both Areas 1 and 2 (Figs 3 and 7). They were all aligned north-east to south west and were 1m-1.50m wide, 0.12m-0.25m deep and spaced 5m-7m apart. Their fills, which comprised mid grey-brown silty clay and produced a sherd of pottery dating from the 13th to 16th centuries, were overlain by subsoil. The reported medieval pit which was encountered in Trench 16 of the trial trench evaluation was found to be remnants of a furrow (Foard-Colby 2009, fig 3).

5.5 Undated features

There was a single pit, [72], in Area 2, sub-circular in plan, 1.20m in diameter, 0.20m deep with gradual sloping convex edges and an irregular base (Fig 7). The mid grey-brown silty clay fill, which produced no finds, was overlain by subsoil which could suggest a medieval or earlier date.

5.6 Post-medieval features

Ditches

Across Area 1 there were six ditches, aligned north-west to south east which cut the subsoil and truncated the medieval furrows (Fig 3). These were 0.50m-0.90m wide, 0.20m-0.42m deep with steep sloping sides and flat bases. The dark brown-grey silty clay fills produced a single piece of red brick and fragments of window glass (not retained).

Ditch [45]

A linear ditch at least 185m long and aligned north-east to south west, was present in Areas 1 and 2 (Figs 3 and 8). It was 0.80m-1.0 wide by 0.30m deep and truncated the post-medieval ditches. It had steep sloping sides and broad concave base. The ditch, which probably originated in the medieval period (see Discussion paragraph 9) had largely been removed by a recut along the same alignment. The fill comprised a dark grey silty clay with frequent woody root inclusions, red brick fragments, window glass and 20th century bottles and a sherd of residual pottery dating from the 11th to 13th centuries.



Ditch [45], looking north-east Fig 8

Pits and postholes

Posthole group [101]

A group of five postholes in the north-western corner of Area 2 (Fig 7), were all sub-circular and between 0.40m and 0.70m in diameter. Only one of them was investigated by hand excavation, [74], and was 0.10m deep with gradual sloping sides and a concave base. All of the postholes were filled with dark grey silty clay which contained coal and abundant 20th century glass bottle fragments (not retained).

Pit [99]

A large pit, partially exposed in Area 2, was filled with a loose bituminous material which contained sheets of corrugated steel and large concrete fragments. It was not investigated by hand excavation.

6 THE FINDS

6.1 Iron Age pottery by Andy Chapman

The fill (83) of posthole [84] contained four small sherds, weighing 7g, of pottery, probably all from a single vessel. The fabric has a grey core and brown surfaces, and contains some shell inclusions and voids from leached shell. There is a simple upright rounded rim. The rim form suggests a date in the middle to late Iron Age.

6.2 The medieval pottery by Paul Blinkhorn

The pottery assemblage comprises two sherds with a total weight of 9g. It was quantified using the chronology and coding system of the Northamptonshire County Ceramic Type-Series (CTS), as follows:

F200: T1 (2) type St. Neots Ware (AD1000-1200) 1 sherd, 4g.

F324: Brill/Boarstall ware (early 13th -16th centuries) 1 sherd, 5g.

Both fabric types are common finds in the region. The sherd of F200 occurred in context (42) from the recut of ditch [45], that of F324 from furrow [60]. The latter was somewhat abraded, and is clearly residual.

6.3 Metalworking debris by Andy Chapman

The fill of the grave containing burial HB1 produced one large fragment, weighing 245g, and two small fragments, weighing 20g, of dense ferrous-rich stone, possibly unroasted ore rather than slag.

7 THE HUMAN BONE by Chris Chinnock

Methodology

The remains, burials HB1 and HB2, were analysed and recorded according to the procedures outlined by the Guidelines to the Standards for Recording Human Skeletal Remains (Brickley and McKinley: 2004) and the English Heritage guide for producing Human Bone assessments and reports (Mays, Brickley and Dodwell: 2004). Age and Sex estimations were attempted using the methods described by Buikstra and Uberlaker (1994). Due to the fragmentary nature of the remains metric analysis was not possible.

Preservation and Completeness

Skeletal preservation depends on a number of factors, including the age and sex of the individual as well as the size, shape and robusticity of the bone. The taphonomic environment, post-depositional disturbance and post-excavation treatment can have a significant impact on the survival and condition of the skeletal material.

Both individuals were extremely fragmented with only a few large long bone elements surviving. Approximately 0-25% of Burial 1 was present and 25-50% of HB 2. Preservation of the bone cortex was assessed using the seven-category system by Brickley and McKinley (2004). In both burials, bone preservation was described as 'poor'. This indicates extensive erosion of the bone surface resulting in partial-complete loss of the surface morphology.

Age and Sex

Due to the highly fragmentary state and poorly preserved bone surface of both individuals, skeletal elements most useful for estimation of age and sex were not available. Age estimation was only possible from the surviving teeth. Estimation was based on dental eruption (van Beek 1983) and occlusal wear of the molars (Brothwell 1981).

The only tooth available for HB 1 was an upper first pre-molar. The development of the crown and root suggest this tooth was fully erupted at the time of death. Full eruption of this tooth usually occurs in adolescence, around 12-14 years. The occlusal wear on the tooth suggests that it had been erupted for some time. It is only possible to say that the individual was older than mid-teens at the time of death

HB2 had many more teeth available for analysis. Both mandibular third molars were present and fully erupted. This occurs between 18-25 years. Analysis of the wear patterns on the molars suggests an age at death of 25-30.

Pathology

Due to the high level of fragmentation and poorly preserved cortical bone, no evidence for any pathological conditions was observed on any of the bones. Moderate supra-gingival calculus was noted on almost all of the teeth.

Discussion and conclusions

The two individuals from the site are of unknown gender, one was in their late twenties to early thirties (HB 1), the other (HB 2) was of uncertain age though certainly into their mid teens at least.

During excavation it was noted that HB1 had been heavily disturbed by a furrow associated with later agricultural activity across the site. This later activity is probably the reason for such high fragmentation in both burials though much more obviously so in HB1.

8 THE CHARRED PLANT REMAINS by Val Fryer

Nine samples were taken for the retrieval of the plant macrofossil assemblages and submitted for assessment

The samples were bulk floated by MOLA and the flots were collected in a 300 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 were recorded following Stace (1997). All plant remains were charred. Modern roots, seeds and arthropod remains were common within all nine assemblages.

The non-floating residues were collected in a 1mm mesh sieve and sorted by MOLA. Samples 1 and 2 (Gully [15], Structure S1) both contained numerous spherules (initially identified as seeds), all of which appeared to be natural concretions of ferrous minerals and small grits. Sample 1 also included a small number of fossil mollusc shells.

Results

Although charcoal/charred wood fragments are present throughout, the density of material recovered is generally very low, with some assemblages containing only occasional charcoal flecks. Samples 4, 5 and 6 (from postholes [32], [34] and [36], Structure S1, respectively) do contain slightly higher densities of material, but the remains are all highly comminuted and abraded. Other plant macrofossils, namely a grain of wheat (*Triticum* sp.), an indeterminate cereal, and a single clover type (*Medicago/Trifolium/Lotus* sp.) seed, are only recorded within the assemblage from sample 1 (Gully [15], Structure S1). Other remains are also exceedingly scarce. However, sample 6 includes a minute fragment of what appears to be abraded amber and the assemblages from burials HB1 and HB2 (contexts [68] and [61]) contain numerous comminuted bone fragments.

Although specific sieving for molluscan remains was not undertaken, shells are present within all nine assemblages. However, as many retain delicate surface structures and coloration, it is thought most likely that all are intrusive within the contexts from which the samples were taken.

Conclusions

In summary, the paucity of material within these assemblages all but precludes any further interpretation of the contexts from which the samples were taken. However, if the curvilinear gully does demarcate a structure, it is tentatively suggested that the building may have been used for purposes other than domestic habitation as, even allowing for that fact that contemporary roundhouses were generally kept clean to minimise the risk of accidental fires, detritus within the current assemblages is particularly scarce.

9 DISCUSSION

Structure S1, the curvilinear gully with associated postholes, is likely to have been of Iron Age date although, despite 100% excavation, no pottery was retrieved. These forms are common on Iron Age sites and are thought to be the gullies which once surrounded circular buildings or in the case of structure S1 an open-sided structure of some sort. The paired postholes within the enclosed space may be either structural in nature or may have secured two-post structures such as racks for drying food stuffs or other materials. The paucity of artefactual and environmental evidence suggests that the structure was sited away from the main settlement foci of the period.

The inhumation burials could be broadly contemporaneous with structure S1, however, their north-west to south-east orientation would suggest they were buried with regard to the Christian tradition. The fact that HB1 appeared to have been disturbed by a medieval furrow would suggest a Roman to early medieval date.

Ditch [45] was visible between Areas 1 and 2 as a slight earthwork and appears on historic maps from 1635 (Rushden Open Fields Historic Map) up to 1938 (Ordnance Survey) (Ove Arup and Partners 2011). It appears to have been a long-lived boundary feature which is likely to have been a remnant of the field system which developed along the southern and northern sides of High Street during the medieval period. Its later recutting may have been closely contemporary with the system of ditches set at right angles to it.

BIBLIOGRAPHY

- BGS 2014 *Geoindex* www.bgs.ac.uk/geoindex.htm, British Geological Survey
- Brickley, M, and McKinley, J I, (eds) 2004 *Guidelines to the Standards for Recording Human Remains, Reading*, Institute for Archaeologists, Paper 7
- Brothwell, D, 1981 *Digging Up Bones* (Third Edition), New York, Cornell University Press
- Buikstra, JE, and Uberlaker, DE, (eds) 1994 *Standards for Data Collection from Human Skeletal Remains*, Research Series 44, Fayetteville, Arkansas Archaeological Survey
- DCLG 2012 *National Planning Policy Framework*, Department for Communities and Local Government
- EH 1991 *Management of archaeological projects*, second edition (MAP2), English Heritage
- EH 2006 *Management of Research Projects in the Historic Environment: The MoRPHE Project Managers Guide*, English Heritage
- Foard-Colby, A, 2009 *Archaeological trial trench evaluation at Rushden Hospital, Northamptonshire*, Northamptonshire Archaeology **09/165**
- Hall, D, and Harding, R, 1985 *Rushden, A Duchy of Lancaster Village*, Buscott
- IfA 2008 *Standard and guidance for archaeological excavation*, Institute for Archaeologists
- IfA 2010 *Code of Conduct*, Institute for Archaeologists
- Knight, D, Vyner, B, and Allen, C, 2012 *East Midlands Heritage: An updated Research Agenda and Strategy for the Historic Environment of the East Midlands*, University of Nottingham & York Archaeological Trust
- Mather, L-A, 2013 *Brief for a programme of archaeological excavation, recording, analysis and publication of land at Rushden Hospital, Rushden, Wymington Road, Northamptonshire*, Northamptonshire County Council
- Mays, S, Brickley, M, and Dodwell, N, 2002 *Human Bones from Archaeological Sites: Guidelines for Producing Assessment Documents and Analytical Reports*, BABAO/English Heritage
- MGC 1992 *Standards in the Museum care of Archaeological Collections*, Museums and Galleries Commission
- NA 2014 *Written scheme of investigation for archaeological works, land at Rushden Hospital, Rushden, Northamptonshire*, Northamptonshire Archaeology
- Ove Arup and Partners 2011 *Rushden Hospital site, archaeological technical appraisal*, document ref N-00-002, prepared for Northamptonshire Healthcare NHS Foundation Trust
- RDHS 2009 *A Thousand Years of Rushden*, Rushden and District History Society

Stace, C, 1997 *New Flora of the British Isles*, 2nd edition, Cambridge University Press

Van Beek, G, C, 1983 *Dental Morphology: An Illustrated Guide*, UK, Butterworth and Heinemann

Walford, J, and Fisher I, 2009 *An archaeological geophysical survey at Rushden Hospital, Northamptonshire, August 2009*, Northamptonshire Archaeology report, **09/110**

MOLA
July 2014

APPENDIX 1: Context summary

Cut	Fill	Layer	Type	Description	Dimensions (m)	Artefacts
		001	Topsoil	Loose dark grey, silty clay loam with occasional small rounded pebbles	0.20 - 0.25m deep	-
		002	Subsoil	Medium, mid brown silty clay with occasional small rounded chalk pebbles	0.20-0.35m deep	-
		003	Natural	Medium soft mid yellow/grey clay with some randomly distributed chalk and flint	-	-
005	004		Fill	Medium dark grey silty clay with occasional small rounded pebbles	2.88m wide 0.14m deep	-
			Tree bowl?	East-west elongated ellipse with uneven sides and base		-
007	006		Fill	Medium dark grey/brown silty clay with occasional small rounded pebbles	0.64m wide 0.27m deep	-
			Ditch	East-west linear, possible field boundary with straight sides and flattened base		-
009	008		Fill	Medium dark brown/grey silty clay with occasional small rounded flint pebbles	0.62m wide 0.28m deep	-
			Ditch	East-west linear possible field boundary with straight sides and flattened base.		-
011	010		Fill	Medium dark brown/grey silty clay	0.77m wide	-
			Ditch	East-west linear possible field boundary with straight sides and flattened base.	0.27m deep	-
013	012		Fill	Medium dark brown/grey silty clay with occasional small flints	0.41m wide 0.10m deep	-
			Cut	Curving linear butt-end feature with straight sides and slightly curved bottom		-
015	014		Fill	Medium dark grey silty clay with orange flecks and occasional small rounded flint pebbles	0.46m wide 0.12m deep	-
			Cut	Curving linear butt-end feature with straight sides and slightly curved bottom		-
017	016		Fill	Medium dark grey silty clay with occasional flint pebbles	0.55m wide 0.20m deep	-
			Gully	Possible curved linear horseshoe-shaped enclosure gully		-
019	018		Fill	Compact dark grey silty clay	0.64m wide	-
			Ring ditch	South-east to north-west ring ditch cut with straight sides and flat bottom	0.26m deep	-
021	020		Fill	Compact dark grey silty clay	0.58m wide	-
			Ring ditch	Linear, south-west to north-east aligned. Steep sided with flat base	0.24m deep	-
023	022		Fill	Compact dark grey silty clay	0.55m wide	Flint
			Ring ditch	Linear west to east. Steep sided with flat base	0.16m deep	

RUSHDEN HOSPITAL

Cut	Fill	Layer	Type	Description	Dimensions (m)	Artefacts
025	024		Fill	Compacted mid greyish-brown silty clay with occasional small stones	0.9m wide 0.18m deep	-
			Gully	Linear north to south, u-shaped gully		
027	026		Fill	Compacted mid greyish-brown silty clay with occasional small stones	0.92m wide 0.11m deep	-
			Furrow	Linear east to west with gently sloping sides and flat bottom		
029	028		Fill	Compacted mid greyish brown silty clay	1.36m wide 0.24m deep	-
			Gully	Linear north to south u-shaped gully/ditch		
031	030		Fill	Compact dark grey silty clay	0.3m wide	-
			Post hole	Circular post hole with steep sides and flat bottom	0.15m deep	
033	032		Fill	Compact dark grey silty clay	0.35m wide	-
			Post hole	Circular post hole with sloping sides and flat bottom	0.08m deep	
035	034		Fill	Compact dark grey silty clay	0.40m wide	-
			Post hole	Circular steep-sided post hole with flat bottom	0.20m deep	
037	036		Fill	Dark grey silty clay	0.32m wide	-
			Post Hole	Circular steep-sided post hole with flat bottom	0.20m deep	
040	038		Fill	Compacted light greyish-brown silty clay	0.37m wide 0.12m deep	
	039		Fill	Compacted dark grey silty clay with stone inclusions	0.20m wide 0.18m deep	Flint? Bone
			Gully	Linear north-east to south-west steep-sided gully with flat bottom	0.37m wide 0.12m deep	
043	041		Fill	Compacted dark brownish-grey silty clay	0.47m wide 0.26m deep	Brick/tile Glass
	042		Fill	Compacted mid brownish-grey silty clay	0.72m wide 0.09m deep	Pottery
			Ditch	Linear, v-shaped north-east to south-west ditch with a regular base	0.84m wide 0.33m deep	
045	044		Fill	Compacted mid yellowish-brown silty clay with occasional small chalk and stone flecks	0.52m wide 0.27m deep	-
			Ditch	Linear north-east to south-west ditch with gently sloping sides, base unknown		
047	046		Fill	Compacted light grey silty clay	0.30m wide 0.30m deep	1 flint
			Ditch	Linear, north-east to south-west with steep sides and flat bottom		
049	048		Fill	Compacted dark grey silty clay	1.0m wide 0.30m deep	Bone
			Ditch	Linear, north-east to south-west ditch with steep sides and flat bottom		

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Cut	Fill	Layer	Type	Description	Dimensions (m)	Artefacts
051	050		Fill	Firm, mid greyish-brown silty clay with fine gravel inclusions	1.21m long 0.80m wide 0.11m deep	-
			Natural	Sub-circular feature with steeply sloping sides and undulating base		
053	052		Fill	Mid greyish-brown silty clay	0.80m wide 0.14m deep 0.70m long	-
			Natural disturbance	Sub-circular feature with gently sloping sides and undulating base		
055	054		Fill	Compacted mid greyish-brown silty clay	0.80m long 1.00m wide 0.23m deep	-
			Pit	Circular pit with steeply sloping sides and concave base		
058	056		Fill	Firm mid orange-brown silty clay with rounded pebble inclusions	1.00m long 0.18m wide 0.13m deep	-
	057		Fill	Compacted light blue-grey silty clay with pebble inclusions	0.80m long 1.00m wide 0.23m deep	
			Pit/tree bowl	Sub-circular pit with gently sloping sides and flat base		
060	059		Fill	Compacted mid greyish-brown silty clay	0.71m wide 0.41m deep	Pot Brick/tile Glass
			Ditch	Linear north-west to south-east with near vertical sides and flat base		
062	061		Fill	Burial fill of firm, mid-grey silty clay	1.80m wide 0.1m deep	Bone
	067		Burial Grave cut	Prone burial with straight legs Linear east to west with gently sloping sides and flat bottom		Bone
064	063		Fill	Firm mid greyish-brown silty clay with flint and chalk inclusions	1.24m long 0.46m wide 0.20m deep	-
			Ditch	Linear east to west ditch with vertical sides and flat bottom		
066	065		Fill	Compacted mid greyish-brown silty clay with occasional small stone inclusions	0.66m wide 0.38m deep	Fe Nail
			Ditch	Linear north-west to south-east ditch with steep sides and curving base		
069	068		Fill	Burial fill of compacted mid-grey silty clay	1.60m wide	Bone
	070		Burial Grave cut	Partial skeletal remains aligned east to west Linear east to west with flat bottom		Bone
072	071		Fill	Compacted mid greyish-brown silty clay	0.16m dia 0.18m deep	-
			Pit	Circular pit with gently sloping sides and irregular base		

RUSHDEN HOSPITAL

Cut	Fill	Layer	Type	Description	Dimensions (m)	Artefacts
074	073		Fill	Firm mid grey-brown silty clay with occasional pieces of chalk	0.40m dia 0.07m deep	-
			Post hole	Circular post hole with steep sides and flat bottom		
076	075		Fill	Compacted mid to dark grey silty clay	0.80m wide 0.05m deep	-
			Furrow	Linear north-east to south-west furrow with gently sloping sides and flat base		
078	077		Fill	Compacted mid to dark grey silty clay	0.25m deep	-
			Ditch	Linear north-west to south-east with flat bottom	0.25m deep	
080	079		Fill	Soft mid brown-grey silty clay with occasional small pebbles	1.50m long 0.90m wide 0.25m deep	-
			Ditch	Linear east to west with steeply sloping sides and unknown base		
082	081		Fill	Compacted mid greyish-brown silty clay with occasional small – medium stones	0.56m wide 0.34m deep	-
			Ditch	Linear north-east to south-west ditch with near vertical sides and flat base		
084	083		Fill	Soft dark brown-grey silty clay with occasional sub-rounded stones	0.4m dia 0.13m deep	Pot
			Post hole	Circular with steeply sloping sides and flat base	0.26m wide 0.13m deep 0.40m dia	
086	085		Fill	Firm mid brown-grey silty clay with some sub-rounded stones	0.26m wide 0.13m deep 0.35m dia	-
			Post hole/pit	Circular with steeply sloping sides and concave base	0.20m wide 0.12m deep 0.35m dia	
088	087		Fill	Firm light greyish-brown silty clay	0.37m dia 0.16m deep	-
			Post-hole/pit	Circular with gently sloping sides and flat base	0.56m wide 0.34m deep	
089	090		Fill	Compacted mid blue-grey grey silty clay with occasional sub-angular stones	0.37m dia 0.16m deep	-
			Pit/post hole	Circular with gently sloping sides and concave base	0.4m dia 0.15m deep	
092	091		Fill	Firm mid brownish grey silty clay with occasional pebbles	0.4m dia 0.15m deep	-
			Pit/post hole	Circular with gently sloping sides	0.15m wide 0.10m deep	
094	093		Fill	Soft mid greyish-brown silty clay with moderate sub-angular stones	0.09m wide 0.10m deep	-
			Stake hole	Circular with steeply sloping sides and concave base		
096	095		Fill	Compacted mid greyish-brown silty clay with occasional charcoal flecks	0.25m dia 0.10m deep	-
			Pit/post hole	Circular with gently sloping sides and flat base		

Cut	Fill	Layer	Type	Description	Dimensions (m)	Artefacts
098	097		Fill	Firm dark greyish-brown silty clay with occasional charcoal flecks and sub-rounded stones	1.24m long 0.54m wide 0.25m deep	-
			Pit	"D" shaped with gently sloping sides and concave base		



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