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CAM ARC Report Number 963

Prehistoric Remains at Riddlesworth Hall School, Riddlesworth, Diss, Norfolk

Evaluation Report

Richard Mortimer

August 2007

Cambridgeshire County Council
Environment & Community Services

Commissioned by Kilngrove for Riddlesworth Hall School

CAM ARC Report Number 963

Prehistoric Remains at Riddlesworth Hall School, Riddlesworth, Diss, Norfolk

Evaluation Report

Richard Mortimer MIFA

With contributions by Barry Bishop MA, Sarah Percival MA MIFA and Rachel Fosberry

Site Code: 50434 RDW
NHER Event Number: 30519
Date of works: 30th July – 1st August 2007
Grid Ref: TL 9650 8143

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PROJECT DETAILS				
Project name	Evaluation at Riddlesworth Hall School, Norfolk			
Short description	A mixed Late Mesolithic to Late Bronze Age (principally LBA) flint scatter was recovered from subsoil/topsoil at the northwest of the site; tree throws containing Later Bronze Age struck flint, burnt flint and pottery were recorded at the northeast.			
Project dates	Start	30th July	End	1st August
Previous work	No		Future work	unknown
Associated project reference codes	50434.RDW XNF RHS 07 NHER 30519			
Type of project	evaluation			
Site status	none			
Current land use (list all that apply)	Grassland in grounds of Riddlesworth School, adjacent to tennis courts.			
Planned development	New sports Hall and swimming pool			
Monument types / period (list all that apply)	none			
Significant finds: Artefact type / period (list all that apply)	Mixed Mesolithic to (chiefly) Late Bronze Age flint assemblage Late Bronze Age pottery			
PROJECT LOCATION				
County	Norfolk	Parish	Riddlesworth	
HER for region	Norfolk			
Site address (including postcode)	Riddlesworth Hall School, Riddlesworth, Norfolk, IP22 2TA			
Study area (sq.m or ha)	2600 sq m			
National grid reference	TL 9650 8143			
Height OD	Min OD	29.90	Max OD	30.10
PROJECT ORIGINATORS				
Organisation	CAM ARC			
Project brief originator	Norfolk Landscape Archaeology			
Project design originator	James Drummond-Murray			
Director/supervisor	Richard Mortimer			
Project manager	James Drummond-Murray			
Sponsor or funding body	Riddlesworth Hall School			
ARCHIVES	**Location and accession number**		**Content (e.g. pottery, animal bone, database, context sheets etc)**	
Physical	CAM ARC offices		Pottery, flint, stone	
Paper	CAM ARC offices		Context records, context list etc	
Digital	\\ccc.cambridgeshire.gov.uk\data\Elh Afu\Active Projects\Non-Cambs\Norfolk\Riddlesworth		Database, report, digital photographs, finds reports etc	
BIBLIOGRAPHY				
Full title	Prehistoric Remains at Riddlesworth Hall School, Riddlesworth, Diss, Norfolk			
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Summary

An evaluation was carried out at Riddlesworth Hall School, near Diss, Norfolk in advance of development for a sports and swimming pool complex. The work took place over three days from the 30th of July to the 1st of August 2007. Five trenches were excavated totalling 91m in length - a 5.6% sample of the development area.

The archaeology recorded consisted of a surface scatter of prehistoric flint and pottery, partly preserved within the hollows of broadly contemporary tree throws. The assemblage recovered from the subsoil had been subjected to post-depositional plough action and was not found *in situ*. The material captured by the tree throws had been unaffected by ploughing.

There was a background scatter of Mesolithic to Early Bronze Age flintwork across the area, indicative of low-level activity, with the bulk of the assemblage being of the later Bronze Age. Late Bronze Age pottery was also recovered from the tree throws, though not from the subsoil scatter.

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1 Introduction

This archaeological evaluation was undertaken in accordance with a Brief issued by Ken Hamilton of Norfolk Landscape Archaeology (NLA Planning Application 3PL/2007/0336/F), supplemented by a Specification prepared by CAM ARC, Cambridgeshire County Council (formerly the Archaeological Field Unit). The evaluation was carried out in advance of planned development for a sports hall and swimming pool complex at Riddlesworth Hall School, near Diss, Norfolk. The work took place over three days from the 30th of July to the 1st of August 2007.

The work was designed to assist in defining the character and extent of any archaeological remains within the proposed redevelopment area, in accordance with the guidelines set out in *Planning and Policy Guidance 16 - Archaeology and Planning* (Department of the Environment 1990). The results will enable decisions to be made by NLA, on behalf of the Local Planning Authority, with regard to the treatment of any archaeological remains found.

The site archive is currently held by CAM ARC and will be deposited with the appropriate county stores in due course.

2 Geology and Topography

Riddlesworth is situated 9km east of Thetford, just off the A1066 to Diss (Fig. 2). The school and site lie at the top of a south-facing valley slope at between 28 and 30m OD. The valley is that of the Little Ouse and falls away to *c*. 18m OD at the river 500m to the south. There is a small tributary valley 300m to the west, giving the area the feel of a pronounced hill-top. To the north the land is rolling and gently rising to 40m OD on West Harling Heath.

The superficial deposits are of glacial clay, silt and sand, mixed with gravel, overlying cretaceous chalk bedrock (British Geological Survey 1995, Sheets 174 & 175).

3 Archaeological and Historical Background

3.1 Prehistoric

No direct evidence for prehistoric settlement has been discovered in the immediate vicinity of the Hall. However, a number of stray finds (mainly struck flint) have been discovered by fieldwalking and metal detecting over the years. The closest of these to the subject site are: HER 29318, 350m to the north (where Mesolithic and Neolithic flints

and potboilers were found) and HER 29009 & 21964, 350m east-southeast (the find spot of worked flints).

HER 21964	Lithic Implement
HER 29009	Lithic Implement
HER 29012	Lithic Implement
HER 29013	Lithic Implement
	Iron Age pot
HER 29318	Mesolithic Microburin
	Neolithic Microburin
	Pot boiler
HER 18458	Iceni silver coin
HER 36076	Bronze Age spear
	Neolithic flint

3.2 Roman

A Roman road, The Peddars Way (HER 1289) runs close to the Hall. Whilst no other Roman features have been positively identified in the vicinity there is such a large volume of finds from metal detecting and field walking, mostly to the south along the lower slopes of the valley, suggesting that a substantial Roman building must be located nearby. The following list provides examples of the range of material found.

HER 29007	Roman puddingstone quern
HER 29012	Roman pottery
HER 29013	Roman pot
	Roman coin
	Roman bracelet
	Roman knife
HER 29318	Roman pot
	Roman coin
HER30519	Roman figurine
	Roman bracelet
	Roman finger ring
	Roman brooch
	Roman Steelyard weight
HER 30925	Roman finger ring
HER 36076	Roman Coin hoard

3.3 Saxon

The pattern is similar for the Saxon period. Sufficient stray finds have been discovered to indicate settlement activity on the lower slopes of the valley close to the river, although its exact location is unclear.

HER 29012	Late Saxon pot
HER 29013	Late Saxon pot
HER 29014	Late Saxon pot
HER 30519	Early Saxon stud
HER 30925	Early Saxon brooch
HER 36076	Early Saxon hanging bowl
	Middle Saxon hanging bowl
	Early Saxon strap fitting

3.4 Medieval

Riddlesworth Hall (HER 6119) is a medieval foundation and the original building was burnt down in 1589. Extensive medieval finds have been made around the current buildings through metal detecting and field walking including coins, tokens, rings, buttons, buckles, brooches, a cauldron, book fitting, spur and pottery. Of particular note is an inscribed medieval seal matrix, the seal of Isabell daughter of Geidun (HER 33932).

3.5 Post-medieval and modern

The Hall was rebuilt as a manor in 1600. This building was demolished in 1789, rebuilt and burnt down again in 1899, being replaced around 1900 by the current building. Again an extensive range of post-medieval and later objects have been found in the immediate vicinity.

4 Methodology

The objective of this evaluation was to determine as far as reasonably possible the presence/absence, location, nature, extent, date, quality, condition and significance of any surviving archaeological deposits within the development area.

The Brief required that a 5% sample of the development area be subjected to trial trenching.

Machine excavation was carried out under constant archaeological supervision with a wheeled JCB-type excavator using a toothless ditching bucket.

Spoil, exposed surfaces and features were scanned with a metal detector. All metal-detected and hand-collected finds were retained for inspection, other than those that were obviously modern.

All archaeological features and deposits were recorded using CAM ARC's *pro-forma* sheets. Trench locations, plans and sections were recorded at appropriate scales and tied in to the OS by EDM survey. A level survey was also taken and tied in to a benchmark on the church to the east of the Hall (at 25.41m AOD). Colour and monochrome photographs were taken of all relevant features and deposits.

Environmental samples were taken from two sub-surface contexts – the earliest and latest fills in a sequence of intercutting tree throw hollows.

Site conditions were dry and bright throughout, the ground (grassland) was firm and access was via a rubble-made track.

5 Results

The development area as outlined by the developer's ground plans covered some 2600 square metres – the area lying tightly between the extant tennis courts and a small copse of mature trees to the north and east. The site lies on top of the hill on level ground at between 29.90 and 30.10m OD.

Five trenches were excavated totalling 91m in length by 1.60m wide (Fig. 3). A total of 145.6 square metres was opened, making a 5.6% sample of the development area. The trench plan and excavated area were agreed on site by Ken Hamilton of Norfolk Landscape Archaeology.

In the results presented below all trench depths are given to the base of the subsoil and all feature depths from the base of the subsoil.

5.1 Topsoil and subsoil

Topsoil (context 32) was a mid to dark brown slightly sandy clay silt with few inclusions, chiefly occasional worked and unworked flints. There was noticeably very little modern material present. The depth of topsoil varied very little across the site between 0.18 and 0.22m.

Subsoil (context 33) was a fairly dense orangey pale brown silty sandy clay with few flint (worked and unworked) inclusions. Subsoil depth varied to a greater extent than that of topsoil: in Trench 1 it was an even 0.30m; in Trench 2 no more than 0.15m; in Trench 3 it undulated between 0.15 and 0.20m; in Trench 4 it was 0.15 at the western end, 0.20m at the eastern.

The even depth of subsoil along the main east-west aligned Trench 2, and the undulation of that in the north-south Trench 1, may suggest the presence of otherwise invisible ridge and furrow, on an east to west alignment. The even 0.30m depth of subsoil in Trench 1 could indicate a headland.

5.1.1 Finds assemblage

From the commencement of the trench machine-strip (at the northern end of Trench 1) it was apparent that both topsoil and subsoil held assemblages of prehistoric worked flint. Machining was therefore undertaken slowly and by slight increments and all visible artefacts were collected. The collection units used were the length of the pull of the machine bucket - approximately 2.50m. All artefacts were retained with the exception of two sherds of 19th-century stoneware and three

small fragments of post-medieval brick, all from the topsoil. Table 1 below presents the combined finds assemblages from topsoil and subsoil but excludes those from within a 1m square test pit excavated at the western end of Trench 2 – these are presented separately under the trench results. The distribution of these finds along the trenches – almost exclusively from Trenches 1 & 2 – is shown on Figure 3.

	Flint - number			
Context	**Worked**	**Burnt**	**Pottery (g)**	**Lava quern (g)**
32 topsoil	44	2		
33 subsoil	33		1	56
Total	77	2	1	56

Table 1: Topsoil and subsoil finds

The lava quern was recovered from two separate collection units towards the western end of Trench 2. The fragments are fragile and extremely degraded, and there are no surviving surfaces or measurable dimensions. The raw material for the quern (or querns) is particularly fine-grained. The single pottery sherd recovered was small and heavily worn and of a medieval fabric similar to Grimston ware.

No animal bone was found in either the topsoil or subsoil.

5.2 The Trenches

5.2.1 Trench 1

North to south, 12m long, overall depth to natural 0.50m. No archaeological features were recorded, though finds materials were retrieved from both topsoil and subsoil (see above).

5.2.2 Trench 2

East to west, 34m long, overall depth to natural 0.33m. A single feature was recorded (context 34), a small, shallow tree throw. Its fill was a mid grey clay silt with very occasional charcoal flecks, and produced a single worked flint flake.

At the western end of the trench, at the junction with Trench 1, a 1m test pit was excavated through both the base of topsoil and the full depth of subsoil. The aim was to retrieve all the finds from within this metre square as a control on the quantities of finds that were being removed in the machine spoil. Four 10cm spits were hand excavated and the finds retrieved are presented in Table 2 below.

Context	Layer	Worked flints	Pottery (g)
25	topsoil:	6	
26	subsoil:	5	1
27	subsoil:	10	
28	subsoil:	3	1
Total		24	2

Table 2: Finds assemblage from 1m test pit

The worked flint assemblage was of predominantly later Bronze Age manufacture (see Appendix 1), and in relatively worn and damaged condition. The two pottery sherds recovered were similarly very degraded - a single small sherd of probable Grimston ware and a sherd of medieval sandy ware in a reddish fabric.

5.2.3 Trench 3

North to south, 29m long, overall depth to natural undulating between 0.42m and 0.32m. Five features were excavated and recorded, all natural tree throws.

At the northern end of the trench were three intercutting tree throws, none of which were seen in their entirety:

Tree throw **31**
Length approximately 5.00m north to south, width 1.50m minimum, depth to maximum 0.40m. Very uneven sides and base, vertical to undercut sides at east and north, gentler slope to west. Two identifiable fills were excavated; lower fill (30) was a dirty pale brown silty clay with occasional flint inclusions, and upper fill (20) a pale yellow-beige sandy clay silt, darker, browner and with more clay towards the base of the context. A single worked flint was recovered from the lower fill, with the remainder of the finds assemblage (see below) coming from the upper fill. Approximately 50% of the available area of the feature was excavated. The feature was partially truncated at the south by tree throw 21.

Tree throw **21**
Length *c*. 1.50m west to east, width 1.25m, depth to 0.40m. Visible part of the feature sub-circular in plan. The fill was a pale orangey beige sandy clay silt with occasional flint and charcoal inclusions. Approximately 50% of the available area of the feature was excavated. The feature was partially truncated by tree throw 22 at the south.

Tree throw **22**
Oval, length 1.30m west to east, width 1.00m, depth to 0.35m. Fill a pale grey clay silt with common charcoal flecks and fragments and a noticeably larger finds assemblage – pottery, worked and burnt flint. All of the available area of the feature was excavated.

Ten metres to the south two further, shallow tree throws were excavated:

Tree throw **29**
A linear/oval feature, minimum length 1.60m west to east, width 0.50m, depth to 0.05m. Fill, a dirty pale brown silty clay with flint inclusions. All of the available area of the feature was excavated.

Tree throw **24**
An irregular feature, minimum length 1.60m west to east, width 1.40m, depth to 0.10m. Fill, a pale brown silty clay with flint inclusions. 20% of the available area of the feature was excavated and no finds were recovered.

Finds and environmental assemblage

The earliest, and largest of the tree throws (31) produced a small finds assemblage, chiefly of worked flint with very small quantities of burnt flint and pottery. The second feature in the sequence, 21, produced a larger assemblage, of both worked flint and pottery, with a single burnt flint. The latest, and smallest feature (22) produced by far the largest assemblage, of pottery, worked and burnt flint (with one fragment of burnt sandstone). The later features contained progressively darker fills, with more frequent charcoal inclusions. The finds assemblages are presented in Table 3 and examined in more detail under Discussion and in Appendices 1 and 2.

	Flint - number		
Feature	**Worked**	**Burnt**	**Pottery (g)**
31	6	1	8
21	10	1	50
22	21	12	72
29	2		
Total	39	14	130

Table 3: Finds assemblages in Trench 3

Two environmental samples were taken, from the earliest and latest of the tree throw fills. Sample 1, from context 22, produced nothing but charcoal; sample 2, from context 20 contained a single charred seed of ribwort plantain and a fragment of cereal grain too degraded to be identified (see Appendix 3).

No animal bone was found in any of the excavated features.

5.2.4 Trench 4

North-northwest to east-southeast, 12m long, overall depth to natural 0.25m at west, 0.40m at east. No features were recorded in this trench.

5.2.5 Trench 5

Northwest to southeast, 4m long, overall depth to natural 0.40m. Trench was excavated to check on the alignment of what was thought to be a possible ditch at the northern end of Trench 3. On excavation the feature proved to be a tree throw. No features were recorded in the trench.

6 Discussion

The archaeology recorded within the evaluation trenches is limited to surface scatters of prehistoric flintwork and pottery, some of it captured subsurface by broadly contemporary tree throws.

There are a handful of early prehistoric worked flints in the finds assemblage that suggest low-level and perhaps episodic activity at the site between the Mesolithic and the Early Bronze Age. The bulk of the assemblage, however, is dated to the Mid to Late Bronze Age. The density of this flintwork is relatively high, with the single hand-excavated test pit producing 24 struck flints. At this density it would suggest that somewhere in the region of 1500 struck flints may have been present in the topsoil and subsoil of Trenches 1 and 2.

Along with worked and burnt flint, a small pottery assemblage was recovered from three tree throws excavated at the north of Trench 3. While containing no diagnostic sherds, the relatively friable, flint-tempered pottery fabrics indicate a contemporary, Late Bronze Age date. No prehistoric pottery was recovered from the subsoil, perhaps an indication of subsequent plough action (see below).

No cut features were recorded on the site, and there was little evidence of any activity post-dating the later Bronze Age. No clearly Romano-British or Anglo-Saxon finds were recovered. Three sherds of highly abraded medieval pottery, weighing only a gram each, and two small and degraded fragments of lava quern, were recovered from the subsoil in Trench 2. These are the only finds representing the period from the later Iron Age through to the medieval. The lava quern could date to almost any period within this range but, as the only other finds recovered are of the 12th to 14th centuries, they are probably best also assigned a medieval date.

In itself, the very small medieval finds assemblage would not suggest that the area had undergone any great amount of middening or night-soiling while under plough, despite lying very close to the centre of the medieval occupation at Riddlesworth Hall. However, other aspects of the site do suggest that the area was subject to ploughing, and perhaps for an extended period. Both the machining finds and the flint assemblage from the test pit were distributed throughout the full depth of the subsoil (and into the topsoil), with no particular concentration

toward the base, and the material was far more worn and abraded than that preserved within the tree throws (see Appendix 1). This, allied to the depth of subsoil and the variation seen in this depth north to south, suggests that the area may have been ploughed, perhaps during the late 12th to 14th centuries, with plough ridges running west to east across the site.

The area may have been turned to pasture by the 15th century, and then to parkland with the rebuilding of the house in 1600. There are no finds from this period to suggest any other activities, and none until the later 19th century from the topsoil – two sherds of late stoneware and a few brick fragments.

7 Conclusions

The area that includes Riddlesworth - from Thetford in the west to Garboldisham and East Harling in the east - sits on a narrow tongue of land bordered to the north and south by the valleys of the Thet and the Little Ouse. This strip varies in width between 1 and 5km and is 12km long. There is a large ditch or dyke (like many of these features, known as the Devil's Ditch) 2km east of Riddlesworth that runs north to south and cuts off this tongue of land to the west.

There are numerous barrows along the ridge including the Seven Hills 6km to the west of Riddlesworth, and at least two more 1.5km due north on West Harling Heath. Important early archaeological excavations were undertaken in the late 1940s and early 50s on Micklemoor Hill at the north of the heath, overlooking the River Thet, exposing parts of a Late Bronze Age / Early Iron Age settlement site (Clark and Fell 1953). The bulk of the pottery here was of the Early Iron Age, much of it with intensive fingertip impressed decoration, and forms part of a recognised style group with material from other early excavations at Fengate and Cromer (Cunliffe 2005).

The entire area would have seen extensive settlement and funerary activity throughout the prehistoric period. The evidence uncovered at Riddlesworth, of a surface scatter of later Bronze Age material being partly captured and preserved within tree throws, is clearly part of this wider occupation. The quantity of flintwork present on the site is fairly substantial for the later Bronze Age; settlement sites would not generally produce this amount of worked flint. Conversely, there does not seem to be sufficient material to suggest the deliberate, structured, and possibly ritual, deposition seen elsewhere at this period. At recent sites in Cambridgeshire a pattern has emerged of deliberate deposition of very large quantities of late flintwork into monumental features such as shafts, ditched enclosures and barrows (e.g. Pollard 2002, Mortimer 2006). While it is possible that some monumental feature lies adjacent to the trenched areas, the Riddlesworth material is perhaps best seen as more of a surface scatter, and perhaps represents the remains of a

midden heap, or surface debris from settlement activity. If this were the case then it suggests that a settlement site may have been relatively close by.

The flint assemblage from the site represents the main focus of this report. There were no cut features recorded and none of the finds appear to have remained *in situ* as surface scatters. However, none of the material would have travelled far from its point of deposition and that trapped in the tree throws may have been incorporated relatively quickly after deposition.

While Bronze Age funerary evidence is relatively common across Norfolk, settlement evidence is rare, and this scarcity has received much recent attention (e.g. Ashwin 1996, Trimble 2006). It has been suggested that, through the Bronze Age, communities in Norfolk may have clung on to earlier more mobile modes of occupation, with sedentary settlements developing later than elsewhere in the region (Ashwin 2001).

The town of Scole lies in a similar situation to Riddlesworth, 20km to the east, on the north bank of the River Waveney. There is evidence at Scole (Wiltshire forthcoming) for large-scale tree clearance in the later Bronze Age (*c*. 14th century BC). While this would point to a mixed farming economy in the period, there is little evidence for contemporary settlement sites set within this farmed landscape. The evidence recorded at Riddlesworth, of Late Bronze Age surface scatters not clearly allied to earlier monumental features, could represent the remains of a settlement site of the period. It is possible that settlements at this time retained some of the impermanence of earlier occupations, and that this surface debris, a difficult thing to find in modern trench-based archaeology, represents all that remains of one such site.

Recommendations for any future work based upon this report will be made by the County Archaeology Office.

Acknowledgements

The author would like to thank Peter O'Connor, Bursar of Riddlesworth Hall School, and Paul Faldo of Kilngrove who jointly commissioned and funded the archaeological work. The JCB was provided by T&A Plant Hire and the project was managed by James Drummond-Murray. Site staff were the author and Louise Bush, who also undertook the EDM survey; the report was illustrated by Crane Begg, and edited by Elizabeth Popescu. Thanks also to Dennis Payne who metal-detected the trenches and spoilheaps.

The brief for archaeological works was written by Ken Hamilton of Norfolk Landscape Archaeology, who visited the site and monitored the evaluation.

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Appendix 1: Lithics

By Barry Bishop

1 Introduction

The evaluation recovered 141 struck flints and 215g of burnt flint fragments. This report concentrates on the assemblage's basic technological and typological characteristics in order to suggest a chronological framework (see Table 4). It includes some general, preliminary impressions and interpretations of the material, discusses its significance and recommends any further work required.

2 Quantification

Context	Context Type	Decortication Flake	Trimming Flake	Flake	Flake Fragment	Blade	Core	Conchoidal Chunk	Retouched	Context Total	Burnt Flint (no)	Burnt Flint (wt:g)
01	Tr1 TS	2		2	2					6		
02	Tr1 TS	1	2	5		1		2		11		
03	Tr1 TS	1		4	1				1	7		
04	Tr1 TS			3	2					5		
05	Tr1 SS				1					1		
06	Tr1 SS		2						1	3		
07	Tr1 SS		1	5	1			1		8		
08	Tr1 SS							1		1		
09	Tr2 TS			2						2	1	24
10	Tr2 TS	1			1		1			3		
11	Tr2 TS	1	1	1		1	1	1		6		
12	Tr2 TS	1		1						2	1	27
13	Tr2 SS		1	1		2				4		
14	Tr2 SS	1	1	7			1	1		11		
15	Tr2 SS					1				1		
16	Tr2 SS				1		1			2		
17	Tr2 SS	1								1		
18	Tr2 TS			1						1		
19	Tr2 TS			1						1		
20	Tr2 TT 31	2		2				1		5		
21	Tr3 TT 21		1	7	1			1		10	1	38
22	Tr3 TT 22	5		8	1	1	4	2		21	12	75
23	Tr5 SS								1	1		
25	Tr2 TP TS			4	1			1		6		
26	Tr2 TP SS	1		1	3					5		
27	Tr2TP SS	1	1	4	2			1	1	10		
28	Tr2 TP SS		2		1					3		
29	Tr3 TT 29			1				1		2		
30	Tr3 TT 31					1				1	1	51
34	Tr2 TT 34			1						1		
Total		**18**	**12**	**61**	**18**	**7**	**8**	**13**	**4**	**141**	**16**	**215**
%		**12.8**	**8.5**	**43.3**	**12.8**	**5.0**	**5.7**	**9.2**	**2.8**	**100**		

Table 4: Quantification of lithic material by context

The struck flint represents a moderate sized assemblage of 141 worked pieces and a small quantity of burnt flint. The struck flint was

mostly recovered from top- and subsoil horizons in Trenches 1 and 2 (42 and 48 pieces respectively) and from tree-throw features in Trenches 2 and 3 (40 pieces). A single piece, possibly relating to a different period of flintworking from the remainder, was recovered from subsoil horizons in Trench 5.

3 Burnt Flint

Small quantities of burnt flint were recovered from topsoil horizons in Trench 2 and three of the tree-throw features in Trench 3. This was variably burnt but all to the degree that it had changed colour and become 'fire-crazed', a result of being heated to a high temperature and consistent with being incorporated into a hearth, although the quantities were too small to indicate any deliberate production of burnt flint at the site. A few struck flints had also been burnt, probably from being accidentally incorporated into hearths.

4 Struck Flint

Raw Materials

The assemblage contained pieces manufactured both from a glassy and a matt translucent black flint, the latter containing variable, but often substantial, proportions of coarser-grained opaque grey inclusions. It is uncertain whether these represent genuinely different flint types or merely variations within the nodules themselves, as flint nodules from the Norfolk chalklands are sometimes inclusion-free in their outer parts and become chertier and greyer towards the middle. A few flakes were made from a translucent brown flint. A comparable range of thick but weathered chalky cortex and ancient thermal scars were present on all of the types identified, which similarly consisted of moderately sized, thermally shattered, angular nodules. Such material is present as peri-glacially affected mass wastage deposits located on and around chalk hills (Gibbard 1986) and would be easily obtainable in the vicinity of the site.

Condition

The assemblage varied in its condition. The material from the top- and subsoil horizons was frequently edge-chipped and abraded, consistent with having spent considerable time in an active burial environment, such as a ploughzone, whilst that from the tree-throws was predominantly in a good sharp condition and was likely to been deposited not long after its manufacture.

Description

The bulk of the assemblage was technologically homogeneous and characteristic of industries dating to the later 2nd and 1st millennia BC. A few pieces were present that may indicate sporadic flintworking at the site during earlier periods. Two systematically produced blades were present which may indicate low-key activity at the site during the Mesolithic or Early Neolithic.

The topsoil in Trench 1 produced a narrow flake with invasive 'thinning' type retouch over much of both its dorsal and ventral surfaces. Its form is rather unusual but the use of bifacial invasive retouch for non-projectile points is most characteristic of later Neolithic or Early Bronze Age industries, and possibly of a similar date to this was the retouched implement from Trench 5, the only struck piece from this location, which consisted of a narrow flake with semi-invasive retouch near its distal and which may have been used as a knife. Some of the less technologically diagnostic debitage may also belong to earlier periods of flintworking at the site although it is unlikely that any substantial or significant quantities are present.

The remaining material consisted primarily of knapping waste and included high proportions of decortication and trimming flakes and conchoidal chunks, indicating that the full knapping sequence was represented. Flakes varied in shape and size but tended to be thick and short. They mostly exhibited wide plain striking platforms and pronounced bulbs of percussion, and hinged distal terminations were frequently represented. With the exception of the two mentioned above, the remaining blades may have been fortuitously produced during *ad hoc* flintworking, rather than being the products of a controlled, blade-based reduction strategy.

Several of the flakes, notably those from the top- and subsoil horizons, showed edge blunting and damage which, although conceivably from deliberate utilization, could not be distinguished from natural damage. Four convincingly retouched pieces were identified, representing less than 3% of the total. In addition to the implements described above, these both consisted of two scrapers with rather crudely and erratically executed steep retouch around their distal ends. Cores formed nearly 6% of the total assemblage. These all consisted of angular chunks which usually had only a few flakes removed before being discarded. This was usually prompted by the core shattering along pre-existing thermal flaws, although around half of them exhibited multiple incipient points of percussion suggesting that these may have been discarded when the platforms failed to produce further flakes. They varied in weight from 24g to 68g and at least on one may have been used as heavy duty cutting or scraping implement.

5 Discussion

The assemblage by itself was not particularly large but considering the limits of the areas investigated, it would appear that a sizeable quantity of lithics had been deposited at the site. The material was concentrated in tree-throw hollows and soil horizons in Trenches 1, 2 and 3, with 24 pieces being recovered from a 1m square test-pit alone.

A few earlier pieces suggest episodic but low-level flintworking at the site between the Mesolithic and Early Bronze Age, but the bulk of the assemblage can be dated on technological grounds to the Middle Bronze Age or later. During these periods, flintworking tends to be casual and opportunistic, and flint was generally only knapped when needed, used for the specific purpose in mind and readily discarded (Young and Humphrey 1999). Worked flint of these periods tends, therefore, to be recovered only in small quantities and scattered around settlements and field-systems. However, it is becoming increasingly apparent that in some circumstances larger and more concentrated accumulations of worked flint were being deposited, nearly always in what may be considered ceremonial contexts (e.g. Drewett 1982; Smith 1987; Herne 1991; Seager Thomas 1999; Greatorex 2001; Pollard 2002). In these cases, the worked flints recovered tend to number in their thousands, they often appear to have been made specifically for deposition rather than use and they are often deposited in terminal contexts or recuts of earlier monuments or features. In this light, the large quantities of struck flint potentially present at this site may have fulfilled similar roles. The potential quantities are larger than may be expected from casual or domestic use and the very low proportions of retouched pieces may indicate that the production of useable implements was not the primary concern of the knappers. Unfortunately, the limits of the present investigations preclude testing these possibilities or fully realizing the contextual associations under which the flintwork was created and deposited.

6 Recommendations

The assemblage is of some significance in that it indicates sporadic flintworking at the site during the Mesolithic/Early Neolithic and the Later Neolithic/Early Bronze Age and, perhaps more significantly, indicates a sustained phase of flintworking and deposition at the site during the later 2nd or early 1st millennium BC. A brief description of the flintwork should therefore be submitted to the local Historic Environment Record and a report summarising that recorded here should be compiled and included in any published account of the investigations.

Should further fieldwork be considered, attention should be drawn to obtaining as large and as closely contextually defined lithic assemblage as possible, in order to attempt to understand the nature,

extent and chronology of any prehistoric lithic-based activities, particularly those relating the production and discard of the later prehistoric assemblages. Should sufficient quantities of lithic artefacts be procured from any future work, full metrical, typological and technological analysis may be warranted and, through consideration of other recovered artefact groups and environmental based evidence, this information should be incorporated into establishing as detailed and complete an understanding as possible of the prehistoric exploitation of the area.

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Appendix 2: Prehistoric pottery

By Sarah Percival

Forty two sherds of pottery weighing 137g were recovered from four contexts. All the sherds are of flint tempered fabric and are undecorated. All the pottery was recovered from the fills of a sequence of three intercutting tree throws. The assemblage is of later Bronze Age or possibly Early Iron Age date.

1 Fabric

Three fabrics were identified. All contain flint inclusions in varying quantities. The predominance of flint temper is common to the majority of later Bronze Age pottery assemblages from Norfolk (Percival 2000, 206). Other inclusions commonly found in later Bronze Age pottery from Norfolk include shell and grog (Ellison 1988). Flint and grog tempered fabrics, similar to fabric F3, were also found at Grimes Graves (Ellison 1988, 410). No shell tempered fabrics were present.

Fabric	*Fabric Description*	*Quantity*	*Weight (g)*
F1	Common, medium angular flint (5-8mm), moderate rounded sand; occasional quartz sand	3	20
F2	Common, small angular flint (2-5mm), moderate rounded sand.	28	73
F3	Common, small angular flint (2-5mm), occasional quartz sand; some grog.	11	44
Total		**42**	**137**

Table 5: Quantity and weight of pottery by fabric

2 Form

The assemblage is mostly composed of undecorated body sherds. Two small base sherds were present. One is a simple base angle (21) and the other has a slight pinched out foot (22).

3 Discussion

The small size of the assemblage and lack of diagnostic sherds prohibits identification of the exact chronology of the pottery. However the profuse flint and grog tempered fabric coupled with the presence of flat base sherds perhaps suggests a later Bronze Age date for the sherds.

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Appendix 3: Environmental remains

by Rachel Fosberry

1 Introduction and methods

Two bulk samples were taken from features identified as tree throw fills within the evaluated areas of the site in order to assess the quality of preservation of plant remains and their potential to provide useful data as part of further archaeological investigations.

Ten litres of each sample were processed by tank flotation for the recovery of charred plant remains, dating evidence and any other artefactual evidence that might be present. The flot was collected in a 0.5mm nylon mesh and the residue was washed through a 1mm sieve. Both flot and residue were allowed to air dry. The dried residue was passed through 5mm and 2mm sieves and a magnet was dragged through each resulting fraction prior to sorting for artefacts. Any artefacts present were noted and reintegrated with the hand-excavated finds. The flot was examined under a binocular microscope at x16 magnification and the presence of any plant remains or other artefacts are noted on Table 6.

2 Results

Sample Number	Context Number	Cut Number	Flot contents	Residue contents
1	22	22	Sparse charcoal only	Flint flakes
2	20	31	Ribwort plantain, cereal grain fragment	Flint debitage, burnt flint

Table 6: Flot and residue results

Plant macrofossils

Preservation is by charring and sparse charcoal fragments are present in both of the samples. Sample 2, context 20 contained a single charred seed of ribwort plantain (*Plantago lanceolota*) and a fragment of cereal grain that was too degraded for identification.

3 Conclusions and Recommendations

The general lacks of plant remains does not aid interpretation of the features. No further work is recommended.

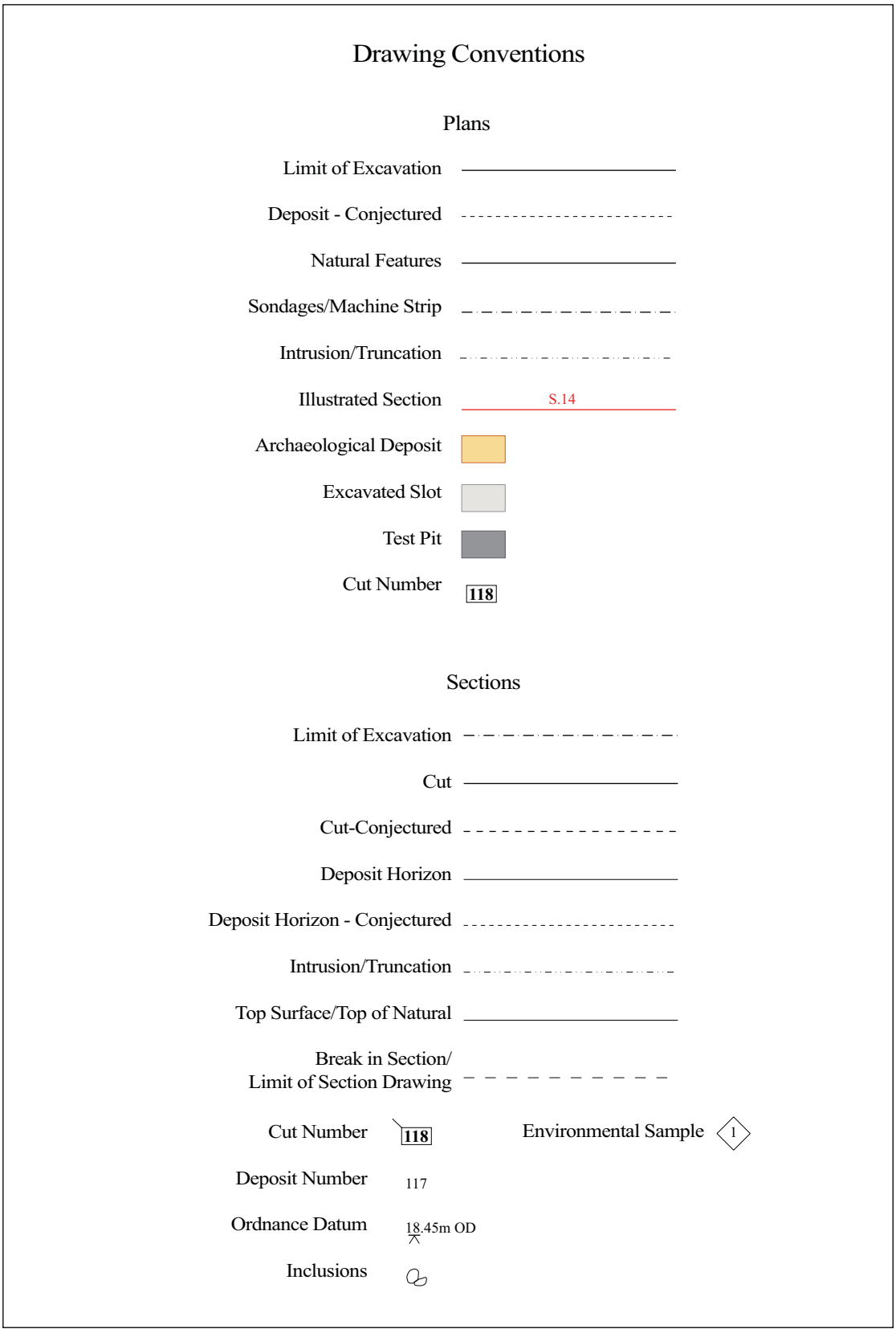


Figure 1: Drawing Conventions

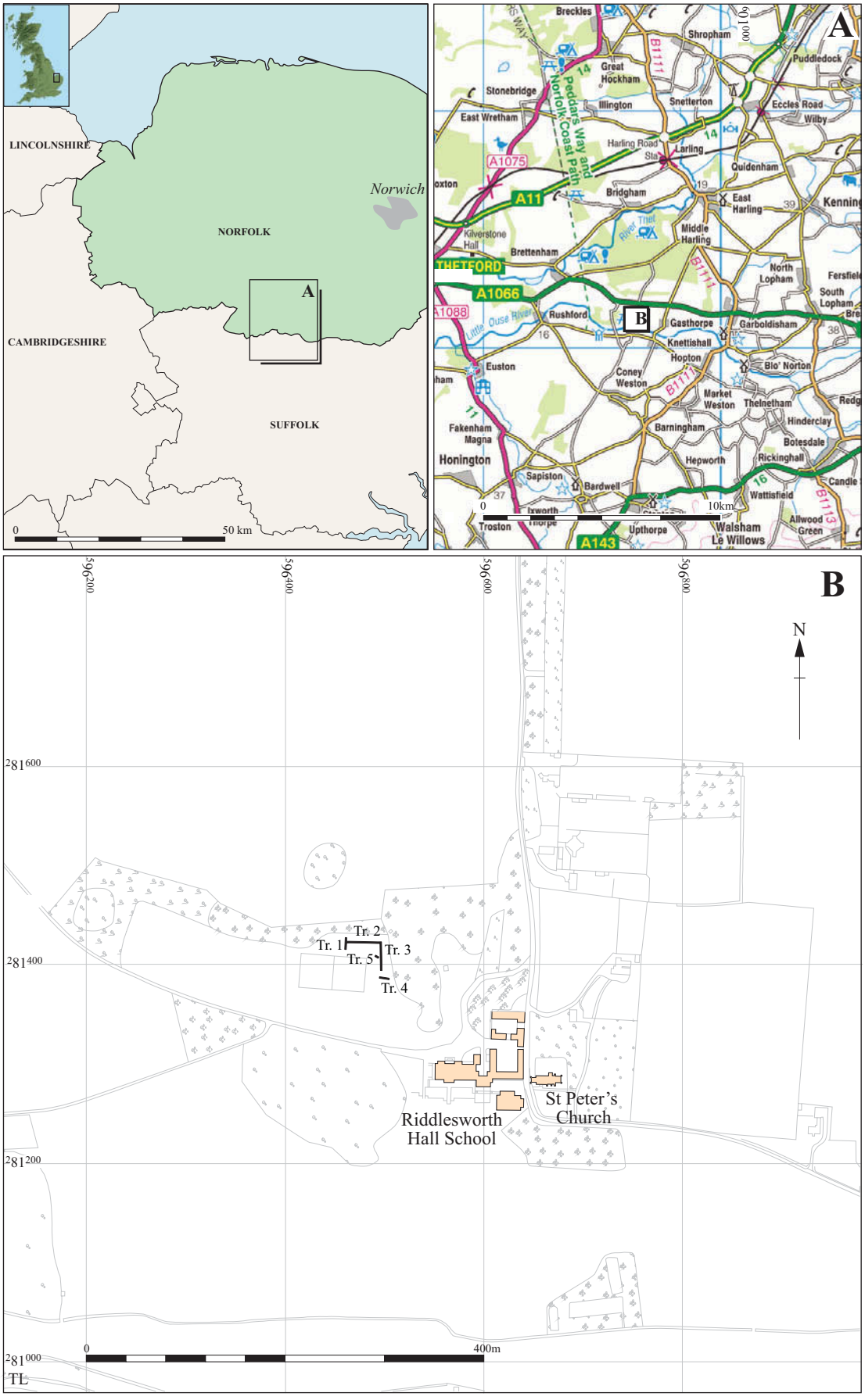


Figure 2: Location of trenches (black)

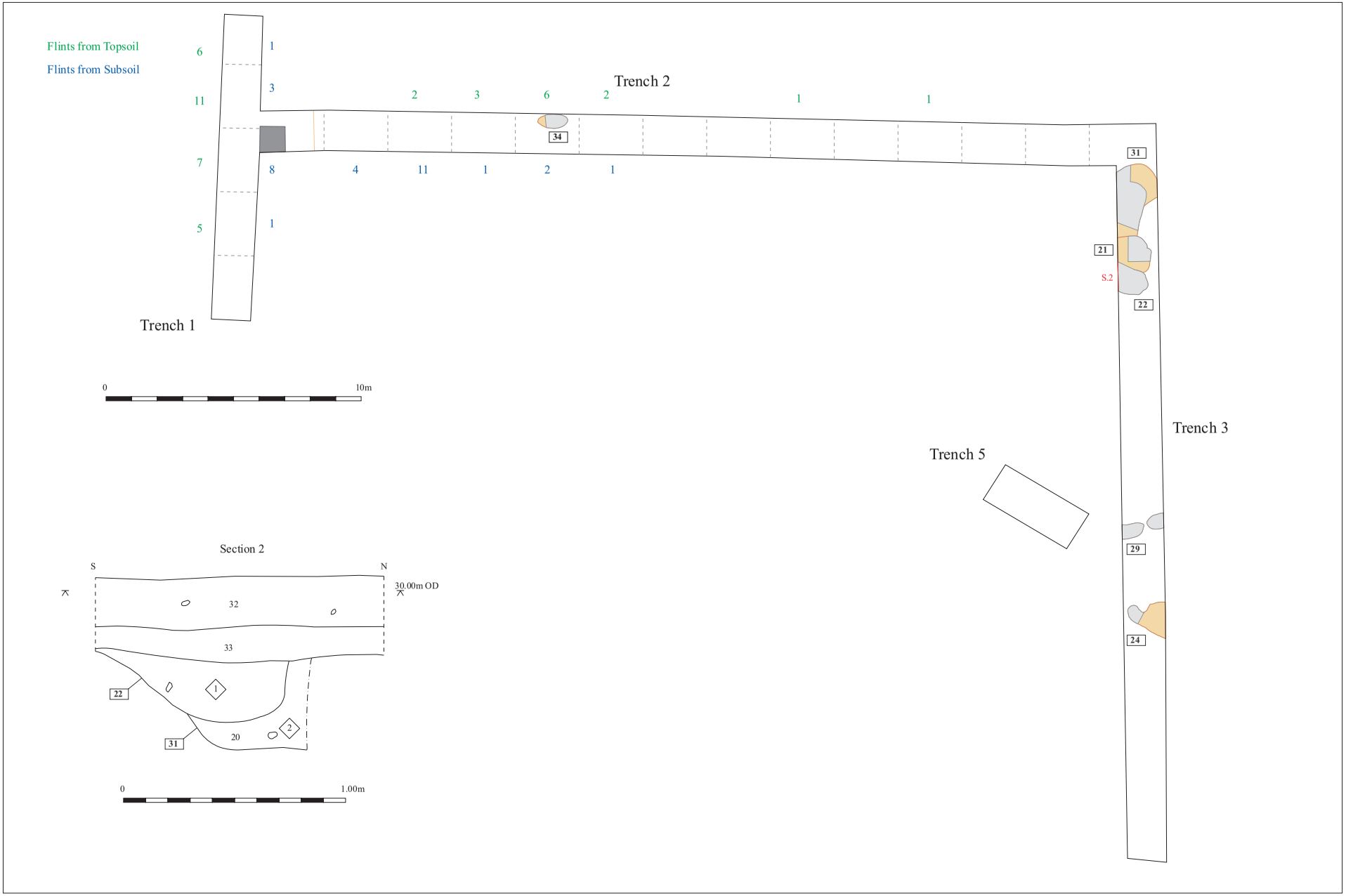
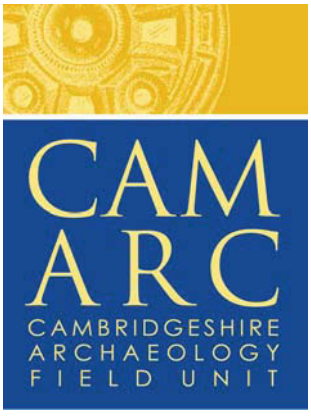


Figure 3: Trench plan and section



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