

**LAND ADJOINING 80 WISBECH ROAD, LITTLEPORT,
CAMBRIDGESHIRE**

ARCHAEOLOGICAL EXCAVATION
RESEARCH ARCHIVE REPORT

ARCHAEOLOGICAL SOLUTIONS LTD

**LAND ADJOINING 80 WISBECH ROAD, LITTLEPORT,
CAMBRIDGESHIRE**

**ARCHAEOLOGICAL EXCAVATION
RESEARCH ARCHIVE REPORT**

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NGR: TL 5608 8732	Report No. 3459
District: East Cambridgeshire	Site Code: AS905
Approved: Claire Halpin MIFA	Project No. 2466
Signed:	Date: May 2009

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OASIS SUMMARY SHEET			
Project name	<i>Land adjoining 80 Wisbech Road, Littleport, Cambridgeshire: Archaeological Excavation Research Archive Report</i>		
<i>Between June 2005 and February 2008, Archaeological Solutions carried out two stages of archaeological investigation on land adjoining 80 Wisbech Road, Littleport, Cambridgeshire (NGR TL 5608 8732), in advance of residential development. The site encompassed part of the former Fen edge on the north side of Littleport 'island'.</i>			
<i>The investigations revealed three phases of activity, focused on the higher, drier southern part of the site. Scattered struck flint indicated sporadic activity during the early Neolithic (Phase 1), when this area was probably dry. In the late Bronze Age/ early Iron Age (Phase 2), numerous shallow pits, some containing pottery and occasional daub fragments, suggest the site lay within paddocks on the periphery of a settlement further to the south. Peat growth in the north of the site was well-developed by this time, having begun around the middle Bronze Age. Remains of two ditches, the larger of which ran down into the fen, suggest that similar agricultural land use continued into the late Iron Age (Phase 3). Part of a ?curated Mesolithic/ Neolithic quartzite pebble hammer was found in the upper fill of the larger ditch, close to its terminus. This might represent a deliberately-placed 'votive' deposit. Its deposition may have been associated with the rising water table, which was causing flooding on the site around this time and probably led to its abandonment soon after. Column samples contained well-preserved pollen evidence for later prehistoric environmental change and agriculture in this part of Littleport.</i>			
Project dates (fieldwork)	<i>June 2005; December 2007 to February 2008</i>		
Previous work (Y/N/?)	<i>Y</i>	Future work (Y/N/?)	<i>N</i>
P. number	<i>2466</i>	Site code	<i>AS905</i>
Type of project	<i>Archaeological excavation (following desk-based assessment and trial trench evaluation)</i>		
Site status	<i>None</i>		
Current land use	<i>Formerly pasture; now new residential dwellings</i>		
Planned development	<i>Residential dwellings with associated access routes/ services</i>		
Main features (+dates)	<i>Late Bronze Age/ early Iron Age pits and postholes (c. 1000 – 600 BC), two late Iron Age ditches (c. 100 BC – AD 43)</i>		
Significant finds (+dates)	<i>Residual early Neolithic struck flint, late Bronze Age/ early Iron Age pottery, late Iron Age pottery, residual/ curated Mesolithic/ Neolithic quartzite pebble hammer fragment, later prehistoric pollen sequence (from column samples)</i>		
Project location			
County/ District/ Parish	<i>Cambridgeshire</i>	<i>East Cambridgeshire</i>	<i>Littleport</i>
SMR for area	<i>Cambridgeshire HER</i>		
Post code (if known)	<i>N/A</i>		
Area of site	<i>Total development area = 1.2ha; excavation area=516m²</i>		
NGR	<i>TL 5608 8732</i>		
Height AOD (max/ min)	<i>1.02m OD (Trench 6; south end) to 0.11m OD (Trench 5; west end)</i>		
Project creators			
Brief issued by	<i>Cambridgeshire Archaeology Planning and Countryside Advice (CAPCA)</i>		
Project supervisor/s (PO)	<i>Jon Murray</i>		
Funded by	<i>Cheffins/ Matthew Homes</i>		
Full title	<i>Land adjoining 80 Wisbech Road, Littleport, Cambridgeshire: Archaeological Excavation Research Archive Report</i>		
Authors	<i>Tom Woolhouse & Richard Greene</i>		
Report no.	<i>3459</i>		
Date (of report)	<i>May 2009</i>		

OASIS

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LAND ADJOINING 80 WISBECH ROAD, LITTLEPORT, CAMBRIDGESHIRE: ARCHAEOLOGICAL EXCAVATION RESEARCH ARCHIVE REPORT

SUMMARY

In June 2005 and between December 2007 and February 2008, Archaeological Solutions carried out two stages of archaeological investigation (a trial trench evaluation and a small open area excavation) on land adjoining 80 Wisbech Road, Littleport, Cambridgeshire (NGR TL 5608 8732), in advance of residential development. Prior to large-scale drainage works in the early to mid 17th century, Littleport would have been an 'island' of relative high ground surrounded by fen. The site itself lies at between 0.00m and just over 1.00m OD, encompassing part of the former fen edge on the north side of Littleport. The principal aims of the investigations were to identify and characterise any prehistoric settlement remains on the fen edge and to use the full spectrum of appropriate scientific techniques to reconstruct the past hydrology and environment of the site.

The investigations revealed three phases of prehistoric activity, all focused on the higher, drier ground in the south of the site (around Trench 6). A scatter of mainly residual struck flint indicated occasional/ seasonal activity during the early Neolithic period (Phase 1). Palynological evidence indicates that the site would probably have been dry land at this time. A cluster of shallow pits and postholes attested to limited activity during the late Bronze Age/ early Iron Age (Phase 2). Small quantities of pottery and occasional daub fragments were present in a few of the pits and hollows, but the general paucity of finds suggests that the site lay within an area of pasture/ paddocks on the periphery of a settlement located further to the south, on the high ground of Littleport 'island'. In the late Iron Age (Phase 3), two ditches crossed the site. The smaller ditch ran on a meandering east to west alignment and probably followed the contemporary fen edge; the larger ran northwards down into the fen. Part of a broken Mesolithic/ Neolithic quartzite pebble hammer was found in the upper silt fill of the ditch, close to its northern terminus. Although the object might represent a chance inclusion of residual material within the ditch fill, it is considered more likely that it was a deliberately curated object, which was carefully placed in the ditch as a 'votive offering'. The 'offering' may have been connected with the rising water table at the site, which appears to have been causing flooding by this time (the late Bronze Age/ early Iron Age and late Iron Age features were all sealed by a silt layer) and probably led to the abandonment of the site soon after. Deliberate deposition of valued objects in watery contexts, often for seemingly ceremonial, symbolic or religious motives, is well-attested at other Fenland sites such as Flag Fen and Bradley Fen.

Pollen from column samples demonstrates that in the late Neolithic/ early Bronze Age, the local environment was one of river floodplain with grasses, sedges and probably some alder growth along the fen edge. Local high ground supported lime woodland. From around the middle Bronze Age, lime declined, almost certainly in part due to anthropogenic woodland clearance for

agriculture. This was followed by a more stable phase of reed swamp and peat growth in willow-dominated fen carr woodland. Although a peat sample sent for radiocarbon analysis returned a modern (post-AD 1950) date (presumably due to contamination), late Bronze Age pottery was recovered from the upper peat, suggesting that peat growth was already well-established by this time. This stable willow carr phase was terminated by a resumption of alluvial sediment deposition, with strong signs of saline conditions reaching this part of the fen edge. This was probably the result of ponding-back set in motion by the (probable) late prehistoric final increase in regional sea level. There was then a return to freshwater fen conditions, dominated by grasses, sedges and other reed swamp taxa. After woodland clearance, the pattern of later prehistoric agricultural activity remained much the same for the duration of the sediment record: grassland, probably rough pasture, was important in areas adjacent to the fen edge, while a consistent record of cereal pollen indicates that wheat, barley and other cereals were cultivated on the better-drained soils on the high ground of the island. In the late Iron Age (Phase 3) and possibly also during earlier periods (Phase 2), the site is likely to have been used for pasturing livestock by the inhabitants of the (previously-excavated) hilltop settlement at Highfield Farm. A driveway excavated at Highfield Farm ran north-westwards towards the fen edge, providing a physical link between the settlement and pasture/ paddocks in the vicinity of the present site.

1 INTRODUCTION

This document is the Research Archive Report for archaeological investigations undertaken by Archaeological Solutions Ltd (AS) on land adjoining 80 Wisbech Road, Littleport, Cambridgeshire (NGR TL 5608 8732) (Figs. 1 & 2; Plates 1 & 2) between June 2005 and February 2008. The investigations, comprising a trial trench evaluation (June 2005) and an open area excavation (December 2007 to February 2008), were commissioned by Cheffins/ Matthew Homes (respectively) prior to redevelopment of the site and construction of residential housing with associated access routes and services (Planning Ref. E/07/00298/FUM). The archaeological investigations were conducted in accordance with briefs issued by Cambridgeshire Archaeology Planning & Countryside Advice (CAPCA, dated 07/02/05 and 14/09/07) and specifications compiled by AS (dated 18/02/05 and 24/09/07). The following report has been compiled in accordance with EH MAP 2, Section 7 and Appendix 6. It follows the Trial Trench Evaluation Report (Grassam, Nicholson and Weston 2005), the Interim Site Narrative (Greene 2008) and the Post-Excavation Assessment and Updated Project Design (Sparrow and Woolhouse 2008). This report comprises the analytical reports which have arisen from post-excavation analysis, as well as plans/ section drawings (Figs. 1 - 8) and illustrations drawn during finds analysis (Fig. 9). The significance of the site is discussed, with reference to relevant comparative sites and synthetic studies. Full details of the background to the project, and of all features and contexts revealed by the investigations, can be found in the Desk-Based Assessment, Evaluation Report and Interim Site Narrative (a

catalogue of context descriptions is also included in Appendix 2 of this report). Supporting data can be found on the accompanying CD.

2 BACKGROUND

2.1 Topography and geology

Figs. 1 & 2; Plates 1 & 2

Littleport is located c. 5.6km north-east of Ely. The site is situated on the west side of Littleport, on the north side of Wisbech Road; a small portion of the site fronts directly onto Wisbech Road. The site is bounded to the north by Blackbank Drove, to the west by a modern housing development and to the east by gardens to the rear of Nos. 74 and 76 Wisbech Road.

The modern site lies at between 1.02m and 0.11m OD, on the northern edge of what was once a dry 'island' surrounded by fenland. The site slopes down towards the former fen to the north. The trial trench evaluation (see below) showed that the original pre-fen ground surface (either Kimmeridge Clay or mixed clay/ glacial sand and gravel drift) lies at between 0.39m OD in the south of the site (southern end of Trench 6) and -1.54m OD in the central northern area (northern end of Trench 4), which would have originally been a natural low point in the site's micro-topography. Littleport 'island' itself reaches a high point of around 20m OD some 1.5km to the south, just south of Highfield Farm.

Littleport 'island' is comprised of solid Kimmeridge Clay deposits (BGS 1985), overlain by a tongue of boulder clay till (extending north-westwards from the modern core of the town) and capped with glacial sand and gravel (BGS 1991). Soils on the higher ground of the island, above the fen edge, belong to the Ashley association. These generally comprise slowly-permeable fine chalky tills, which are (today) considered suitable for growing winter cereals, as well as supporting some short-term grassland (SSEW 1983a & b). To the north of the site are marine alluvium and fen peat of the Downholland 1 association. The channelled course of the River Great Ouse runs c. 1.5km to the east of Littleport 'island', with the Holmes River (a tributary of the Great Ouse) lying c. 1km to the east of the site. The winding roddon of the Old Croft River, once the main watercourse draining the south-eastern Cambridgeshire Fens, can still be traced in the pattern of field boundaries to the north of Littleport.

As noted above, until large-scale drainage works in the early to mid 17th century, Littleport would have been an 'island' surrounded by fen, with the site itself lying on the former fen edge at the north side of the island. Current knowledge regarding the chronology and development of the surrounding fen is discussed by Hall in the Fenland Survey volume covering the Isle of Ely and Wisbech (1996, 19); the following is a summary of the information therein. Peat formed early in the deep channels of the Great Ouse and Little Ouse. Excavations in 1934 at Peacock's Farm, at the eastern edge of the parish, showed that the original ground surface was about -6m OD and subsequent

radiocarbon determinations gave dates of 8620±160 BP to 4800±120 BP (8015-7305 and 3930-3340 cal. BC, respectively) for the onset of peat growth. Radiocarbon measurements from basal peat (taken from just below the interface with the overlying layer of marine clay) at Site 52 (see below), also near Peacock's Farm, gave a date of 4350±60 BP (3295-2785 cal. BC), indicating when marine flooding reached this site. Saltwater conditions continued until c. 2400 BC, depositing grey 'fen clay'. The marsh/ mudflats were drained by a series of creeks and channels forming a dendritic pattern based on the Old Croft River. After the cessation of this first stage of marine conditions, there was in-growth of peat over the whole area. A second, lesser, flooding in the middle Iron Age (dated to 2255±60 BP; 405-180 cal. BC at Welney), deposited coarse and fine silts mainly along the course of the Old Croft River and around Butchers Hill, in the north-west of the parish. The only other mineral deposits are shell marls deriving from freshwater lakes, occurring in the Little Ouse area and in Redmere. An Iron Age or Roman date has been suggested for these meres, and a mechanism of formation in which water backed up against the Little Ouse roddon. Recent work has given a date of 55-320 cal. AD from immediately beneath the mere sediments.

2.2 Archaeology and history

Figs. 3a & 3b

2.2.1 Mesolithic and Neolithic (c. 12,000 – 2100 BC)

Mesolithic finds are comparatively widespread along the south-eastern Fen edge (Reynolds 2000, 6). Mesolithic flints have been found in the east of Littleport at Fenland Survey Site 52 (Hall 1996, 19; Fig. 3a). They were buried under peat, suggesting that this part of the Fenland Basin was still dry for much of the Mesolithic. Some 15 pre-Bronze Age sites, several with large quantities of lithics, have been identified on small rises/ islands of sand in the south-east of the parish (Hall 1996, 20). These Littleport sites mirror the intense prehistoric activity on the hummock-and-hollow landscape of the south-eastern Fen edge around Hockwold and Mildenhall. Mesolithic material and early Neolithic Bowl pottery have been recorded underneath the marine clay at Fenland Survey Sites 5 and 6, while Beaker and early Bronze Age pottery occurred on top of the marine clay at these sites (Clark *et al.* 1935). Also in the east of the parish, Fenland Survey Site 30, at Letter F Farm, lies on another sandy knoll and has produced Mesolithic flints from the pre-fen ground surface (Hall 1996, 20). Other sand rises in this area have also produced Mesolithic and some Neolithic struck flint (e.g. Fenland Survey Sites 2, 3 and 27-9). Concentrations of early flints are rare elsewhere in the parish, although a small site was identified at Apes Hall (Sites 21 and 26), 3km north of the present site, during the Fenland Survey fieldwalking. Where exposed, the pre-Flandrian land surface across much of Littleport has a sparse background scatter of flints (Hall 1996, 20). Neolithic and Bronze Age flints were also recovered to the north and west of Littleport 'island' during a programme of targeted fieldwalking along the Ely Bypass (e.g. HER 07191, 07192, 07193B and 07239) and struck flint of similar date has been found during trial trenching at Parson's Lane (Cutler 1996). Chance finds around Littleport include a Neolithic flint sickle from just north of the modern town

centre (HER 07233) and a ?Mesolithic pebble macehead (HER 07218) from the high ground of the island just south of Highfield Farm.

An archaeological excavation carried out in advance of development at Highfield Farm, on the higher ground of the fen island (between 6m and 19m OD) (just over 1km south of the present site), has revealed evidence of activity from the early Neolithic period onwards (Dymond 1999; Holt 2008). The earliest manmade features identified were scattered discrete early Neolithic pits containing pottery and animal bone, including bones of red deer and other wild animals. These were followed by a single pit containing Peterborough Ware, thought to represent waste from an episode of short-term occupation.

2.2.2 Bronze Age to middle Iron Age (c. 2100 – 100 BC)

By the Bronze Age, most of the parish would have been under peat fen (the projected position of the Bronze Age fen edge is shown on Fig. 3a). An early Bronze Age site has been partially investigated at Plantation Farm (Site 32) in the east of the parish (Hall 1996, 20; Clark *et al.* 1933; Fig. 3a). The site would have occupied a sandy ridge surrounded by peat fen; occupation debris on the sand included pottery sherds, bone, charcoal and struck flint (including plano-convex knives and barbed-and-tanged arrowheads). Two sparse scatters of Bronze Age flint were noted on the high ground of Littleport island itself during the Fenland Survey (Sites 17 and 18; Hall 1996, 25; Fig. 3a). Butchers Hill (Site 33), in the far north-west of the parish, had a dark occupation area that produced numerous late Bronze Age sherds.

At Highfield Farm, a number of late Neolithic/ early Bronze Age pits containing Beaker pottery, flint-working debris and small quantities of cattle and pig bone have been interpreted as the possible remains of 'ritualised feasting' (Holt 2008, 13). A possible ditched sub-rectangular enclosure is also tentatively assigned to this phase. Low-level middle Bronze Age activity at the site was followed by several late Bronze Age to early Iron Age ditches, which may represent parts of an enclosure. Rubbish pits, a large wattle-lined pit and possibly structural postholes were also present. Only a single middle Iron Age pit was found, but this contained a large assemblage of pottery (104 sherds), suggesting that activity may have simply shifted away from the site slightly rather than declining at this time.

2.2.3 Late Iron Age and Romano-British (100 BC – AD 410)

The principal phase of activity at Highfield Farm was in the late Iron Age and Romano-British period, when the site was occupied by part of a rural settlement which continued up the higher ground to the south. This comprised substantial rectilinear ditched enclosures which surrounded possible posthole structures or fence-lines, a covered working area, pits containing domestic and butchery waste, and larger pits, perhaps intended to collect water either for the livestock or for use in the working area (Holt 2008, 17). On the hillside and lower slopes to the north and west were field systems and stock enclosures, also picked up during a previous archaeological

evaluation in the area (Cutler 1996). The settlement spanned the late Iron Age to the 4th century AD, peaking in the 3rd century (Holt 2008, 107-8). It is thought to have been used for stock-rearing on a fairly substantial scale, perhaps to provide food for the inhabitants of the Roman saltern sites along the Old Croft River (Holt 2008, 17 & 107-8).

Only two Iron Age sites were found in the parish during the Fenland Survey fieldwalking: a large dark area of burnt flint and early Iron Age sherds at Butchers Hill (Site 34) and an Iron Age to Roman site (53) on the north-western extremity of the main fen island (Hall 1996, 25). Apart from the high ground, the Iron Age landscape would have been primarily peat fen with active watercourses in the area near the Old Croft River.

Despite the paucity of Iron Age features and finds in Littleport, excavations in the wider south-eastern Fenland have identified activity during this period. Waterlogged evidence recovered from Cottenham (Evans 1998) has been dated to the 1st millennium BC and has potential to inform upon the fenland landscape of the area during later prehistory. Prickwillow Road, Ely, revealed evidence dating from the early Iron Age to the late Roman period (Atkins and Mudd 2003). The early Iron Age activity was represented by a small enclosure, which was enlarged during the middle Iron Age. The late Iron Age evidence was less substantial, comprising two ditches and several pits (similar to the results of the present excavation).

There is widespread evidence of Roman activity along the Old Croft River and Camel Road, to the north and north-east of the site. 'Camel Road' is thought to be a surviving British Celtic place-name meaning 'Crooked Drove'. Roman activity in the area is largely associated with salt extraction from the brackish tidal waters of the Old Croft River and its tributaries. Romano-British saltern sites are known c. 400m north-east (HER 07261), 300m east (HER 10939) and 1km north-west (HER 07197) of 80 Wisbech Road, with a concentration of similar sites further to the north (Hall 1996, 25; Fig. 3b). Sites 36-40, at the northern edge of the parish, form the largest cluster of these saltern sites. Site 36 was investigated and recorded following ploughing in the late 1940s and was found to have numerous raised and ditched house platforms, with an associated field system close by (Fowler 1949).

Approximately 450m east of the present site, excavations near Camel Road in 1997-8 revealed part of a long-lived and probably high-status Romano-British site spanning the early 2nd to early 4th centuries AD (Roberts 1997; Macaulay 2002). Eight phases of activity were identified. Particularly notable features included several channels or 'tanks' thought to have been used in an industrial process such as salt-making (in Phase 2), a roundhouse and associated boundary ditches (in Phase 4) and a large enclosure and possible droveways, suggesting a shift away from industrial activity and towards pastoral use in the final period of occupation (Phase 8). The evidence suggests that this was part of a larger Roman settlement extending onto the higher ground to the south. The range of pottery and glass vessel fragments, as well as the presence of unusual lime-plastered daub, suggests high-status occupation, perhaps the presence of a villa controlling the salt-making

activities in the vicinity, or a *mansio* (Macaulay 2002, 49-50). This would be highly significant for the interpretation of the Roman Fenland as forming a large Imperial estate (Jackson and Potter 1996, 688-9; Salway 2001, 144-6).

Residual Roman brick and tile fragments, including one with slag adhering, were recovered from the topsoil during a nearby evaluation at 72 Wisbech Road (Vaughan 2000). Roman Akeman Street may have followed the line of Ely Road, c. 800m east of the site, to the Old Croft River.

2.2.4 Anglo-Saxon and medieval (AD 411 – 1539)

Until recently, no Anglo-Saxon sites were known in Littleport, but an early Anglo-Saxon inhumation cemetery has recently been excavated on the high ground of the 'island', at Highfield Farm (Holt 2008). Littleport was acquired by Ely monastery at an unknown date and in 1086, Domesday Book recorded the whole parish and manor as being in demesne. The settlement was probably based on a hithe where the Old Croft River runs close to the island, some 600m east of the present site (Hall 1996, 27, 28 fig. 15).

2.3 Excavation strategy and methodology

The principal aim of the investigation was to identify and characterise any prehistoric remains on the site and to contextualise them against other prehistoric sites/ finds in Littleport. Another key aim was to use the full spectrum of appropriate scientific techniques to shed light on the origins/ date of the fen deposits at the site and to facilitate reconstruction of the past environment.

Seven trial trenches were excavated in positions around the site, providing a 5% sample of the total area (Fig. 2). Archaeological features were only revealed in Trench 6, towards the higher ground in the far south of the site. Following the evaluation, an open area around Trench 6, measuring 30 x 20m, was stripped of topsoil using a 360° mechanical excavator fitted with a toothless ditching bucket, operating under close archaeological supervision. Nineteen 1x1m test pits, positioned at regular 5m intervals, were then hand-excavated through the underlying layers, down to the archaeological horizon (L1009=L2004). The aim was to better characterise the nature of the deposits, particularly the possible flood/ inundation layer (L1012=L2003) which sealed the archaeological features. Machine stripping across the excavation area then continued down to the level of the archaeological horizon (L1009=L2004). A monolith sample (in addition to two complementary bulk samples) was taken through the full stratigraphic sequence at the south end of Trench 6. Following the open area excavation, three additional test pits were excavated at intervals on a south-west to north-east alignment down the slope of the site, from the higher ground, down into the fen. Three monolith samples were taken through the peat and silt layers with the aim of carrying out pollen analysis; bulk and letterbox samples from the peat in each test pit were taken at the same time.

Mechanical excavation ceased when archaeological deposits were encountered and thereafter all excavation was undertaken by hand. Exposed surfaces were cleaned as appropriate and examined for archaeological features and finds. Archaeological features and deposits were manually excavated, recorded by means of *pro forma* recording sheets and drawn to scale in plan and section. Black and white, colour and digital photographs were taken as appropriate. Pits and postholes were half sectioned; linear features (ditches, non-structural gullies etc.) were excavated in slots providing a minimum of 10-20% coverage. Slots were positioned for optimal determination of inter-feature relationships. Any intrinsically-interesting features (e.g. hearths, possible structural features) were 100% excavated. Finds were generally recovered by hand and are therefore subject to the usual biasing factors. A metal detector was used to scan features during excavation and to check excavated spoil for metallic objects. The locations of Small Finds were recorded in three dimensions to the nearest 1cm.

3 SITE NARRATIVE

Figs. 4-8; Plates 3-8

3.1 Summary

The investigations revealed three phases of archaeologically-attested activity, all focused on the higher ground in the south of the site (around Trench 6). The remainder of the site would have been increasingly waterlogged, and subject to peat growth, from at least the middle Bronze Age onwards.

Phase 1 comprised small quantities of residual struck flint, found mainly in later features and indicative of sporadic low-level activity on or near the site during the early Neolithic period, before the fen began to develop.

Phase 2 comprised five shallow pits (F1020, F1022, F1024, F1032 and F1050), identified during the trial trench evaluation. Pits F1020 and F1024 contained late Bronze Age/ early Iron Age pottery, while Pit F1032 yielded two button end scrapers, broadly attributable to the Bronze Age. Although few of them contained anything other than undiagnostic struck flint, numerous other shallow pits and postholes located on the higher ground in the far south of the site were probably contemporary. All were heavily-truncated.

Phase 3 comprised two large intercutting ditches (F2015 and F2011) and one gully (F1026=F2082), all of which contained small quantities of late Iron Age pottery. The larger of the two ditches, which ran down into the fen, also contained a residual or curated Mesolithic/ Neolithic quartzite pebble hammer fragment.

A lack of datable finds in many features, combined with the general absence of stratigraphic relationships, means that some 60 pits, postholes and hollows, and five gullies/ small ditches remain un-phased. All the archaeological features were sealed by a silt layer (L2003=L1012), which may represent a

period of flooding to the higher ground in the south of the site. This contained a few late Iron Age sherds and a single fragment of Roman pottery.

3.2 Sequence of deposits and site formation processes

Figs. 2 & 8; Plate 3

Due to the fen edge location of the site, the sequence of peat and alluvial deposits revealed during the archaeological investigations was complex and provided evidence of past hydrological and environmental change. Past human activity on the site cannot be properly understood without reference to this changing environment.

3.2.1 Natural geology

At the bottom of the stratigraphic sequence was the natural blue/ grey Kimmeridge Clay (L1011=L2006). It had a gleyed appearance, probably resulting from water action. In the centre of the site (Trench 4 and the north end of Trench 6), it was overlain by a grey/ brown water-lain clay containing organic debris (L1095=L2005). The relative depths of the overlying deposits across the site indicate that this area would have originally been a natural low point (-1.54m OD at the north end of Trench 4), contrasting with the modern site's gradual and fairly even slope downwards to the north. A rising water table would have caused ponding in this low-lying area, resulting in the deposition of clay L1095=L2005. In Trench 4, L1095=L2005 was overlain by a dark grey heavy clay layer containing abundant mollusc shells (L1002); this layer was also present above the Kimmeridge Clay/ glacial sand and gravel (L1009=L2004; see below) in Trenches 3 and 5, reflecting the increasingly waterlogged conditions in the lower-lying northern and central parts of the site.

3.2.2 Archaeological horizons above the fen edge (far south of site)

In the far south and south-west of the site (Trench 3 and the south end of Trench 6), the lowest deposit encountered (above the natural clay) was a variable yellow/ orange sand, silt and clay with flint gravel inclusions (L1009=L2004). In Trench 6, this layer contained cultural material, including struck and burnt flint, animal bone, daub and late Bronze Age/ early Iron Age pottery. It was probably a mixture of the boulder clay and glacial sand/ gravel which are known to cap the Kimmeridge Clay across the higher ground of Littleport fen 'island'. All the archaeological features revealed during the evaluation and excavation were cut into this layer and while some of the associated finds may have been intrusive from these features, it is possible that L1009=L2004 represents a buried prehistoric land surface sealed beneath later fen deposits. Some of the finds, including a thumbnail scraper, were noted by the excavator as appearing to have been 'trampled' into the surface of L1009=L2004. All the archaeological features (Phases 2 and 3) were sealed by L1012 (=L2003), a mid grey/ orange/ yellow clayey silt layer 0.06-0.12m deep, which was only present at the southern edge of the site (Trenches 6 and 7). It might represent a short-lived episode of flooding to the slightly higher, and generally drier, ground in this area. It contained struck

flint, four late Iron Age potsherds and a single fragment of Roman pottery, suggesting that the fen was encroaching on the higher ground in the south of the site by the late pre-Roman Iron Age/ early Romano-British period.

3.2.3 *Waterlogging and peat growth in the fen (north of site)*

The deposits revealed in Trenches 1-5 indicate that the north of the site was subject to prolonged water-logging and would have lain within the fen during much of later prehistory. The wet ground conditions were represented by a dark grey/ black heavy clay layer (L1002) present in Trenches 3, 4 and 5 (and sealing L1009=L2004 in Trench 3). The waterlogged conditions across the majority of the north of the site were further attested by two successive accumulations of dark brown/ black peat (L1006=L1010=L1004 and L1001). In Trench 5, the lower peat (L1004) yielded a loomweight fragment, possibly of the triangular form used between the middle Iron Age and the early Romano-British period, although this could not be discerned with certainty from the surviving fragment (Crummy, this report). The upper peat layer in Trench 5 (L1001) yielded a fairly large assemblage of unabraded late Bronze Age pottery (50 sherds; 372g), suggesting that the formation of the upper peat was broadly contemporary with the Phase 2 occupation/ activity in the far south of the site, above the fen edge. Some uncertainties over this sequence of events remain, as in the north of Trench 6 and in Trench 7, the same peat deposits (L1004 and L1001) were recorded as overlying late Iron Age/ Roman Flood Layer L1012. However, excavation ceased at this level in Trench 7 and it is likely that had the full stratigraphic sequence down to the natural drift geology been revealed, this disparity would have been resolved. For example, it is possible that the layer recorded in Trench 7 as L1012 was actually the slightly gleyed surface of the natural boulder clay/ gravel (L1009). In the north of Trench 6, it seems likely that a later peat horizon (which overlaid L1076; see below) was mistakenly identified on site as L1001. A sample of the lower peat in Test Pit 1 was sent for radiocarbon analysis and returned a modern (post-AD 1950) date; it had presumably been contaminated (Beta Analytic/ Woolhouse, this report).

A former river channel (which would have silted up and become an upstanding roddon by the Romano-British period), shown on Hall's conjectured plan of the prehistoric landscape of Littleport (1996, 23 fig. 11; Fig. 3a), would have flowed eastwards across the northern edge of the site at the time when this peat was forming. Its profile (filled with silt L1015) was partially revealed in the north of Trench 1, while Trench 2 was probably excavated directly through, and on the same east to west alignment as, this silt-filled former watercourse. It had breached its banks at least twice, flooding the whole of the northern area of the site (Trenches 1-5) and resulting in clayey silt deposits (L1003=L1008=L1005) overlying the peat. An organic silty clay layer (L1076=L2002), present in the south of the site (Trenches 6 and 7), might also represent flooding from this former watercourse. These deposits were all sealed by the peaty topsoil (L1000=L2000).

3.3 Phase 1: early Neolithic (c. 4300 – 3300 BC)

Residual struck flint was found in several features and deposits across the excavation area. Although limited in number, and generally undiagnostic, a few blades and other pieces are enough to suggest a low level of early Neolithic activity on or near the site, possibly including blade production and retouching (Peachey, this report). The only piece which might have been found in its original context is a denticulate or scraper from Pit F2084, in the north-west corner of the excavation area. This was a shallow, irregularly-shaped pit (2.20 x 1.30 x 0.10m¹) with a single mid grey-brown silty clay and flint gravel fill (L2085). However, this feature had clearly been subject to more recent disturbance and the original provenance of the piece is therefore not certain. Other residual blades were found in late Iron Age (Phase 3) Ditch F2011 and late Iron Age/ early Roman Silt Layer L2003=L1012, which sealed all the archaeological features. The evidence for sporadic early Neolithic activity on the site might also help to explain the presence of a residual/ curated Mesolithic/ Neolithic pebble hammer in the terminus of late Iron Age (Phase 3) Ditch F2011 (see below). The local environment during Phase 1 would probably have been dry, as the pollen evidence suggests that the sequence of silt and peat deposits at the site did not begin to develop until at least the late Neolithic (Scaife, this report). Two irregular tree hollows (F1077 and F1079), which were cut into the mixed clay/ glacial sand and gravel drift geology (L1009=L2004) in Trench 3, were sealed by a water-lain heavy clay layer (L1002; see above), possibly indicating the inundation of a formerly dry and lightly wooded landscape. By the late Neolithic/ early Bronze Age, the area would have been floodplain with grasses, sedges and other fen taxa and possibly some alder growth along the fen edge (Scaife, this report).

3.4 Phase 2: late Bronze Age/ early Iron Age (c. 1000 – 600 BC)

Figs. 5 & 6; Plate 4

A dense cluster of postholes and small pits/ hollows was located in Trench 6, on the higher ground in the south of the site. Almost without exception, they were extremely shallow and had been subject to past truncation. In the approximate centre of the trench, shallow circular Pit F1020 (0.42 x 0.40 x 0.03m; gently-sloping concave profile; single light grey/ orange clayey silt fill) contained a body sherd in a mottled buff/ grey fabric with sparse flint, quartz and grass inclusions, from a cup or bowl of probable late Bronze Age date (Thompson, this report). Immediately adjacent to the west of F1020 were two pits of identical size and plan, F1022 and F1024. The former yielded three undiagnostic flint flakes; F1024 contained a small fragment of undiagnostic but probably late prehistoric organic-tempered pottery. Just to the south, oval Pit F1032 (1.05 x 0.38 x 0.07m; moderately-sloping concave sides and flattish base; single mid to dark brown clayey silt fill) contained two button end scrapers, which can be assigned a broad Bronze Age date. A single small sherd (1g) of sand and organic-tempered later prehistoric pottery was found in F1050, a small pit or gully terminus just south of Pit F1032. All these features were cut into L1009=L2004, the mixed boulder clay and glacial sand/ gravel.

¹ In all feature descriptions, dimensions are given in the order: length x width x depth

A few late Bronze Age/ early Iron Age potsherds were recovered from this deposit and a thumbnail scraper was found lying on its surface.

Undiagnostic struck flint flakes and chips were near-ubiquitous in the other small hollows, postholes and stakeholes in the vicinity. Many of these features were probably also of late Bronze Age/ early Iron Age date, but their poor preservation renders more accurate phasing and characterisation of their functions impossible. The high incidence of charcoal/ burnt material in the fills of many features might indicate the disposal of hearth waste from domestic areas, while the presence of very small quantities of daub (just a few grams each) in Pit F1032 and undated Pit F1036 hints at there being structures or wattle and daub hurdles/ fences somewhere in the vicinity. A bulk environmental sample taken from Pit F1018=F2050 contained a single spelt wheat glume base, suggesting that cereal crops were being grown in the vicinity, while single heather stems were present in Postholes F1028 and F1056 and probably reflect areas of rough fen edge grazing (Fryer, this report). Many other recorded features were probably just small natural hollows caused by rooting. Overall, although the sparseness of cultural material in these features might partly be a result of subsequent truncation, it is perhaps more likely, especially given their low-lying position just above the contemporary fen edge, that this was not a 'core' settlement area. The pits and postholes are more likely to represent traces of agricultural land use on the periphery of a settlement further to the south, with some of the postholes/ stakeholes perhaps being related to fenced stock enclosures or paddocks.

With only a few exceptions (Pit F1054 in the middle of Trench 6, and Gully F1081 and Pit/ Tree Hollow F1083 in the south of the trench), all the features in this area were just a few centimetres deep and had clearly been subject to severe truncation. However, as they were all sealed beneath Silt Layer L2003=L1012, the truncation must have occurred before this layer was deposited in the late Iron Age/ Romano-British period. Although also shallow, the late Iron Age (Phase 3) features, which were similarly sealed below L2003=L1012, did not appear to have been as badly truncated. It therefore seems likely that whatever caused this truncation took place earlier in the Iron Age. Potential explanations include intensive or long-term agricultural land use (either ploughing or poaching from the movement of livestock) or erosion caused by water action.

As described above, one of the peat layers (L1001) in the north of the site (Trench 5) yielded a large assemblage of un-abraded late Bronze Age pottery, probably all from the same vessel. As this layer overlaid an earlier peat horizon (L1004), it appears that the north of the site had already been waterlogged for a considerable period of time before the late Bronze Age. The loomweight fragment from Peat L1004, which appears to be middle to late Iron Age on typological grounds, is hard to reconcile with the late Bronze Age date of the pottery from the overlying peat layer. Either, as suggested below (Crummy, this report), the fragment is too small to conclusively identify and may actually belong to an earlier period, or it was intrusive within the lower peat horizon, perhaps as a result of some localised truncation not visible within the confines of the evaluation trench. Pollen analysis indicates that a

rising water table caused the gradual replacement of the late Neolithic/ early Bronze Age floodplain environment with damp, willow-dominated fen carr woodland in which peat formed (Scaife, this report). The pottery in the upper peat horizon in Trench 5 indicates that this process was well underway by the late Bronze Age. A sample of the lower peat from Test Pit 1 returned a modern (post-AD 1950) radiocarbon date and had presumably been contaminated (Beta Analytic/ Woolhouse, this report). Based on the overall characteristics of the pollen spectra and the later Bronze Age pottery present in the upper peat, an approximate middle Bronze Age date is suggested for the beginning of peat growth on this part of the fen edge. The late Bronze Age/ early Iron Age site would have lain immediately on the edge of this developing fenland environment.

3.5 Phase 3: late Iron Age (100 BC – AD 43)

Figs. 5-6 & 9; Plates 5-8

Phase 3 activity comprised two large ditches (F2011 and F2015) and one gully (F2082). Ditch F2011 (20+ x 2.40 (max.) x 0.64m (max.)) (Plates 6 and 7) ran northwards from beyond the southern boundary of the excavation area, leading down towards the fen. To the north, it ended in a tapering terminus. It had a steep concave side to the east, a stepped side to the west and a rounded base; it contained a single fill of mid grey-brown silty clay, which yielded struck flint, a relatively un-abraded rim fragment from a late Iron Age vessel and five fragments of cattle bone (Phillips, this report). In addition, a residual/ curated ?Mesolithic/ Neolithic quartzite pebble hammer (SF1; Fig. 9; Plate 8) was found fairly high up in the ditch fill close to the northern terminus (Tingle, this report). The stepped west side of the ditch might indicate that it had been re-cut at some point, although this could not be discerned with certainty.

Ditch F2015 (20+ x 1.80 (max.) x 0.61m (max.)) (Plate 5) was sinuous and aligned roughly east to west, running across the southern edge of the excavation area. It had a moderately-sloping rounded profile, although its north side was stepped in places. It seems likely, given its position and slightly meandering alignment, that Ditch F2015 would have followed the contemporary fen edge. The ditch gradually became narrower towards the eastern site boundary. It contained a single sherd (23g) of late Iron Age pottery and one fragment (8g) of cattle bone. Ditch F2015 appeared to be cut by the perpendicular north to south aligned ditch (F2011), but as it was generally shallower than F2011, might simply have become silted up earlier than the deeper ditch, giving the impression that it was cut by it. The ditches could therefore have been contemporary parts of the same system, forming the corner of a ditched enclosure. Two metres to the north of Ditch F2015, and following the same alignment, was a narrow, shallow, c. 10m long gully (F2013) cut into the fill of Ditch F2011. It did not contain any finds, but appeared to be part of the same late Iron Age boundary system.

Gully F2082 was noted during the trial trench evaluation as F1026, and appeared to be heavily-truncated. The eastern terminus of the gully was excavated; to the west, F2082 could not be traced beyond the edge of the trial

trench. It contained a residual Bronze Age flint scraper and a small body sherd in a fine flint and sand-tempered fabric, of probable late Iron Age date (Thompson, this report).

Scattered undated pits/ postholes appeared to be aligned with respect for the late Iron Age ditches, suggesting that they were contemporary. These included F2042, F2038, F2036, F2034, F2060, F2052 and F2007, in the west of the excavation area, which ran on a north to south alignment approximately parallel to Ditch F2011. In the east of the site, undated Pits F2024, F2026, F2074 and F2072 ran west to east roughly in line with Ditch F2015. Although not conclusive, these alignments might suggest that these features were truncated postholes forming fence-lines associated with the boundary ditches, or that they were rubbish pits located with respect for the spaces defined by the ditches.

The layout of the ditches and the small quantity of associated finds suggests that they were probably field or paddock boundaries (as well as assisting drainage). Based on the few fragments of associated animal bone, it can be tentatively suggested that the enclosed spaces were used for grazing cattle. The topographical position of the site would have been well-suited to such land use. Indeed, pollen evidence suggests the presence of mixed arable and pastoral farmland in the vicinity of the site during later prehistory. Following the clearance of lime-dominated woodland (perhaps in the middle Bronze Age), wheat, barley and other cereal crops were grown on the better-drained high ground of Littleport 'island', while the floodplain and adjacent fen edge were used as rough pasture (Scaife, this report).

All the archaeological features of Phases 2 and 3 were sealed by a shallow silt layer (L1012=L2003), which is thought to represent an ephemeral episode of flooding to the higher ground in the south of the site. It contained struck flint, four late Iron Age potsherds and a single small Roman sherd in an oxidised sandy fabric. The fills of Ditches F2011 and F2015 were very similar in composition and appearance to this silt layer, suggesting that the ditches were naturally in-filled during this phase of rising water levels in the fen. Two undated pits, F1018 and F1052, had very similar silty fills and were probably also in-filled by this flooding. Pollen analysis (Scaife, this report) indicates that the long-lived phase of stable willow carr and peat growth (see above) was eventually terminated by a reincursion of alluvial sediment deposition, probably the result of a ponding-back effect caused by the last of the (probable) late prehistoric increases in regional sea level. The result was a sedge fen with areas of open water and clear evidence of saline conditions reaching as far as the fen edge (Scaife, this report). It is possible that Silt Layer L1012=L2003 represents this short-lived phase of alluvial deposition from the river just north of the site. The rising water table probably explains the end of activity on the site during the late pre-Roman Iron Age/ early Romano-British period.

4 SPECIALISTS' REPORTS

4.1 Flint

Andrew Peachey and Tom McDonald

The flint from the evaluation

Tom McDonald

All the flint from the evaluation of the site was found in features in Trench 6. The average fragment size is small and chips are common. The colour of the flint varies between dark grey and brown; the use of brown pebble flint is common. None of the pieces are sharp or mint, but neither is the material heavily-abraded. There is also some burnt flint in the assemblage. Two multi-platform core fragrise scrapers are present. Several small button scrapers with shallow scale flaking are datable to the Bronze Age, mirroring the pottery evidence.

Feature	Context	Type	Stage	Colour	Patination	Burnt	Retouch
-	L1009	Flakes Blades	Secondary Tertiary	Grey Brown	Slight	Yes	x2 multi-platform core fragments x2 not retouched
F1013	L1014	Flakes	Secondary	Grey Brown	No	No	x2 end scrapers
F1018	L1019	Flakes Blade Chip	Tertiary	Dark grey Brown	Slight	Yes	No
F1020	L1021	Chip	Secondary	Dark grey	No	No	No
F1022	L1023	2 flakes	Secondary	Grey	Yes	Yes	No
F1026	L1027	Flakes	Secondary	Dark grey	No	No	Small button scraper x3 not struck
F1032	L1033	Flake Chip	Secondary	Grey Brown	No	No	Small button scraper x2 not struck
F1034	L1035	2 flakes	Secondary	Grey/brown Brown	No	No	Side edge scraper
F1036	L1037	2 chips	Secondary	Grey/brown	No	No	x2 not struck, x2 burnt
F1046	L1047	-	-	-	-	Yes	No
F1050	L1051	Chip	Tertiary	Grey	No	No	No
F1052	L1053	Chip	Secondary	Dark grey	No	No	No
F1054	L1055	2 chips	Tertiary	Brown	No	No	No. x3 not retouched, x1 burnt
F1056	L1057	Chip	Tertiary	Grey/brown	No	No	No
F1058	L1059	x2 chips x1 flake	Secondary	Brown	No	No	x1 burnt
F1062	L1063	-	-	-	-	Yes	No
F1070	L1071	Flake	Secondary	Grey/brown	No	No	Edge retouch
F1072	L1073	Flake	Tertiary	Brown	No	No	Edge retouch. Honey brown pebble flint
F1083	L1084	Chip	Tertiary	Brown	No	No	No
F1091	L1092	-	-	-	-	-	x6 not retouched

Table 1: Catalogue of flint from the evaluation

The flint from the excavation Andrew Peachey

The excavation produced a total of 14 fragments (89g) of struck flint, of which three (13g) were present in late Iron Age/ early Roman Silt Layer L2003. The assemblage includes a scraper or denticulate, two blades and a variety of flakes, possibly produced in the (early?) Neolithic period.

Methodology and terminology

The flint was quantified by fragment count and weight (g), with all data entered into a *Microsoft Excel* spreadsheet (on the accompanying data CD). Flake type (see 'Dorsal cortex', below) or implement type, patination and colour were also recorded as part of this data set.

The term 'cortex' refers to the natural weathered exterior surface of a piece of flint, and the term 'patination' to the colouration of a flaked surface exposed by human or natural agency. Dorsal cortex is categorised after Andrefsky (2005, 104 & 115), with 'primary flake' referring to those with cortex covering 100% of the dorsal face, 'secondary flake' to those with 50-99%, 'tertiary' to those with 1-49% and 'non-corticated' to those with no dorsal cortex. A 'blade' is defined as an elongated flake, the length of which is at least twice as great as its breadth, often exhibiting parallel dorsal flake scars (a feature that can assist in the identification of broken blades that, by definition, have an indeterminate length/ breadth ratio).

Raw materials

The flint varies considerably in colour from mid grey to pale - mid brown to very dark olive brown and is not of particularly high quality. The flint also demonstrates varying degrees of light to moderate patination that is probably a reflection of post-deposition exposure or re-deposition. Only limited quantities of moderately abraded/ battered pale grey and white cortex are present in this flint assemblage, suggesting the flint may have been collected from nearby surface gravels.

Composition and technology

The single tool present in this flint assemblage comprises a denticulate or scraper recovered from Pit F2084 (L2085) (22g). One edge of this implement has been retouched to form a blade, which is furthermore serrated or notched. It is unclear if this is the result of heavy wear on an originally 'smooth' blade (a scraper) or was the original intended result (a denticulate). It is equally unclear whether the artefact evolved through wear from one type to another without any deliberate human agency. The non-blade side of this implement is more opaque and matt than the blade, with traces of cortex around the blunt edge, thus suggesting that this implement was manufactured from a relatively large flake blank rather than a specific core. A similar example in technology and profile was recorded in an early Neolithic context at Spong Hill (Healy 1988, 56, L73).

Further implements recorded in this assemblage include blades in late Iron Age Ditch F2011 (L2012) (1g) and Silt Layer L2003 (4g). Both blades are narrow, less than 30mm in length and display dorsal scars. The example in Ditch F2011 displays moderate patination all over and is probably residual, while the remaining example is unstratified in a subsoil horizon. These blades were probably produced in the Neolithic period, but this cannot be confirmed.

The remaining struck flint in the assemblage comprises a series of conchoidal flakes, with a small concentration in Gully F2082. Gully F2082 (L2083) contained unpatinated examples of three tertiary flakes (12g) and single primary, secondary and uncorticated flakes (5g, 2g and 19g, respectively). Further single examples of uncorticated and tertiary flakes were found in Ditch F2015 (L2016) (4g and 8g, respectively) and a single uncorticated flake was recovered from Pit F2060 (L2061) (3g). An additional heavily-patinated tertiary flake was also recovered from Silt Layer L2003 (9g). The limited quantity and diagnostic attributes of this assemblage do not allow any firm conclusions to be drawn, but it may be tentatively suggested that this assemblage represents (early?) Neolithic activity and that very limited retouching or basic blade production might have occurred on or near the site.

Feature	Context	Description	Spot Date	Find/type	Number	Weight (g)	Comment
-	L2003	Silt Layer	\	Blade	1	4	Narrow blade, unpatinated, very dark olive brown
-	L2003	Silt Layer	\	Tertiary Flake	2	9	Mid-brown, heavily patinated on 2of 3 sides = ?recycled flakes
F2011	L2012	Ditch	LIA	Blade	1	1	Narrow blade, slightly patinated, dark olive brown
F2015	L2016	Ditch	LIA	Tertiary Flake	1	8	Unpatinated, very dark olive brown
F2015	L2016	Ditch	LIA	Uncorticated Flake	1	4	Unpatinated, very dark olive brown
F2060	L2061	Pit	\	Uncorticated Flake	1	3	Slightly patinated, dark olive brown
F2082	L2083	Gully	\	Primary flake	1	5	Almost entirely comprised of cortex
F2082	L2083	Gully	\	Secondary Flake	1	2	Unpatinated, very dark olive brown
F2082	L2083	Gully	\	Tertiary Flake	3	12	Unpatinated, mid grey to dark olive brown
F2082	L2083	Gully	\	Uncorticated Flake	1	19	Unpatinated, mid to dark brown
F2084	L2085	Pit	\	Scraper	1	22	Or 'denticulate' -serrated blade scraper; mid brown, unpatinated blade, remainder moderately patinated
					14	89	

Table 2: Catalogue of flint from the excavation

4.2 Pottery

Peter Thompson

Introduction

The investigations recovered 66 sherds of pottery, weighing 511g (57 sherds (395g) from the evaluation plus nine sherds (116g) from the excavation).

Fabric descriptions

Flint

F1 – Dark grey, with some patchy slight oxidation to the outside surfaces. Temper comprises moderate finely-crushed white (burnt?) angular flint less than 3mm across. Rare grass/ chaff marks are evident on some external surfaces but were not noted within the fabric temper. Surfaces are also smoothed.

F1a – Mottled buff and grey with rare to sparse angular flint up to 0.4mm across, rare rounded quartz and rare grass.

F1b – Dark grey or brown with sparse to moderate flint 0.1-0.5mm across, with sparse fine to medium quartz sand and rare burnt organics.

F1c – Dark grey or brown with moderate flint 0.1-0.5mm across, sparse to moderate sub-rounded quartz sand and rare grog or clay pellets.

Sand

F2 – Friable grey fabric with patches of bright orange colouration from oxidisation or, possibly, staining. Fabric includes moderate to common grey quartz up to 1mm across and rare to sparse grass temper noted mostly on the outside surfaces.

F2a – Grey fabric containing sand, large burnt organic and fine white calcitic material.

F2b – Brown or buff thick sherds with moderate to common coarse sub-angular sand and sparse platy shell and flint.

F4 – Buff-orange with fine to medium sub-angular to sub-rounded well-sorted sand.

Organics

F3 – Mottled grey and buff fabric containing moderate voids from burnt-out organics and sparse sub-rounded pale brown grog.

F3a – Grey or brown with sparse to moderate voids from burnt grass.

F3b – Grey or brown with sparse to moderate burnt grass and sparse sub-angular to sub-rounded quartz sand.

Diagnostic traits and dating

The pottery from the evaluation is in poor condition, generally being friable with abraded surfaces and some rounded edges, although the sherds from Peat Layer L1001, probably all from the same vessel, have relatively fresh breaks. The sherds have smooth surfaces. Fabrics are varied but mainly comprise flint and/ or grass temper; quartz sand, calcite and grog are also present. There is only limited diagnostic evidence. Peat L1001 contained a flat base with quite profuse flint tempering on the underside, which has been noted in some areas as a late Bronze Age trait. Two conjoining body sherds showing the beginning of an angle turn suggest a carinated shoulder, possibly from a *situla* profile. This is a characteristic of the Post-Deverel-Rimbury and late Bronze Age/ early Iron Age periods. A curving body sherd, indicative of a small bowl or possibly a cup, from Pit F1020, might also suggest a late Bronze Age date. Overall, the pottery assemblage can be broadly described as of probable later prehistoric date, most likely of the late 2nd to mid 1st-millennium BC.

As noted above, the open area excavation produced only nine sherds of abraded pottery, weighing 116g. One sherd is possibly baked or hardened clay. The majority of the excavation assemblage is heavily-abraded and comprises later prehistoric ceramics, as well as one Roman sherd.

Silt Layer L2003 contained five abraded body sherds. One is in a Roman oxidised sandy ware; the other four (two thick sherds with coarse sand temper and sparse shell and flint, and two with grass temper, one of which also contains sand) are of late Iron Age appearance, but could be contemporary with the Roman sherd. Ditch F2011 L2012 contained a probable late Iron Age small upright rim, in fairly good condition. It is slightly expanded externally, with smoothed surfaces, and contains flint and sand temper with a little grass. Accompanying this was a piece of pottery or baked material with a profusion of burnt-out voids, probably from organics, but possibly from dissolved shell. It has no fired surfaces and the abundance of inclusions suggests that it is not actually from a pottery vessel. Ditch F2015 L2016 contained a mid to late Iron Age abraded base fragment in a mixed fabric with flint, organics and a little grog and sand. There is a hint of upward curvature of the base to an *omthalmos* form, but not enough survives to enable a definitive conclusion and it might simply be slightly uneven. Gully F2082 L2083 contained a probable late Iron Age small abraded body sherd in fine flint and sand, also containing a small amount of grass.

Feature	Context	Feature Type	Quantity	Date	Comment
-	L1001	Peat Layer	50x 372g F1	Prehistoric	Probable carinated shoulder and flat base
-	L1009	Sand/ Gravel Layer	4x5g F2	“ “	

F1020	L1021	Pit	1x15g F1a	“ “	Curving body sherd, probably from a small bowl or cup
F1024	L1025	Pit	1x2g F3	“ “	-
F1050	L1051	Pit/ Gully	1x1g F2a	“ “	-
-	L2003	Silt Layer	1x9g F4 2x50g F2b 1x10g F3a 1x3g F3b	Roman	F4 - Roman Oxidised ware F2b - Prehistoric Sandy Shelly Ware F3a - Prehistoric organic tempered ware F3b - Prehistoric grass and sand tempered ware
F2011	L2012	Ditch	1x3g F1b 1x15g F3a	Late Iron Age?	F1b - Prehistoric flint and sand tempered ware F3a - Prehistoric organic ware?
F2015	L2016	Ditch	1x23g F1c	Late Iron Age	F1c - Prehistoric flint, organic and grog temper.
F2082	L2083	Gully	1x3g F1b	Iron Age (Late?)	F1b - Prehistoric fine Flint and sand tempered ware

Table 3: Pottery catalogue

4.3 Daub

Andrew Peachey

A total of 33 fragments (173g) of daub were recovered from seven contexts during the evaluation. All the fragments are poorly-preserved and rounded through attrition and abrasion. The fragments exhibit varying states of oxidisation, probably dependent upon the degree of exposure and weathering that they have been subjected to rather than burning or firing. The average fragment weight is low at 5.24g.

Feature	Context	Frequency	Weight (g)
-	L1002	6	39
-	L1009	15	42
-	L1012	7	53
F1018	L1019	1	1
F1026	L1027	1	23
F1032	L1033	2	10
F1036	L1037	1	5
<i>Total</i>	-	33	173

Table 4: Catalogue of the daub

4.4 The loomweight

Nina Crummy

A fragment from the apex of a fired clay loomweight, broken across a perforation, was recovered from Peat L1004 within Evaluation Trench 5. The fabric is a sandy clay containing some inclusions of sandy grit and flint pebbles. It is hard-fired and is mainly grey, both internally and externally, but with some brown patches. The maximum surface dimensions are 60 by 55mm; it weighs 145g. The precise form of the loomweight is not clear, but it is likely to be of the triangular form used from the middle Iron Age into the first decades after the Roman Conquest.

4.5 The quartzite pebble hammer (Fig. 9; Plate 8)

Dr Martin Tingle

This artefact is probably a pebble hammer; a prehistoric shaft hole implement formerly known as a pebble macehead. The fragmentary example from Littleport exhibits the characteristics of a pebble hammer, being made from a quartzite-type rock, possessing an hourglass perforation, and showing marks of battering on its surviving end. While they are often made from circular pebbles, with the perforation at the centre, this example would appear to have utilised an oval pebble and consequently, when complete, it might have resembled an ovoid macehead.

Pebble hammers appear to largely date from the Mesolithic, although they may have continued in use through the Neolithic and even into the Bronze Age (Rankine 1951, 53; Roe 1979, 36). The presence of this example in an Iron Age context may simply represent the chance inclusion of residual material within the ditch fill, although there are numerous examples of these distinctive artefacts appearing, apparently as curated objects, in much later periods, including the Iron Age (Crummy 2004, 12; Roe 1979, 36).

The hammer is made from a pale white translucent quartzite which has pinkish veins that are clearly visible in the broken sections. Only one pebble hammer from Cambridgeshire, a greywacke example from Fen Ditton, has been ascribed to a specific petrological group, thought to derive from Cornwall (Crummy 2004, 12). Most, like the Littleport example, are quartzite and probably derive from local drift deposits (Rankine 1951, 53). In general, pebble hammers are distributed in the south and east of England, although the apparent concentrations in East Anglia and Sussex identified by Rankine seem less obvious as more examples have been found (Roe and Radley 1968, 169; *c.f.* Rankine 1951, 55 and Roe 1979, fig. 15). A recent example from Gamlingay has been linked to a general cluster of pebble hammers centred on the Cambridge area, to which the Littleport example could also be ascribed (Crummy 2004, 12).

4.6 Animal bone

Carina Phillips

Sixteen fragments of animal bone were recovered from ten contexts during the evaluation. Erosion has affected most of the fragments, causing brittleness and resulting in some fragmentation. Some bone (from Peat Layer L1010 and Tree Hollow F1079 L1080) exhibits a dark and eroded appearance caused by the bone lying in a waterlogged, anaerobic environment. Cattle (*Bos sp.*) bones are present in the highest numbers, accounting for ten of the bone fragments. Sheep/goat (*Ovis sp./ Capra sp.*) was the only other domestic species to be identified in the assemblage, represented by part of one femur. A metatarsal belonging to a red deer (*Cervus elaphus*) is the only wild species present in the assemblage. The remaining bone is unidentifiable to species. There is no evidence of butchery on any of the bone. Cattle and sheep/ goat are the most common species to be found on British archaeological sites of virtually all periods due to their importance as meat, milk and wool producers. Red deer are likely to have been exploited for their meat, skins and antler and have been found on numerous prehistoric sites. A woodland environment is their preferred habitat, suggesting that forested areas may have existed close to the site.

During the excavation of the site, animal bone was only found in two features, both of which were dated to the late Iron Age. The bone is in a moderate condition, with little surface erosion, but some fragmentation. Only six fragments of bone are present. Cattle (*Bos sp.*) is the only species present within the assemblage; one bone exhibits evidence of butchery. The assemblage is of no further research potential due to the small number of bone fragments.

4.7 Shell

Carina Phillips

Three small fragments of unidentifiable shell were excavated by hand from undated Pit F2070 (L2071). Further discussion of the shell is not possible.

4.8 Charred plant macrofossils and other remains

Val Fryer and Ruth Pelling

The charred plant macrofossils and other remains from the evaluation

Val Fryer

Introduction

Samples for the extraction of plant macrofossils were taken from the fills of stakeholes and postholes, pits, gullies and a tree hollow. Thirty three were submitted for assessment.

Methodology

The samples were bulk floated by Archaeological Solutions and the flots were collected in a 500 micron mesh sieve. The dried flots were scanned under a binocular microscope at magnifications up to x16, and the remains noted are listed below (Table 5).

Results

Modern contaminants, including fibrous and woody roots, seeds and arthropod remains, were present in all samples. Of the 33 samples assessed, 16 contained nothing but modern plant and arthropod remains. The assemblages from a further 14 samples contain a very low density of small charcoal fragments, many of which are heavily abraded. Only three assemblages contain identifiable charred plant remains, comprising single pieces of possible heather (*Ericaceae*) stem (from Samples 25 and 29) and a spelt wheat (*Triticum spelta*) glume base from Sample 31. All are from undated contexts. The assemblage from Sample 37 contains a high density of de-watered plant macrofossils of wetland/ aquatic and scrub species.

Sample No.	Context No.	Feature type	Phase	Contents
1	1088	Stakehole	-	All modern
2	1086	Posthole	-	All modern
3	1082	Gully	-	Charcoal <2mm
4	1063	Stakehole	-	Charcoal <2mm
5	1065	Stakehole	-	Charcoal <2mm
6	1067	Stakehole	-	All modern
7	1071	Pit	-	Charcoal <2mm
8	1069	Stakehole	-	All modern
10	1094	Pit/ Posthole	-	All modern
11	1073	Stakehole	-	All modern
12	1075	Stakehole	-	All modern
13	1059	Pit	-	All modern
14	1047	Stakehole	-	Charcoal <2mm
15	1041	Post/ Stakehole	-	All modern
16	1041	Post/ Stakehole	-	Charcoal <2mm
17	1051	Stakehole	-	Charcoal <2mm
18	1045	Stakehole	-	All modern
19	1043	Stakehole	-	Charcoal <2mm
20	1037	Pit/ Posthole	-	All modern
21	1035	Posthole	-	All modern
22	1033	Pit	Phase 2	Charcoal <2mm
23	1027	Gully		Charcoal <2mm
24	1023	Pit	Phase 2	All modern
25	1029	Post/ Stakehole	-	?Heather stem
26	1021	Pit	Phase 2	All modern
27	1025	Pit	Phase 2	All modern
28	1031	Post/ Stakehole	-	All modern
29	1057	Stakehole	-	?Heather stem
30	1055	Pit	-	Charcoal <2mm
31	1019	Pit	-	Spelt glume base
32	1014	Pit	-	Charcoal <2mm
33	1053	Pit	-	Charcoal <2mm
37	1078	Tree Hollow	-	Charcoal <2mm

Table 5: Charred plant macrofossils from the evaluation

Discussion and conclusions

In summary, the density of plant macrofossils is exceedingly low and the few charred remains recorded are all possibly present as accidental inclusions within the contexts.

The charred plant macrofossils and other remains from the excavation
Ruth Pelling

Introduction

Samples of archaeological deposits were taken for the extraction and assessment of charred plant remains. Features excavated included ditches and gullies of late Iron Age date. Two samples, both from late Iron Age ditch fills, were processed by bulk water flotation and the resultant flots collected onto a 500 micron mesh. Samples were submitted to the author for the examination of any charred plant remains present.

Methodology

Processed flots were evaluated by scanning under a binocular microscope at x10 to x20 magnifications. Any charred seeds and chaff were provisionally identified and quantified. The presence of charcoal was noted, with an approximation of abundance. Results were entered into an *Excel* spreadsheet.

Results

Both flots consist largely of recent roots and silt, with occasional fragments of indeterminate charcoal. A single recent seed of *Ranunculus acris /repens bulbosus* (buttercup) is present in Sample 2 (Ditch F2015 L2016).

Sample No.	1	2
Context No.	L2012	L2016
Feature No.	F2011	F2015
Feature Type	Ditch	Ditch
Tree/shrub macrofossils		
<i>Corylus avellana</i>	+	-
<i>Quercus</i>	+	-
Other plant macrofossils		
<i>Ranunculus acris/repens/bulosus</i>	+	-
Charcoal	+	+
Sample volume (litres)	10	10
Volume of flot (ml)	70	30
% flot sorted	100%	100%

Table 6: Charred plant macrofossils from the excavation

Discussion

There is no evidence from the samples examined for the presence of charred plant remains in any quantity on the site. The presence of charcoal would suggest preservation of charred remains is possible.

Recommendations for any future archaeological work in the area

Preservation of charred plant remains at the site appears to be possible given the presence of charcoal, although it is impossible to predict the likelihood of recovery based on the two samples examined. Fairly locally, the Roman administrative site of Stonea produced useful charred plant remains (van der Veen 1991) and the Cambridgeshire Fens are known to have been utilised for arable production during the Roman period. It must be considered that in the event of future excavation in this area of Littleport, charred remains may be recovered. The late Iron Age to Roman period is of great interest in terms of the development of arable production in the region.

4.9 Soils

Dr Richard I. MacPhail

Introduction

The site was visited on 6th December 2007 in order to evaluate the soils and sediments present and to suggest future geoarchaeological sampling protocols with Gary Brogan (Project Manager; Archaeological Solutions). Machining was underway during the visit. Bronze and Iron Age features and artefacts were present in and around Trench 6, on the highest ground, in the southernmost part of the site; this is believed to be the approximate former position of the fen edge (Gary Brogan, pers. comm.). To the north, wetland deposits (humified peat) are reportedly approximately 1.00m thick, over a mineralogenic substrate (Trenches 1-5 and 7). Exposed peaty topsoils and a feature fill and associated soil profile in a reopened part of Trench 6 (Fig. 2) were examined; one monolith and two bulk samples were collected (Goldberg and Macphail 2006; Hodgson 1997).

Results

Peaty topsoils thicken northwards (from 0.30 – 0.50m in the current machined area). These presumably develop into earthy eutro-amorphous peat soils of the Adventurers' soil series (included within the Downholland 1 soil association, formed in marine alluvium and fen peat), which dominate the low ground to the east, north and west sides of Littleport 'island' (Hodge *et al.* 1983). Although Littleport is located on superficial deposits, such as Boulder Clay, over Kimmeridge Clay (Gary Brogan, pers. comm.) and has a general mapped cover of stagnogleyic argillic brown earth soils (Ashley soil association; Hodge *et al.* 1983), the exact nature of the fen edge soils in the area of Trench 6 has not yet been determined (see below).

Machining through the humic (peaty) topsoil exposed dark grey gleyed silty clay (L1012=L2003), which contained Iron Age and Roman artefacts and apparently sealed and infilled late Bronze Age/ early Iron Age and late Iron Age features (Table 7). Layer L1012=L2003 also overlaid a gleyed and ochreous mottled subsoil, L1009=L2004. A 30cm long monolith (M1) was collected through contexts L1012=L2003 and L1009=L2004 to record the soil stratigraphy at the southern end of Trench 6. Two complementary bulk soil samples were also collected (Table 7).

Monolith	Suggested thin section	Bulk samples	Context and brief description
			<i>Small and shallow box excavation within Trench 6; machined down/ topsoil removal to ~30cm</i>
M1 (0-30cm)	M1A (0-8cm) M1B (14-22cm)	L1012	0-18cm (L1012): dark grey (5Y4/1) moderately weak silty clay, with many fine faint (pale ochreous) mottles; essentially stone-free, with flint and pot artefacts present (Gary Brogan, pers. comm.); moderately well-developed medium prisms; common fine roots; abrupt mainly smooth boundary.
M1 (0-30cm)	M1B (14-22cm) M1C (22-30cm)	L1009	18-32cm+ (L1009): brownish-yellow (10YR6/8) moderately weak silty clay/clay loam(?), with very many fine distinct (grey) and few distinct (ochreous) mottles; ochreous mottles become more common below 30cm; few fine roots; poorly formed medium-coarse prisms.

Table 7: Brief soil descriptions and samples

Discussion

Fen and fen edge soils associated with archaeological sites in north Cambridgeshire have been studied by French (French 2003, Chapters 8 & 9), who recorded palaeosols sealed by fen peat. The site apparently has a similar palaeosol sealed by a fen peat, which thickens to the north. However, the following are unclear:

- The relationship between L1012=L2003 and L1009=L2004: is L1012 an alluvium which precedes peat deposition during inundation, or is it an upper palaeosol horizon that has become gleyed?
- The relationship between L1012 and the fill of Ditch F2015: is it a feature infilled through ditch silting or is it an alluvium-infilled feature?
- The exact nature of the palaeosol (L1009=L2004): is it the strongly gleyed remains of the argillic brown earth soil (see French 2003, 130) and representative of a previously wooded landscape?

Soil micromorphology and bulk analyses (e.g. grain size analysis, P and LOI) could be applied to address these questions; such techniques can also be employed to help understand the function/ infill of the ditch (e.g. phosphate concentrations could imply stock control) (Courty *et al.* 1989; French 2003; Goldberg and Macphail 2006).

4.10 Pollen analysis of the fen edge sediments

Dr Rob Scaife

Introduction

The low-lying, waterlogged sediments of the fen edge adjacent to this site offered potential for studying the vegetation and environmental history of the area through pollen analysis of the peat and alluvial deposits. Three test pits were excavated in order to obtain material for environmental analysis (pollen, diatoms, plant macrofossils and radiocarbon dating). A pollen assessment study (Scaife 2008) was carried out in order to ascertain if fossil pollen was present in the deposits and to understand its potential for studying late prehistoric vegetation and environmental changes.

Well-preserved pollen and spores were recovered from all of the profiles examined and from the range of sedimentary units present at the site. The data confirms that the sediments are of late prehistoric age, showing that some woodland remained, but within a mixed agricultural landscape, and that a fluctuating water table resulted in both changes in sediment type and development of the wetland vegetation habitat. As a consequence of this initial study, a fuller analysis of the most representative profile (Test Pit 1) was undertaken, which adds substantially more detail to the initial picture of late prehistoric environmental change at this fen edge site. This report presents the information obtained from Test Pit 1 (Fig. 2; Plate 3).

Pollen method

Pollen sub-samples were taken from monolith profiles obtained from the machine-dug test pits. Standard techniques for pollen concentration of the sub-fossil pollen and spores were used on these sub-samples of 1.5ml volume (Moore and Webb 1978; Moore *et al.* 1991). Extracted pollen was identified and counted using an Olympus biological research microscope fitted with Leitz optics. A pollen sum (dry land) of up to 600 grains per level was identified and counted for each level plus extant wetland/marsh taxa and spores of ferns. A pollen diagram (Fig. 10) was produced using Tilia and Tilia Graph, with percentages calculated as follows:

Sum =	% total dry land pollen (tdlp)
Marsh/aquatic herbs =	% tdlp + sum of marsh/aquatics
Spores =	% tdlp + sum of spores
Misc. =	% tdlp + sum of misc. taxa.

Taxonomy generally follows that of Moore and Webb (1978), modified according to Bennett *et al.* (1994) for pollen types and Stace (1991) for plant

descriptions. These procedures were carried out in the Palaeoecology Laboratory of the School of Geography, University of Southampton.

The pollen data

Four local pollen assemblage zones and one local pollen assemblage sub-zone (in Zone 4) were recognised in this pollen sequence. These are defined and described from the base of the profile upwards.

Zone 1: 80cm to 74cm. *Tilia-Quercus-Corylus avellana* type. Basal alluvial silts. Tree pollen has highest values in this zone. *Tilia* (lime; fresh and degraded) is important (to ca. 23%) with *Quercus* (oak; 8%) and *Alnus glutinosa* (alder; 14%). *Pinus* (pine; 4%) and *Salix* (willow) are also present. Herbs (to 40%) are important with Poaceae (grasses; 30%), cereal pollen (1-2%), *Ranunculus* type (buttercups) and *Plantago lanceolata* (ribwort plantain) the most significant. Marsh/fen taxa comprise the *Alnus* and *Salix* already noted, Cyperaceae (sedges; 20%), *Typha angustifolia* type (bur reed and/or reed mace; 6%) and *Iris*, with occasional aquatic macrophytes and algal *Pediastrum*. Pteropsida are dominated by monolete spores of *Dryopteris* type (36%), *Pteridium aquilinum* (bracken; 8%) and *Polypodium vulgare* (common polypody fern; 5%). There are small numbers of *Mougetia* and (pre-Quaternary) palynomorphs.

Zone 2: 74cm to 62cm. The upper levels of the lower silt. This zone is defined by a reduction in *Tilia* from the higher levels of Zone 1 to sporadic/low values (1-2%). *Quercus* increases in value (to 15%) at the top of the zone. Correspondingly, *Corylus avellana* type shows a sharp decline (to ca. 10%). *Alnus* remains at similar levels throughout. Herbs remain dominated by Poaceae (to 55%) with some cereal type, *Plantago lanceolata* (peak to 7%) and *Ranunculus* type remaining. From the middle of the zone (70cm), *Typha angustifolia* type increases to high values (45%), which continue into the lower part of Zone 3. Cyperaceae have correspondingly smaller values but remain important, along with *Potamogeton* type (pond weed; 1%) and sporadic aquatic macrophytes including *Nymphaea* (white water lily), *Nuphar* (yellow water lily), *Callitriche* (water starwort) and *Lemna* (duckweed). Spores remain as Zone 1, but with fewer *Polypodium*. There are small numbers of *Mougetia* and pre-Quaternary palynomorphs.

Zone 3: 62cm to 42cm. *Quercus-Alnus-Corylus avellana* type-*Salix*. The lower peat levels. This zone corresponds with the transition from the lower alluvium to a detrital peat and is delimited by a sharp expansion of *Salix* (to 20%) with some increases in *Quercus* (to its highest values; 29%), *Alnus* (18%) and re-expansion of *Corylus avellana* type (29%). *Tilia* dies out in this zone. *Ilex aquifolium* (holly) and *Fraxinus* (ash) are also present. Herbs remain dominated by Poaceae but at lower levels than previously (20%). Other herb taxa remain similar to the preceding zones. After an initial peak of *Typha angustifolia* type (46%) at the bottom of the zone, values decline in the middle of the zone, but this is followed by further expansion at the top of the zone (35%). Cyperaceae remain (ca. 10%) but with fewer aquatic macrophytes present. Spores are dominated by monolete Pteropsida (*Dryopteris* type) with

fewer *Pteridium aquilinum*. Pre-Quaternary palynomorphs are absent in this zone.

Zone 4: 42cm to 8cm. (l.p.a.s.z 30cm to 18cm). Poaceae-Cyperaceae. The peat to silt transition and the overlying gleyed silt. There is an overall reduction in trees and shrubs (to ca. 30%) with expansion of herbs. A local pollen assemblage sub zone has also been defined by a peak of derived/reworked geological (pre-Quaternary) palynomorphs between 30cm and 18cm. This also corresponds with occurrences of halophytic indicators including dinoflagellates, a peak of Chenopodiaceae (goosefoots, oraches and glassworts), pollen of *Plantago maritima* type (sea plantain) and by occasional occurrences of sea lavender and/or thrifty (Plumbaginaceae; *Armeria* 'A' and 'B' line).

Throughout this upper zone, trees and shrubs remain, as in the preceding Zone 3, but with lower percentages. *Fagus sylvatica* (beech) and *Carpinus betulus* (hornbeam) are present for the first time in this zone but only with single occurrences. The high values/peak of *Corylus* in Zone 3 is much-reduced (15-20%) in Zone 4. Herbs attain their highest values, with Poaceae dominant (to 80%), with a slight expansion of cereal type and Asteraceae types (daisy/dandelion types). Marsh and aquatic taxa comprise Cyperaceae, which attains high values (to 30%). *Typha angustifolia* has highest values at the base and top of the zone, with some *Typha latifolia* type (greater reed mace), *Myriophyllum verticillatum* (water milfoil), *Potamogeton* type and *Pediastrum* (algae). Spores remain as in the preceding zone (3).

Discussion and inferred vegetation and environment

The pollen contained within these sediments come from a number of sources and have been strongly influenced by the depositional environment of the sediments. The taphonomy has been influenced largely by both fluvial and airborne transport. The former also shows evidence of having been influenced by broader regional changes in Holocene relative sea level. The latter consists of airborne transported pollen from the nearby interfluves and from greater distances. This latter element will include evidence for local human activity.

The on-site habitat development: There is a stratigraphical change from the basal gravels, which are probably of last glacial (Devensian) age, to overlying river alluvium. Because of the topographical location of this site at a maximum altitude of 2.00m OD, any minor changes in the hydrology may have had a more than proportionate effect on the vegetation status. Alluvial silts started to accrete on this basement during the late prehistoric period (Pollen Zone 1). From comparison with other regional pollen data, this was probably during the late Neolithic or early-middle Bronze Age and was caused by either: (i) rising relative sea-level (rsl) in the North Sea Basin and Fenlands affecting the hydrology of this region by the middle late prehistoric period, or (ii) increased human activity (primarily agriculture) on the interfluves may also have affected the local hydrology and caused greater sediment mobility (erosion and transport) through woodland clearance. The presence of reworked geological

spores in Zones 1 and 2 attests to the erosion and reworking of older sediments. Contemporary pollen indicates that the initial environment of deposition was floodplain with grasses, sedges and other fen taxa, with possible alder growth along the edges of the fen. Occasional pollen from aquatic plants (e.g. duckweed and water lilies and starwort) may be from local standing water or fluvially-transported from farther distances (along with sediment). With rising water table, a more stable reed swamp became established (during Pollen Zone 2), which was dominated by reed-mace and/or bur reed along with other fen taxa and aquatic plants, including yellow and white water lily, water starwort, duckweed and pondweed. During this phase, willow started to become locally important (during Zone 2) and ultimately became dominant (*Salicetum*) on the site. While sedges and reed mace/bur reed (and probably grasses) remained important, willow was certainly dominant; peat formation occurred in this drier (but still damp) and more stable fen edge habitat. These seral vegetation changes (hydrosere) resulted from local changes in the hydrology of the fen edge which occurred in response to wider changes in rising relative sea level in the North Sea basin and Fenlands. Development of willow represents a stable phase of transgressive floodplain woodland development under which peat formed. Alder produces substantial numbers of air transported pollen (*i.e.* anemophilous), and quantities here, while suggesting some local growth along the perimeter of the fen, indicate that alder was probably not as important as locally growing carr woodland (*Alnetum*). Willow contrasts markedly, having much poorer pollen representation, and numbers recovered here suggest on-site dominance. This period of stable willow floodplain growth (Zone 3) was terminated by re-incursion of alluvial sediment deposition (Pollen Zone 4). Willow became less important on site (but probably transgressed to higher elevation) as local conditions became wetter.

A negative hydrosere was set in motion by the (probable) late prehistoric final increase in regional sea level. This had a ponding-back effect on the local hydrology, which initially caused the (already-noted) demise of willow and the re-establishment of bur-reed and/or reed mace. This was followed by sedge fen with areas of open water, which supported aquatic macrophytes. There is clear evidence that saline conditions reached as far as the fen edge at this site, with evidence of halophytes in the upper alluvium of Zone 4. Pollen sub-zone 4a contains salt marsh plants including sea plantain, Chenopodiaceae (goosefoots, glassworts and oraches) and thrift and/or sea lavender. There are also substantial numbers of reworked pre-Quaternary palynomorphs and occasional dinoflagellates which are also indicative of salt marsh or mud flat conditions. This appears to have been an ephemeral phase of saline incursion, after which there was a return to freshwater fen conditions dominated by grasses, sedges and other reed swamp taxa prior to draining/land reclamation for pasture.

The dry land vegetation: Overall, the input of pollen from the surrounding interfluves and that which may have been fluvially-transported from farther distances (in the alluvium) appears less complex than the changes seen in the on-site vegetation. The principal changes appear to be woodland clearance for agriculture during the late prehistoric period and establishment of

grassland/ local pasture in proximity to the fen edge, with cereal cultivation at some distance, perhaps on the drier upper slopes.

The lower pollen levels (Zones 1 and 2) show that woodland was locally dominant, with a mixture of tree and shrub types present. Lime (*Tilia*) is especially diagnostic and has greatest importance in Zone 1, before declining in Zone 2, and subsequently becoming absent. Pollen of *Tilia* is usually poorly-represented in pollen spectra (Andersen 1979, 1973). This is due to its entomophily and flowering in mid summer, at a time when other vegetation is in full leaf. The latter further inhibits its dissemination from areas of growth on well-drained soils to the wetlands from which pollen sequences largely come (Waller 1994). It is now recognised that it was the dominant or at least co-dominant woodland taxon over large areas of southern and eastern England (Moore 1977; Greig 1982; Scaife 1980, 2000a, 2000b, 2003) from its arrival just prior to post-glacial inundation of the English Channel at ca. 7000-8000 BP (Godwin 1956, 1975). Thus, where its pollen is present, as in Zone 1 here, it is probable that lime woodland was locally dominant or at least co-dominant, in this case with oak and hazel.

The decline in lime pollen at the end of Zone 1 and during Zone 2 is equally diagnostic and although there are taphonomic questions with the stratigraphical change to peat from alluvium, this appears to be the now widely-discussed late prehistoric Lime Decline. This decline has been seen at many sites in southern England (Haskins 1978; Scaife 1980, 1987, 2000b; Waller 1994). In many cases, the prehistoric clearance of lime woodland on preferential soils took place for agriculture. This is evidenced in many cases as an expansion of pollen from agricultural weeds which occurred along with, or shortly after, the declining lime pollen percentages. At this site, this is not the case. While there is a clear decline in lime pollen, the herb pollen assemblages remain more or less consistent or decline. This, however, as noted above, is complicated by the change to peat formed under more closed floodplain (willow) woodland. Waller (1994) demonstrated that due to its poor pollen-dispersal characteristics, an expanding wetland such as that occurring here may have driven lime-dominated woodland further away from the sample site. This would cause a reduction in pollen percentages at the sample site. This is possibly the case here, although it is also probable that the fluvially-transported component ceased with the formation of on-site peat. It is, however, very clear that during the period represented by peat accumulation, lime-dominated woodland was cleared. Thus, it is conceivable that both human and pollen taphonomic factors may have played a role in the reduction of lime pollen.

Radiocarbon dating has demonstrated that the Lime Decline was not, as Godwin suggested, synchronous, but took place from the Neolithic period onwards, with the majority of sites indicating middle to late Bronze Age dates. However, dates as late as the Anglo-Saxon period have been demonstrated in Epping Forest (Baker *et al.* 1978). Although radiocarbon dating of the peat is required to establish both the age of the peat and also this significant phase of woodland clearance, it is probable that this event occurred during the middle Bronze Age. Cereal pollen is present to the base of this profile, thus showing

that the sequence, at oldest, is Neolithic and post-Neolithic. This is also corroborated by the low pollen values of elm (*Ulmus*), suggesting a post-Neolithic Elm Decline age.

Subsequent to this period of major land use change, oak and hazel remained the primary elements of remaining woodland on the drier interfluves, while on the floodplain alder and willow were dominant as carr woodland in drier fen areas. This situation remained throughout the late prehistoric period (probably the Bronze Age). The phase of on-site peat development was clearly willow-dominated carr woodland. However, this was a general drying phase in which these fen wood taxa were able to become established. Pollen during this zone (Zone 3) also shows some expansion of oak and hazel and also a record of holly (*Ilex*). All of these tree/shrub taxa may be constituents of the drier areas of fen woodland and it is probable that, here, these taxa migrated from the heavier soils of the lower fen edge slopes onto drier areas of the floodplain carr woodland. With the reversion to alluvial sedimentation, including the phase of marine incursion noted, there is a reduction in these local woodland elements, but also an increased pollen catchment of other secondary woodland elements. These include beech (*Fagus*) and ash (*Fraxinus*), which are usually poorly-represented in pollen assemblages (Anderson 1970, 1973), suggesting local growth within the catchment, although this may have been the fluvial or airborne pollen catchment.

After clearance of lime woodland, the pattern of agricultural activity remained the same for the duration of the sediment record, that is, throughout Pollen Zones 3 and 4. Grassland, probably rough pasture, was important in areas adjacent to the fen edge. There is a consistent record of cereal pollen throughout the profile and it is likely that cultivation was taking place on better-drained soils on nearby higher ground. Identification to species level is not clear with cereals; crop types were of wheat and barley.

Summary and conclusions

Useful pollen data has been obtained, showing the changing vegetation and environment of this fen edge location. Initially, a floodplain environment existed, on which mineral sediments were deposited, probably during the late Neolithic/ early Bronze Age. This was followed by a more stable phase of fen carr woodland dominated by willow. Rising (relative to land) sea level during the late prehistoric period, possibly coupled with enhanced sediment movement caused by increased human activity, saw a return to deposition of mineral sediments. Within this post-peat phase, there is also clear evidence that there was an ephemeral episode of marine/saline influences to the fen edge. There is also evidence that the terrestrial zone of better-drained soils initially supported woodland dominated by lime, with oak and hazel. Clearance of this woodland for agriculture took place during the period represented by the peat accumulation. This is probably the often-described Lime Decline, which has frequently been dated to the Neolithic and Bronze Age periods, and especially the latter (middle Bronze Age). This clearance was for agriculture and the pollen data suggest that a mixed arable and pastoral economy existed in the vicinity of the site. The latter would have been

rough pasture on the lower, poorer-drained floodplain and immediate fen edge, while the former was probably on the better-drained soils of the higher ground.

The essential points of this study are as follows:

- Pollen is abundant and well-preserved in the peat and alluvial sediments.
- The peat appears to have formed in damp woodland (carr) dominated by willow, with a ground flora of grasses, sedges and reedmace and/or bur reed.
- The peat is underlain and overlain by alluvial sediments, demonstrating that there were substantial changes in the local hydrology. These changes were probably caused (forced) by late-Holocene regional sea level changes in the Fenland basin as a whole. Thus, there is evidence of increased waterlogging and its effect on the autochthonous vegetation of the peat forming community which appears as a retrogressive hydrosere. These changes would have been a diachronous transgression across the rising land of the fen edge.
- There is strong evidence of saline incursion in the mineral sediments overlying the peat. This represents the period of maximum marine/brackish water ingress across the fens prior to reclamation.
- Pollen Zones 1 and 2 have evidence of regional woodland dominated by lime with oak and hazel. The former was cleared by human activity for agriculture and is an example of the late prehistoric Lime Decline. Originally thought to have been a phenomenon caused by climatic change, it is now widely accepted that human activity (forest clearance) was largely responsible. It should, however, also be noted that other taphonomic processes may have had similar effects on the pollen record.
- After woodland clearance, the vegetation was one of agricultural land comprising both arable cultivation on better-drained soils, with grassland, probably rough pasture, on the lower valley sides/ fen edge.
- Although pollen analysis is not a technique for dating, it is possible to say that these sediments are of late prehistoric or early historic age. This is based on the overall characteristics of the pollen spectra and especially the presence of cereal pollen and associated weeds, and the absence of elm (*Ulmus*)/ lime (*Tilia*) in any substantial numbers, except for the latter in the lowest pollen zone.

Littleport Cont.

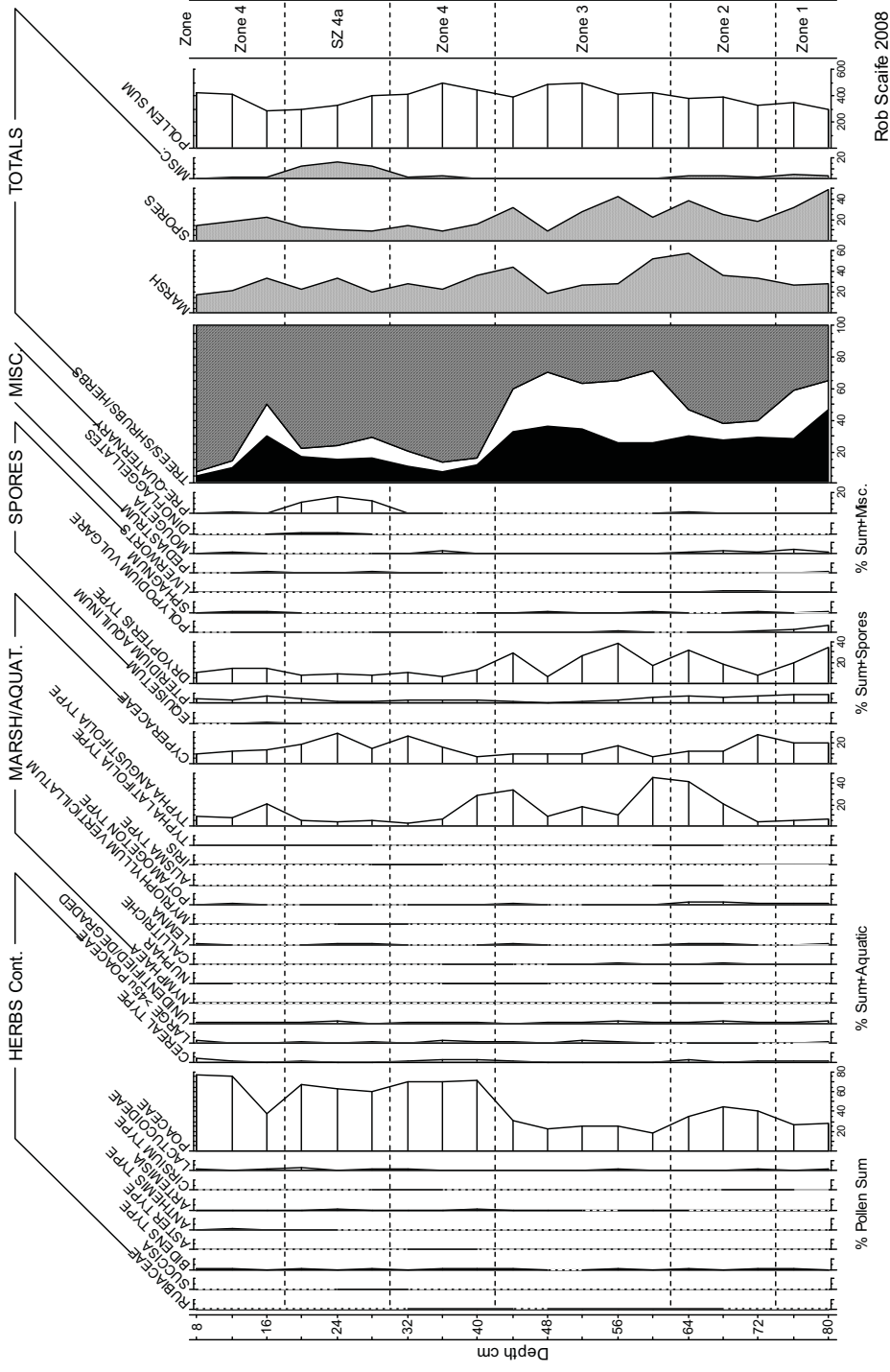


Fig. 10: Pollen graph

4.11 Radiocarbon dating

Beta Analytic/ Tom Woolhouse

Introduction

A sample of peat from Test Pit 1 was submitted to Beta Analytic Inc., Miami, Florida, for radiocarbon dating. A radiocarbon determination (Table 8) was sought in order to provide an absolute date for the onset of peat growth in this part of the site, thought to be the approximate position of the later prehistoric fen edge (Fig. 3a).

Sampling strategy

A sub-sample of peat for radiocarbon analysis was taken from Column Sample 1 (Test Pit 1). The sample material was selected by a palaeo-environmental specialist (Dr Rob Scaife); it was taken from the lower peat horizon, at the interface with the lower alluvial silt layer (Pollen Zone 3, 56-60cm below modern ground level). Selection of material was based on the potential of the lower peat to shed light on the precise chronology of later prehistoric environmental change on the site. Analysis of pollen from the column samples (Scaife, see above) had demonstrated a sequence of past hydrological/ environmental change both on and in the vicinity of the site. Based on the overall characteristics of the pollen spectra (especially the presence of cereal pollen and associated weeds, and the general absence of elm and lime), it seemed likely that the sediments were of later prehistoric/ early historic age. However, radiocarbon analysis was required in order to obtain an absolute date for the beginning of waterlogged conditions and consequent peat growth on this part of the fen edge.

Method

The peat sub-sample was submitted to Beta Analytic Inc., Miami, Florida for dating using Accelerator Mass Spectrometry (AMS).

Results and discussion

It was anticipated that the peat would return a later prehistoric date. Based on pollen analysis, particularly the marked decline of lime (*Tilia*) in the upper levels of the silt sealed beneath the peat (probably representing the later prehistoric Lime Decline), a middle Bronze Age date seemed likely for the initial onset of peat growth. This chronology was supported by unabraded and well-preserved later Bronze Age pottery recovered from the upper peat in Trench 5.

The sample provided a modern radiocarbon date (post-AD 1950). The analysed material had more C14 than the modern reference standard,

indicating that it was part of a system which was respiring carbon after the onset of thermo-nuclear bomb testing in the 1950s.

As both the characteristics of the pollen spectra in the sediments and the ceramic evidence from the overlying peat horizon suggest a later prehistoric date for the lower peat, it must be assumed that the sub-sampled deposits had been contaminated in some way. Given the low-lying position of the site and the high water table, this contamination may have been caused by groundwater. Alternatively, there may have been localised disturbance to the subsurface layers which was not visible within the confines of the 1m x 1m test pit.

Given the other evidence in support of a later prehistoric date for the peat, and the plausible sources of contamination, the modern radiocarbon determination is considered to be unreliable. The pollen and pottery evidence suggests that peat began to accumulate on the fen edge at this site around the middle Bronze Age.

Laboratory Number (Beta-)	AS Sample Number	Analysis	Measured Radiocarbon Age	13C/12C Ratio	Conventional Radiocarbon Age
251957	AS905/TP1-56-60	AMS standard delivery	102.6±0.4 pMC*	-26.6 ‰	102.9±0.4 pMC*

Table 8: Results of radiocarbon analysis

* pMC = 'percent modern carbon'. Results are reported in the pMC format when the analysed material has more C14 than the modern (AD 1950) reference standard.

5 DISCUSSION

5.1 Development of the fen environment

Radiocarbon dating of the basal peat at the site failed to return an accurate date, presumably due to groundwater contamination or unseen soil disturbance just outside the test pit. It is therefore not possible to determine an absolute date for the beginning of peat growth on this part of the Littleport fen edge. However, based on the overall characteristics of the pollen spectra from the column samples, it is thought that the site's sediments are of late prehistoric or historic age. This characterisation is based particularly on the presence of cereal pollen and associated weeds to the base of the profile, and also on the absence of elm/ lime in any substantial numbers, except for the latter in the lowest pollen zone. The presence of large, unabraded fragments of late Bronze Age pottery in the upper peat horizon indicates that peat growth was well-underway by this time. The ceramic evidence lends weight to the early to middle Bronze Age date for the onset of fen conditions which is suggested on the basis of the pollen evidence.

The site was probably dry land in the early Neolithic (Phase 1), when it was sporadically visited by hunter-gather groups and saw occasional flint-working. The pollen indicate that around the late Neolithic/ early Bronze Age, the area was river floodplain with grasses, sedges and other fen taxa, and possibly some alder growth along the fen edge. Clay layers directly overlying the Kimmeridge Clay in the lowest-lying parts of the site also suggest the presence of localised freshwater meres. A conjectural map of the later prehistoric landscape in Littleport (Hall 1996, 23 fig. 11; Fig. 3a) shows the site as lying close to a meander in the course of the Old Croft River, with one of its tributaries running directly along the northern site boundary (this former watercourse was identified in Trenches 1 and 2). The pollen evidence fits well with this suggested topographical context. The higher, drier land to the south of the site originally supported lime woodland, but this declined markedly prior to the onset of peat growth, probably mainly due to deliberate woodland clearance for agriculture.

This river floodplain stage was followed, in the Bronze Age, by a long and stable period of reed swamp in which willow-dominated fen carr woodland became increasingly important, and peat formed, eventually reaching nearly 0m OD. The late Bronze Age pottery found in the upper peat in Trench 5 shows that the late Bronze Age/ early Iron Age (Phase 2) activity in the far south of the site was taking place immediately adjacent to the contemporary fen, on what must have been marginal land.

The period of stable peat growth was terminated by renewed alluvial sedimentation, with strong signs of saline conditions reaching as far as the fen edge. This may have been a result of the last (probable) late prehistoric increase in regional sea level causing water to pond-back up the Old Croft River and its tributaries. It might equate to a known phase of flooding and silt deposition along the course of the Old Croft River, which has been dated to 405-180 cal. BC at Welney (Hall 1996, 19). It might also provide a context for the apparent 'gap' in activity on the site during the middle Iron Age. This marine phase was brief and was followed by a return to freshwater fen conditions, dominated by grasses, sedges and other reed swamp taxa. Late Iron Age (Phase 3) land use on the site would have taken place against this backdrop of renewed freshwater peat fen. At least during prehistory, peat never formed at the far southern edge of the site, which was probably always just above the fen edge. However, a shallow silt deposit sealing all the late Iron Age (and earlier) archaeological features shows that even this high ground (above 1.00m OD) was becoming increasingly prone to flooding by the late pre-Roman Iron Age and was probably eventually abandoned for this reason.

Subsequent developments during the historic period were not evident in the pollen record. Hall notes that peat would have continued to form uninterruptedly in Littleport during the Anglo-Saxon and medieval periods, reaching the 3.5m contour (Hall 1996, 19). Peat wastage and modern agriculture had probably removed deposits of later than prehistoric origin.

5.2 Later prehistoric agriculture on the Littleport fen edge

Late Bronze Age/ early Iron Age activity on the site was represented by a cluster of shallow pits, hollows and possible postholes/ stakeholes, all located on the higher ground in the south of the site, and most of which could not be securely dated. While all had clearly been severely truncated, the general paucity of pottery, daub fragments and other cultural material suggests that this was not a 'core' settlement area. It is more likely that contemporary occupation was focused on the higher, drier land further to the south, with the fen edge being used for agriculture and perhaps small-scale rubbish dumping from nearby occupation areas. Some of the possible postholes might relate to fenced enclosures for livestock.

Similar land use appears to have continued in the late Iron Age, albeit possibly with a break in occupation during the middle Iron Age. The late Iron Age ditches show that land along the northern Littleport fen edge was divided into enclosed plots, probably used as pasture/ paddocks given the low-lying topography and fairly wet ground conditions. It is unclear whether the two principal Iron Age ditches represent successive phases of boundary demarcation, or were contemporary, forming the corner of a rectilinear enclosure extending beyond the site boundaries.

By the late pre-Roman Iron Age/ early Romano-British period, the site became increasingly prone to flooding, as evidenced by a silt layer overlying (and in some case in-filling) all the late Iron Age (and earlier) archaeological features. The fill of the largest late Iron Age ditch, which ran down into the fen, was near-identical to this flood-borne silt layer and it seems likely that the ditch also in-filled as a result of flooding.

The pollen record indicates that after the clearance of lime woodland, the pattern of agricultural activity remained much the same for the duration of the sediment record *i.e.* from around the middle Bronze Age onwards. Grassland, probably rough pasture, was important in areas adjacent to the fen edge (almost certainly including the site itself), while there is a consistent record of cereal, including wheat and barley, being cultivated on the better-drained soils of the nearby high ground.

Excavations at Highfield Farm, close the high point of the 'fen island' just over 1km south of Wisbech Road, have identified features spanning the early Neolithic to Romano-British period and beyond (Dymond 1999; Holt 2008). By the late Bronze Age/ early Iron Age, the surviving features suggest that the hilltop was occupied by a ditched rectilinear enclosure. Contemporary postholes could have formed structures and several pits and ditches contained animal bone, large 'fresh' potsherds and other domestic 'waste' (Holt 2008, 15-16). The presence of only a single middle Iron Age pit suggests that activity shifted away during the middle Iron Age, but by the late Iron Age/ early Romano-British period, the site was occupied by an extensive rural settlement with possible posthole structures, substantial ditched enclosures, droveways, a covered working area and watering holes. The lower slopes to the west and north of the hilltop were occupied by field

systems, identified during a previous archaeological evaluation (Cutler 1996). The site is thought to have been used for stock rearing and animal butchery/processing on a fairly substantial scale, perhaps providing food for the inhabitants of the Romano-British saltern sites along the Old Croft River. It was occupied until the 4th century AD (Holt 2008, 17 & 107).

The Phase 2 and 3 remains on the fen edge at Wisbech Road might be directly related to these phases of activity on the hilltop to the south. The inhabitants of the late Bronze Age - early Iron Age and late Iron Age - early Roman settlements at Highfield Farm may have driven their livestock down to the fen edge to graze and drink. A need for water, as well as pasture, for livestock, is suggested by the presence of a large wattle-lined pit during the late Bronze Age/ early Iron Age phase at Highfield Farm, and by possible watering holes within the late Iron Age/ Romano-British settlement (Holt 2008, 15-17). At just over 1km away, the fen edge on the north side of the 'island' is close to the one mile maximum distance recommended by the Ministry of Agriculture for driving cows in milk (Martin 1999, 40). By the late Iron Age, the boundary/ drainage ditches on the present site suggest that this area of the Littleport landscape was well-ordered and managed, and that the local population were concerned with demarcating areas of different use or ownership, even in what must have been a fairly marginal topographical location. Given the evidence for stock raising and processing on something more than subsistence level at Highfield Farm, the importance of the fen edge for pasturing animals is readily understandable. The Highfield Farm settlement was connected to the surrounding fields by droveways, one of which ran westwards, another of which ran downhill towards the fen edge to the north-west. The latter, dated to the late Iron Age phase of the complex, ran almost directly towards the present site (Holt 2008, fig. 10).

5.3 The quartzite pebble hammer: a 'votive' deposit?

The quartzite pebble hammer fragment found close to the terminus of the larger late Iron Age (Phase 3) ditch (F2011) is an unusual object. Given their rarity, it is perhaps significant that another similar object has previously been found in Littleport itself, on the high ground of the island, south of Highfield Farm (HER 07218; Fig. 3a). In Cambridgeshire, others have been recorded at Chatteris, Kingston, Litlington, Reach and Swaffham Prior (Reynolds 2000, 6), and from Gamlingay (Crummy 2004, 12). Pebble hammers appear to largely date from the Mesolithic, although they may have continued in use through the Neolithic and even into the Bronze Age (Rankine 1951, 53; Roe 1979, 36). It is therefore possible that the object represents residual material left on site during the phase of sporadic early Neolithic activity.

Its presence within the ditch fill may simply be an instance of residual material which was present in the vicinity, either on the ground surface or within an earlier prehistoric feature truncated by the ditch, finding its way into the ditch through natural processes. However, it is equally possible that the pebble hammer had been found by chance by the late Iron Age inhabitants of the area and been deliberately collected and curated as an unusual, aesthetically-pleasing, and valued object. Apparently curated pebble hammers/ mace-

heads have been found in later contexts elsewhere, including, for example, in Anglo-Saxon grubenhauser at Gamlingay (Crummy 2004, 12) and West Stow (Pieksma and Gardiner 1989, 47, fig. 36).

The deliberate placement of a valued object in the upper fill of a boundary ditch leading down into the fen may represent a 'votive' deposit of some kind. Deliberate deposition of objects in watery contexts is well-attested throughout much of prehistory (and possibly beyond). In the broadest sense, such deposits often seem to have been offerings, perhaps to deities, natural forces or ancestors, but could perhaps also have been used to commemorate important events in the life of a community or its inhabitants. Such practices are seen most spectacularly at sites such as Flag Fen near Peterborough and Fiskerton in Lincolnshire. At Bradley Fen near Whittlesey, the boundary between the late Bronze Age fen and the field/ enclosure systems along the dry fen edge was demarcated by seemingly symbolic deposits of bronze metalwork, including spearheads driven point-down into the ground (Pryor 2003, 289-293). The prehistoric inhabitants of the Fenland seem to have been deeply concerned with the transition from 'wet' to 'dry' land, and with demarcating boundaries. As such, it is tempting to see the pebble hammer in Ditch F2011 as a propitiatory offering in response to the increasingly flood-prone conditions on the site in the late pre-Roman Iron Age.

6 STORAGE AND CURATION

The archive records, with an inventory, will be deposited with any donated finds from the site at the Cambridgeshire County Archaeology Store. The archive will be quantified, ordered, indexed, cross-referenced and checked for internal consistency. In addition to the overall site summary, it will be necessary to produce a summary of the artefactual and ecofactual data. The site archive will be prepared in accordance with the document *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (Archaeological Archives Forum 2007). Reference will also be made to the *Guidelines for the Preparation of Excavation Archives for Long Term Storage* (United Kingdom Institute for Conservation 1990) and the *Standards in the Museum Care of Archaeological Collections* (Museums and Galleries Commission 1992).

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8 BIBLIOGRAPHY

- Andrefsky, W. 2005 *Lithics: Macroscopic Approaches to Analysis (2nd Edition)*. Cambridge University Press, Cambridge
- Atkins, R. and Mudd, A. 2003. 'An Iron Age and Romano-British settlement at Prickwillow Road, Ely, Cambridgeshire: Excavations 1999-2000', *Proceedings of the Cambridge Antiquarian Society* 92, 5-55
- Baker, C.A., Moxey, P.A. and Oxford, M. 1978 'Woodland continuity and change in Epping Forest', *Field Studies* 4, 645-669
- Bennett, K.D., Whittington, G. and Edwards, K.J. 1994 'Recent plant nomenclatural changes and pollen morphology in the British Isles', *Quaternary Newsletter* 73, 1-6
- BGS 1985 *East Anglia Sheet 52°N - 00°. 1:250,000 Series. Solid Geology*. British Geological Survey/ Ordnance Survey, Southampton
- BGS 1991 *East Anglia Sheet 52°N - 00°. 1:250,000 Series. Quaternary Geology*. British Geological Survey/ Ordnance Survey, Southampton
- Bryant, S. 1997 'The Iron Age' in Glazebrook, J. (ed.) *Research and Archaeology: A Framework for the Eastern Counties, 1. Resource Assessment*. East Anglian Archaeology Occasional Paper No. 3, Scole Archaeological Committee, Norwich
- Chapman, A., Carlyle, S., and Leigh, D. 2005. 'Neolithic and Beaker pits, and a Bronze Age landscape at Fenstanton, Cambridgeshire', *Proceedings of the Cambridge Antiquarian Society* 94, 5-20
- Clark, J.G.D., Godwin, H., Godwin, M.E. and MacFadyen, W.A. 1933 'Report on an early Bronze Age site in the south-eastern Fens', *Antiquaries Journal* 13, 266-296
- Clark, J.G.D., Godwin, H. and Clifford, M.H. 1935 'Report on recent excavations at Peacock's Farm, Shippea Hill, Cambridgeshire', *Antiquaries Journal* 15, 248-53
- Courty, M.A., Goldberg, P. and Macphail, R.I. 1989 *Soils and Micromorphology in Archaeology*. Cambridge University Press, Cambridge
- Crummy, N. 2004 in Murray, J. 'Prehistoric lithics from Station Road, Gamlingay', *Proceedings of the Cambridge Antiquarian Society* 93, 9
- Cutler, R. 1996 *Parson's Lane, Littleport, Cambridgeshire. An Archaeological Evaluation*. BUFAU Project No. 418

Dymond, M. 1999 *Archaeological Evaluation at Highfield Farm, Littleport, Cambridgeshire*. Archaeological Project Services unpublished report no. 79.99

Evans, C. 1998. 'The Lingwood Wells: waterlogged remains from a first millennium BC settlement at Cottenham, Cambridgeshire', *Proceedings of the Cambridge Antiquarian Society* 87, 11-30

Fowler, G. 1949 'A Romano-British village near Littleport, Cambridgeshire', *Proceedings of the Cambridge Antiquarian Society* 43, 7-20

French, C. 2003 *Geoarchaeology in Action. Studies in Soil Micromorphology and Landscape Evolution*. Routledge, London

Godwin, H. 1940 'Pollen analysis and forest history of England and Wales', *New Phytologist* 39, 370-400

Godwin, H. 1956 *The History of the British Flora*. 1st Edition. Cambridge University Press

Godwin, H. 1975 'History of the natural forests of Britain: establishment, dominance and destruction', *Philosophical Transactions of the Royal Society of London* B271, 47-67

Goldberg, P. and Macphail, R.I. 2006 *Practical and Theoretical Geoarchaeology*. Blackwell Publishing, Oxford, 455

Grassam, A., Nicholson, K. and Weston, P. 2005 *Land Adjoining 80 Wisbech Road, Littleport, Cambridgeshire: An Archaeological Evaluation*. Archaeological Solutions unpublished report no. 1851

Greene, R. 2008 *Land Adjoining 80 Wisbech Road, Littleport, Cambridgeshire: An Archaeological Excavation Interim Report*. Archaeological Solutions unpublished report no. 3048

Greig, J.R.A. 1982 'Past and present lime woods of Europe' in Bell, M. and Limbrey, S. (eds.) *Archaeological Aspects of Woodland Ecology*. Association for Environmental Archaeology Symposia Vol. 2, British Archaeological Reports (International Series) 146, 23-55

Gurney, D.A., Neve, J. and Pryor, F.M.M. 1993 'Excavations at Plant's Farm, Maxey, Cambridgeshire' in Simpson, W.G., Gurney, D.A. and Neve, J. *The Fenland Project No.7: Excavations in Peterborough and the Lower Welland Valley 1960-69*. East Anglian Archaeology Occasional Paper No. 61, The Fenland Archaeological Trust, 69-101

Gurney, D. 2003 *Standards for Field Archaeology in the East of England*. East Anglian Archaeology Occasional Paper No. 14

Hall, D. 1996. *The Fenland Project 10: Cambridgeshire Survey, Isle of Ely and Wisbech*. East Anglian Archaeology Report No. 79, Cambridge Archaeological Committee, Cambridge

Haskins, L.E. 1978 *The Vegetational History of South-East Dorset*. Ph.D. thesis, Department of Geography, University of Southampton

Healy, F. 1988 *The Anglo-Saxon Cemetery at Spong Hill, North Elmham, Part VI: Occupation during the Seventh to Second Millennium BC*. East Anglian Archaeology Report No. 39

Hodge, C.A.H., Burton, R.G.O., Corbett, W.M., Evans, R., George, H., Heaven, F.W., Robson, J.D. and Seale, R.S. 1983 *Soils of England and Wales, Sheet 4. Eastern England*. Ordnance Survey, Southampton

Hodgson, J.M. 1997 *Soil Survey Field Handbook: Silsoe*, Soil Survey and Land Research Centre.

Holt, R. 2008 *Archaeological Assessment Report on Land at Highfield Farm, Littleport, Cambridgeshire (LHF04): Volume 1 Draft*. Archaeological Project Services Report No. 120/07

Humphrey, J. 2007 'Simple tools for tough tasks or tough tools for simple tasks? Analysis and experiment in Iron Age flint utilisation' in Haselgrove, C. and Pope, R. *The Earlier Iron Age and the Near Continent*. Oxbow Books, Oxford, 144-159

Jackson, R.P.J. and Potter, T.W. 1996 *Excavations at Stonea, Cambridgeshire, 1980-85*. British Museum Press, London

Macaulay, S. 2002 *Romano-British Settlement at Camel Road, Littleport, Cambridgeshire (TL 5663 8715)*. Cambridgeshire County Council Archaeological Field Unit Report No. 205

Martin, E. 1999 'The Iron Age' in Dymond, D. and Martin, E. (eds.) *An Historical Atlas of Suffolk*. Suffolk County Council Environment and Transport/ Suffolk Institute of Archaeology and History, 40-41

Moore, P.D. 1977 'Ancient distribution of lime trees in Britain', *Nature* 268, 13-14

Moore, P.D. and Webb, J.A. 1978 *An Illustrated Guide to Pollen Analysis*. Hodder and Stoughton, London

Moore, P.D., Webb, J.A. and Collinson, M.E. 1991 *Pollen Analysis*. Second Edition. Blackwell Scientific, Oxford

Pieksma, E.J. and Gardiner, J. 1989 'The prehistoric flint and stone assemblage' in West, S.E. (ed.) *West Stow: the Prehistoric and Romano-British Occupations*. East Anglian Archaeology Report No. 48

Pollard, J. 1996 'Iron Age pit alignments at St. Ives, Cambridgeshire', *Proceedings of the Prehistoric Society* 62, 93-116

Reynolds, T. 2000 'The Mesolithic' in Kirby, T. and Oosthuizen, S. (eds.) *An Atlas of Cambridgeshire and Huntingdonshire History*. Centre for Regional Studies/ Anglia Polytechnic University, Cambridge, 6

Roberts, J. 1997 *Roman Occupation on the Fen Edge at Camel Road, Littleport*. CCC AFU Report No. A114.

Rankine, W.F. 1951 'Quartzite pebble maceheads with hourglass perforation: their distribution in England', *The Archaeological Newsletter* 4, 53-5

Roe, F.E.S. 1979 'Typology of stone implements with shaftholes' in Clough, T.H. and Cummins, W.A. (eds.) *Stone Axe Studies*. Council for British Archaeology Research Report 23, London, 23-40

Roe, F.E.S and Radley 1968 'Pebble maceheads with hour-glass perforations from Yorkshire, Nottinghamshire and Derbyshire', *Yorkshire Archaeological Journal* 42, 169-177

Salway, P. 2001 *A History of Roman Britain*. Oxford University Press

Scaife, R.G 1980 *Late-Devensian and Flandrian Palaeoecological Studies in the Isle of Wight*. Unpublished Ph.D thesis. Univ. London, King's College

Scaife, R.G. 2000a 'Palynology and palaeoenvironment' in Needham, S.P. *The Passage of the Thames. Holocene Environment and Settlement at Runnymede*. Runnymede Bridge Research Excavations, Volume 1, 168-187

Scaife, R.G. 2000b 'Holocene vegetation development in London' in Sidell, J., Wilkinson, K., Scaife, R.G. and Cameron, N. *The Holocene Evolution of the London Thames. Archaeological Excavations (1991-1998) for the London Underground Limited, Jubilee Line Extension Project*. Museum of London Monograph, 111-117

Scaife, R.G. 2003 'The Palaeoecological background' in Pope, C., Snow, L. and Allen, D. *The Isle of Wight Flora*. Dovecote Press, Wimborne, Dorset, 19-31

Sparrow, P. and Woolhouse, T. 2008 *Land Adjoining 80 Wisbech Road, Littleport, Cambridgeshire. Post-Excavation Assessment and Updated Project Design*. Archaeological Solutions unpublished report no. 3047

SSEW 1983a *Soil Survey of England and Wales Sheet 4. Soils of Eastern England. Scale 1: 250,000*. Lawes Agricultural Trust/ Ordnance Survey, Southampton

SSEW 1983b *Legend for the 1:250,000 Soil Map of England and Wales*. Lawes Agricultural Trust/ Soil Survey of England and Wales, Rothamsted Experimental Station, Harpenden

Stace, C. 1991 *New Flora of the British Isles*. Cambridge University Press, Cambridge

Van der Veen, M. 1991 'Consumption or production? Agriculture in the Cambridgeshire Fens' in Renfrew, J. (ed.) *New Light on Early Farming. Proceedings of the 7th Symposium of the IWGP, Cambridge, 1986*. Edinburgh University Press England, Cambridgeshire, 349-61

Vaughan, T. 2000 *72 Wisbech Road, Littleport, Cambridgeshire. An Archaeological Evaluation*. HAT Report No. 641

Waller, M. 1994 'Paludification and pollen representation: the influence of wetland size on *Tilia* representation in pollen diagrams', *The Holocene* 4, 430-434

APPENDIX 1 FINDS CONCORDANCES

Feature	Context	Trench	Description	Spot Date	Pottery	CBM (g)	A. Bone (g)	Other
1001	-	5	Peat Layer	Late Bronze Age	(50) 375g	-	-	-
1002	-	4	Clay Layer	-	-	-	79	Daub (6), 39g Shell (2) 3g
1004	-	5	Peat Layer	-	-	-	6	Loomweight fragment (1), 145g
1009	-	6	Layer	Prehistoric	(4) 16g	42	49	Struck Flint (17), 183g Burnt flint (2), 33g Flint (1), 76g
1010	-	1	Peat Layer	-	-	-	164	-
1012	-	7 (Test Pit 4)	Silt Layer	-	-	53	21	-
1013	1014	6	Pit fill	-	-	-	-	Struck flint (3), 21g
1018	1019	6	Pit fill	-	-	1	42	Struck flint (4), 15g Burnt flint (3), 49g
1020	1021	6	Pit fill	Late Bronze Age – Early Iron Age	(1) 15g	-	-	Struck Flint (1), 2g
1022	1023	6	Pit fill	-	-	-	-	Struck flint (3), 29g
1024	1025	6	Pit fill	Prehistoric	(1) 2g	-	-	-
1026	1027	6	? Gully fill	-	-	23	34	Struck flint (6), 54g Burnt flint (1), 10g
1032	1033	6	Pit fill	-	-	10	-	Struck flint (2), 33g
1034	1035	6	Posthole fill	-	-	-	-	Struck flint (2), 19g
1036	1037	6	Pit fill	-	-	5	-	Struck flint (4), 11g Burnt flint (2), 14
1046	1047	6	Pit fill	-	-	-	-	Burnt flint (2), 11g
1050	1051	6	Pit/ Gully fill	Prehistoric	(1) <1g	-	-	Struck flint (1), <1g
1052	1053	6	Pit fill	-	-	-	-	Struck flint (1), 2g
1054	1055	6	Pit fill	-	-	-	-	Struck flint (6), 18g

1056	1057	6	Pit/ posthole fill	-	-	-	Struck flint (1), 2g
1058	1059	6	Pit/ posthole fill	-	-	-	Struck flint (4), 20g
1062	1063	6	Pit fill	-	-	-	?Burnt flint (2), 4g
1070	1071	6	Pit fill	-	-	-	Struck flint (1), 2g
1072	1073	6	Pit/ posthole fill	-	-	-	Struck flint (1), 8g
1079	1080	3	Tree hollow fill	-	-	21	-
1081	1082	6	Gully fill	-	-	132	-
1083	1084	6	Tree hollow/ pit fill	-	-	-	Struck flint (1), <1g
1091	1092	6	Pit/ ditch fill	-	-	<1	Flint (6), 182g

Table 9: Concordance of finds from the trial trench evaluation

Feature	Context	Seg.	Description	Spot Date	Pottery	CBM (g)	A.Bone (g)	Other
2003			Silt Layer	Roman	(1) 9g			Struck Flint (3), 14g
2004	-	-	Subsoil	Late Iron Age	(4) 63g			Struck Flint (1), 35g
2011	2012	-	Ditch Fill	Late Iron Age	(2) 21g	-	150	SF 1: Quartz pebble hammer 73g
		-			-			Struck Flint (1), 1g
		D			-		156	-
2015	2016	-	Ditch Fill	Late Iron Age	(1) 24g	-	8	Struck Flint (2), 14g
		E			-			-
2056	2057	-	Gully Fill		-			Burnt Stone (1), 21g
2060	2061	-	Pit Fill		-			Struck Flint (1), 4g
2064	2065	-	Pit Fill		-			Burnt Stone (1), 35g
2070	2071	-	Pit Fill		-			Shell (4), 1g
2082	2083	-	Gully Fill		(1) 3g	-		Struck Flint (8), 39g
2084	2085	-	Pit Fill		-	-		Wood (1), 6g Struck Flint (1), 23g

Table 10: Concordance of finds from the excavation

APPENDIX 2 CONTEXT DESCRIPTIONS

Sequence of deposits (Fig. 8)

Trench 1

<i>Sample section: S end, W facing</i>		
<i>N to S orientation</i>		
<i>0.00 = 0.36m OD</i>		
0.00 – 0.36m	L1000	Turf & Topsoil. Located across whole of site.
0.36 – 0.50m	L1005	Mid buff yellow slightly clayey silt. Essentially the same deposit as L1003. Rodden overflow across site.
0.50 – 0.66m	L1015	Mid yellowy-orange silty clay. Fill of rodde channel at N edge of site.
0.66 – 1.02m	L1001	Black peat layer. Indicative of fen/ marsh conditions. This layer was overlain by clayey silt layer L1003 over the majority of the site.
1.02 – 1.30m	L1006 = L1010	Dark grey/ brown peat with high clay content. Suggests fen/ marsh conditions.
1.30m+	L1011	Blue/ grey clay. Natural clay underlying peat deposits.

<i>Sample section: N end, W facing</i>		
<i>N to S orientation</i>		
<i>0.00 = 0.34m OD</i>		
0.00 – 0.32m	L1000	Turf & Topsoil. As above.
0.32 – 0.66m	L1005	Clayey silt. As above.
0.66 – 0.90m	L1015	Silty clay. As above.
0.90 – 1.22m	L1001	Black peat layer. As above.
1.22 – 1.58m	L1006 = L1010	Dark grey/ brown peat. As above.
1.58m+	L1011	Blue/ grey natural clay. As above.

Trench 2

<i>Sample section: W end, S facing</i>		
<i>E to W orientation</i>		
<i>0.00 = 0.97m OD</i>		
0.00 – 0.35m	L1000	Turf & Topsoil. As Tr.1.
0.35 – 0.77m	L1005	Clayey silt. As Tr.1.
0.77 – 1.64m	L1015	Silty clay. As Tr.1.
1.64 – 2.04m	L1010 = L1006	Dark grey/ brown peat with high clay content. Basal deposit of rodde channel, running E to W across N end of site.
2.04m+	L1011	Blue/ grey natural clay. As Tr.1.

Trench 3

<i>Sample section: E end, S facing</i>		
<i>E to W orientation</i>		
<i>0.00 = 0.20m OD</i>		
0.00 – 0.42m	L1000	Turf & Topsoil. As Tr. 1.
0.42 – 0.75m	L1008	Mid buff yellow slightly clayey silt. Basically the same as L1003, but with slightly higher silt content.
0.75 – 0.98m	L1001	Black peat layer. As Tr. 1.
0.98 – 1.18m	L1002	Dark grey heavy clay layer with abundant mollusc shells. Water-lain deposit.
1.18m+	L1009	Yellow/ orange mixed sandy silty clay with flint gravel.

<i>Sample section: W end, S facing</i>		
<i>E to W orientation</i>		
<i>0.00 = 0.16m OD</i>		
0.00 – 0.36m	L1000	Turf & Topsoil. As Tr. 1.
0.36 – 0.54m	L1008	Clayey silt. As above.
0.54 – 0.74m	L1001	Black peat layer. As Tr. 1.
0.74 – 0.92m	L1002	Dark grey clay layer with mollusc shells. As above.
0.92m+	L1009	Mixed sandy silty clay with flint gravel. As above.

Trench 4

<i>Sample section: N end, W facing</i>		
<i>N to S orientation</i>		
<i>0.00 = 0.16m OD</i>		
0.00 – 0.30m	L1000	Turf & Topsoil. As Tr. 1.
0.30 – 0.66m	L1005	Mid buff yellow slightly clayey silt. As Tr. 1.
0.66 – 0.89m	L1001	Black peat layer. As Tr.1.
0.89 – 1.17m	L1004	Dark brown peat layer with high clay content.
1.17 – 1.33m	L1002	Dark grey clay layer with mollusc shells. As Tr.3.
1.33 – 1.70m	L1095	Grey/ brown clay layer with occasional organic inclusions. Water-lain deposit.
1.70m+	L1011	Blue/ grey natural clay. As Tr.1.

<i>Sample section: S end, W facing</i>		
<i>N to S orientation</i>		
<i>0.00 = 0.21m OD</i>		
0.00 – 0.37m	L1000	Turf & Topsoil. As Tr. 1.
0.37 – 0.51m	L1005	Clayey silt. As Tr.1.
0.51 – 0.85m	L1001	Black peat layer. As Tr. 1.
0.85 – 1.00m	L1004	Dark brown peat with high clay content. As above.
1.00 – 1.15m	L1002	Dark grey clay layer with mollusc shells. As Tr.3.
1.15 – 1.45m	L1095	Grey/ brown clay layer with occasional organic inclusions. As above.
1.45m+	L1011	Blue/ grey natural clay. As Tr.4.

Trench 5

<i>Sample section: S end, W facing</i>		
<i>N to S orientation</i>		
<i>0.00 = 0.22m OD</i>		
0.00 – 0.30m	L1000	Turf & Topsoil. As Tr.1.
0.30 – 0.55m	L1001	Black peat layer. As Tr.1.
0.55 – 0.75m	L1004	Dark brown peat layer with clay content. As Tr.4.
0.75m+	L1002	Dark grey clay layer with mollusc shells. As Tr.3.

<i>Sample section: N end, W facing</i>		
<i>N to S orientation</i>		
<i>0.00 = 0.25m OD</i>		
0.00 – 0.30m	L1000	Turf & Topsoil. As Tr.1.
0.30 – 0.63m	L1003	Yellow/ orange clayey silt layer. Deposit represents the silting up/ overspill of the rodden which runs E to W across N end of the site.
0.63 – 0.91m	L1001	Black peat layer. Indicative of fen/ marsh conditions. This layer is overlain by clayey silt layer L1003 over the majority of the site.
0.91 – 1.07m	L1004	Dark brown peat layer with high clay content. As Tr.4.
1.07 – 1.27m	L1002	Dark grey clay layer with mollusc shells. As Tr.3.
1.27m+	L1011	Blue/ grey natural clay. As Tr.4.

<i>Sample section: E end, S facing</i>		
<i>E to W orientation</i>		
<i>0.00 = 0.15m OD</i>		
0.00 – 0.30m	L1000	Turf & Topsoil. As Tr. 1.
0.30 – 0.63m	L1003	Yellow/ orange clayey silt. As above.
0.63 – 0.91m	L1001	Black peat layer. As Tr.1.
0.91 – 1.11m	L1004	Dark brown peat layer with high clay content. As Tr. 4.
1.11m+	L1002	Dark grey clay layer with mollusc shells. As Tr. 3.

<i>Sample section: W end, S facing</i>		
<i>E to W orientation</i>		
<i>0.00 = 0.11m OD</i>		
0.00 – 0.28m	L1000	Turf & Topsoil. As Tr. 1.
0.28 – 0.40m	L1005	Clayey silt. As Tr.1.
0.40 – 0.92m	L1003	Yellow/ orange clayey silt. As above.
0.92 – 0.99m	L1001	Black peat layer. As Tr. 1.
0.99 – 1.21m	L1004	Dark brown peat layer with high clay content. As Tr.4.
1.21m+	L1002	Dark grey clay layer with mollusc shells. As Tr.3.

Trench 6

<i>Sample section: S end, E facing</i>		
<i>N to S orientation</i>		
<i>0.00 = 1.02m OD</i>		
0.00 – 0.30m	L1000	Turf & Topsoil. As Tr. 1.
0.30 – 0.50m	L1076	Mid to dark grey/ brown alluvial silty clay layer. Also has an organic component and appears to be in the process of developing into a clay-rich subsoil.
0.50 – 0.63m	L1012	Mid grey/ orange/ yellow clayey silt. Flood deposit?
0.63m+	L1009	Yellow/ orange mixed sandy silty clay with flint gravel inclusions.

<i>Sample section: N end, E facing</i>		
<i>N to S orientation</i>		
<i>0.00 = 0.61m OD</i>		
0.00 – 0.40m	L1000	Turf & Topsoil. As Tr. 1.
0.40 – 0.60m	L1001	Black peat layer. As Tr. 1.
0.60 – 0.88m	L1076	Mid to dark grey/ brown silty clay layer. As above.
0.88 – 0.94m	L1012	Mid grey/ orange/ yellow clayey silt. As above.
0.94 – 1.16m	L1095	Grey/ brown clay layer with occasional organic inclusions. Water-lain deposit.
1.16m+	L1011	Blue/ grey natural clay.

Trench 7

<i>Sample section: W end, N facing</i>		
<i>E to W orientation</i>		
<i>0.00 = 0.36m OD</i>		
0.00 – 0.45m	L1000	Turf & Topsoil. As Tr. 1.
0.45 – 0.59m	L1076	Mid to dark grey/ brown silty clay layer. As Tr.6.
0.59 – 0.79m	L1001	Black peat layer. As Tr.1.
0.79 – 1.03m	L1004	Dark brown peat. As Tr. 4.
1.03m+	L1012	Mid grey/ orange/ yellow clayey silt. As above.

<i>Sample section: E end, N facing</i>		
<i>E to W orientation</i>		
<i>0.00 = 0.34m OD</i>		
0.00 – 0.34m	L1000	Turf & Topsoil. As Tr.1.
0.34 – 0.47m	L1076	Mid to dark grey/ brown silty clay layer. As Tr. 6.
0.47 – 0.69m	L1001	Black peat layer. As Tr. 1.
0.69 – 0.90m	L1004	Dark brown peat. As Tr. 4.
0.90m+	L1012	Mid grey/ orange/ yellow clayey silt. As above.

Feature descriptions

Archaeological features were only present in Trenches 3 and 6, and in the excavation area opened around Trench 6.

Trench 3

Fig. 6

Trench 3 contained two tree hollows (F1077 and F1079). Both were cut into the yellow/ orange mixed boulder clay and glacial sandy gravel (L1009=L2004) and were sealed by a water-lain heavy clay deposit (L1002).

Tree Hollow F1077 (dimensions: 1.50m long x 1.20m wide x 0.59m deep) was roughly circular in plan. It had irregular sides with undercut edges and a widely varying slope. The feature had a very slightly concave base. Its fill, L1078, was a dark greyish-brown silty clay with occasional sub-angular flints. It did not contain any finds.

Tree Hollow F1079 (dimensions: 3.50m long x 1.30m wide x 0.15m deep) was also roughly circular in plan. It had irregular sides varying from concave to convex, and a very irregularly-shaped base, which became deeper to the north-east. Its fill, L1080, was an orangey-grey silty clay with occasional angular flints. It contained two small fragments of cattle bone (21g).

Trench 6

Fig. 6

Trench 6 contained numerous archaeological features, principally pits and possible postholes, some of which contained late Bronze Age/ early Iron Age pottery and Bronze Age struck flint. All were cut into the mixed boulder clay and glacial sandy gravel drift geology (L1009=L2004) and were sealed by a silt flood deposit (L1012=L2003). With few exceptions, these features were very shallow; many extended beyond the limits of the evaluation trench and their continuations could not be identified within the subsequent excavation area.

Pit F1013 (dimensions: 0.41m+ long x 0.47m wide x 0.03m deep) was oval with a shallow, flat-bottomed profile. Its fill, L1014, was a mid to light grey/ orange clayey silt. It contained struck flint (21g) including a thumbnail scraper.

Pit/ Posthole F1016 (dimensions: 0.20m+ long x 0.17m wide x 0.03m deep) was roughly circular. It was shallow with a slightly concave base. Its fill, L1017, was a mid to dark grey/ brown clayey silt, which did not contain any finds.

Pit F1018 (dimensions: 1.36m+ long x 0.86m wide x 0.18m deep) was large and oval in plan. It had moderately-sloping sides giving way to a flat base. Its

fill, L1019, was a mid grey/ orange clayey silt. It contained daub (1g), animal bone (42g), struck flint (15g) and burnt flint (49g).

Pit F1020 (dimensions: 0.42m long x 0.40m wide x 0.03m deep) was shallow with a slightly concave base. Its fill, L1021, was a light grey/ orange clayey silt. It contained struck flint (a thumbnail scraper; 2g) and LBA/EIA pottery.

Shallow Pit F1022 (dimensions: 0.51m long x 0.40m wide x 0.03m deep) was roughly circular. It had slightly concave sides giving way to a flattish base. Its fill, L1023, was a light grey/ orange clayey silt which contained struck flint (29g).

Shallow Pit F1024 (dimensions: 0.47m long x 0.41m wide x 0.03m deep) was roughly circular, probably extending just beyond the trench to the west. It had slightly concave sides giving way to a flattish base. Its fill, L1025, was a mid to light grey/ orange clayey silt, which contained prehistoric pottery (2g). Adjacent Pits F1020 and F1022 were very similar in appearance.

Shallow ?Gully F1026 (dimensions: 1.50m+ long x 0.50m wide x 0.02m deep) was linear in plan and aligned east to west. It had slightly concave sides giving way to a flattish base. Its fill, L1027, was a light grey/ brown clayey silt, which contained daub (23g), animal bone (34g), struck flint (54g) and burnt flint (10g). It was an ephemeral feature and was possibly the truncated remains of a drainage gully.

Stake/ Posthole F1028 (dimensions: 0.14m long x 0.14m wide x 0.04m deep) was circular. It had concave sides giving way to a flat base. Its fill, L1029, was a mid grey/ brown clayey silt which did not contain any finds. Its relationship to ?Gully F1026 was uncertain.

Pit/ Posthole F1030 (dimensions: 0.17m+ long x 0.17m wide x 0.03m deep) was roughly circular. It had gently-sloping sides giving way to a slightly concave base. Its fill, L1031, was a mid to dark grey/ brown clayey silt. The fill did not contain any finds.

Pit F1032 (dimensions: 1.05m long x 0.38m+ wide x 0.07m deep) was oval in plan, extending beyond the trench edge to the west. It had moderately-sloping sides giving way to a flattish base. Its fill, L1033, was a mid to dark grey/ brown clayey silt. It contained daub (10g) and struck flint (33g), including a thumbnail scraper.

Posthole F1034 (dimensions: 0.23m long x 0.23m wide x 0.04m deep) was circular. It had moderately-sloping sides giving way to a flat base. Its fill, L1035, was a mid grey/ brown clayey silt containing struck flint (19g).

Pit F1036 (dimensions: 0.58m long x 0.33m wide x 0.04m deep) was oval in plan. It had moderately-sloping sides giving way to a flattish base. Its fill, L1037, was a mid grey/ brown clayey silt containing daub (5g), struck flint (11g) and burnt flint (14g).

Stakehole F1038 (dimensions: 0.13m long x 0.13m wide x 0.05m deep) was circular. It had moderately-sloping sides giving way to a concave base. Its fill, L1039, was a mid grey/ brown clayey silt and did not contain any finds. It appeared to be truncated by Pit F1032.

Pit/ Posthole F1040 (dimensions: 0.29m long x 0.27m wide x 0.02m deep) was circular. It had shallow sides giving way to a slightly concave base. Its fill, L1041, was a mid grey/ brown clayey silt, which did not contain any finds.

Possible Stakehole F1042 (dimensions: 0.22m long x 0.11m wide x 0.05m deep) was oval. It was orientated to run alongside east to west-aligned pit/ gully F1044. F1042 had moderately-sloping sides giving way to a concave base. Its fill, L1043, was a mid grey/ brown clayey silt, which did not contain any finds.

Pit/ Gully F1044 (dimensions: 0.36m+ long x 0.17m wide x 0.05m deep) was elongated or linear in plan; it extended eastwards beyond the trench edge. It had moderately-sloping sides giving way to a flat base. Its fill, L1045, was a mid grey/ brown clayey silt which did not contain any finds.

Pit F1046 (dimensions: 0.38m long x 0.20m wide x 0.04m deep) was oval in plan. It had moderately-sloping sides, which gave way to a concave base. Its fill, L1047, was a mid grey/ brown clayey silt containing burnt flint (11g).

Possibly Pit/ Gully F1048 (dimensions: 0.33m+ long x 0.17m wide x 0.03m deep) was ?linear in plan, appearing to continue beyond the trench to the west. It had moderate sides giving way to a concave base. Its fill, L1049, was a mid grey/ brown clayey silt, which did not contain any finds.

?Gully F1050 (dimensions: 0.30m+ long x 0.14m wide x 0.02m deep) was possibly linear in plan. It had moderately-sloping sides, giving way to a slightly concave base. Its fill, L1051, was a mid grey/ brown clayey silt. It contained prehistoric pottery (<1g) and struck flint (<1g).

Pit F1052 (dimensions: 0.79m long x 0.78m wide x 0.08m deep) was circular in plan. It had moderately-sloping sides giving way to a slightly concave base. Its fill, L1053, was a light orange/ grey silty clay, which contained struck flint (2g).

Pit F1054 (dimensions: 1.05m long x 0.92m wide x 0.28m deep) was circular in plan, large and relatively deep (for the site). It had uneven sides giving way to a flattish base. Its fill, L1055, was a mid to dark grey very clayey silt, containing struck flint (18g).

Pit/ Posthole F1056 (dimensions: 0.22m long x 0.16m+ wide x 0.03m deep) was roughly circular, extending westwards beyond the trench edge. It was shallow with a slightly concave base. Its fill, L1057, was a mid to dark grey/ brown clayey silt, which contained struck flint (2g).

Pit/ Posthole F1058 (dimensions: 0.34m long x 0.27m wide x 0.08m deep) was oval in plan. It had steep sides giving way to a flat base. Its fill, L1059, was a mid to dark grey/ brown clayey silt, which contained struck flint (20g).

Pit/ Posthole F1060 (dimensions: 0.16m+ long x 0.12m wide x 0.02m deep) was roughly circular in plan. It was shallow with a slightly concave base. Its fill, L1061, was a mid grey/ brown clayey silt, which did not contain any finds.

Pit F1062 (dimensions: 0.37m long x 0.16m+ wide x 0.03m deep) appeared to be approximately oval in plan. It had moderately-sloping rounded sides giving way to a slightly concave base. Its fill, L1063, was a mid to dark orange/ grey/ brown heavily clayey silt, which contained burnt flint (4g).

Pit/ Posthole F1064 (dimensions: 0.20m long x 0.16m wide x 0.03m deep) was oval in plan. It had shallow sides giving way to a slightly concave base. Its fill, L1061, was a mid to light grey/ brown clayey silt, which did not contain any finds.

Stakehole F1066 (dimensions: 0.23m long x 0.14m wide x 0.07m deep) was oval in plan. It had steep sides giving way to a concave base. Its fill, L1067, was a mid grey/ brown clayey silt. The fill did not contain any finds. The fills of F1066 and Pit F1070 (see below) were similar, and the relationship between these two intercutting features could be established.

Stakehole F1068 (dimensions: 0.23m long x 0.14m wide x 0.10m deep) was oval in plan. It had steep sides giving way to a narrow base. Its fill, L1069, was a mid grey/ brown clayey silt, which did not contain any finds. Like F1066, the fills of F1068 and Pit F1070 were similar, and no relationship could be established.

Pit F1070 (dimensions: 0.56m long x 0.48m wide x 0.07m deep) was an irregular oval shape in plan. It had moderately-sloping sides giving way to a flattish base. Its fill, L1071, was a mid grey/ brown clayey silt. The fill contained struck flint (2g). No relationship could be established between F1070 and Stakeholes F1066 and F1068

Posthole/ Pit F1072 (dimensions: 0.24m long x 0.22m wide x 0.03m deep) was circular in plan. It had shallow sides giving way to a flattish base. Its fill, L1073, was a mid grey/ brown clayey silt. It contained struck flint (8g).

Stakehole F1074 (dimensions: 0.17m long x 0.13m wide x 0.04m deep) was roughly circular in plan. It had moderately-sloping sides giving way to a concave base. Its fill, L1075, was a mid grey/ brown clayey silt, which did not contain any finds.

Ditch/ Gully F1081 (dimensions: 1.50m+ long x 0.45m wide x 0.28m deep) was sinuous and linear in plan, running on an east to west alignment across the trench. It had steep sides giving way to a concave base. Its fill, L1082, was a mid to dark grey/ brown clayey silt, which contained animal bone

(132g). It was cut by Tree Hollow F1083 and Pit/ Posthole F1085. It extended beyond the trench in both directions.

Pit/ Tree Hollow F1083 (dimensions: 0.84m long x 0.65m wide x 0.19m deep) was irregular in plan. It had irregular sides giving way to a concave base. Its fill, L1084, was a mid grey/ brown clayey silt, which contained struck flint (<1g). The feature may possibly have been the cut of a pit, but the irregular sides suggest a natural tree hollow. It cut Ditch/ Gully F1081.

Pit/ Posthole F1085 (dimensions: 0.20m+ long x 0.18m wide x 0.13m deep) appeared to be oval in plan, extending westwards beyond the trench edge. It had steep rounded sides giving way to a concave base. Its fill, L1086, was a dark grey/ brown clayey silt, which did not contain any finds. It cut Gully F1081.

Stakehole F1087 (dimensions: 0.20m long x 0.14m wide x 0.04m deep) was oval in plan. It had moderately-sloping sides giving way to a concave base. Its fill, L1088, was a mid grey/ brown clayey silt, which did not contain any finds.

Pit F1089 (dimensions: 0.42m long x 0.36m wide x 0.05m deep) was oval in plan with moderate sides giving way to an uneven base. Its fill, L1090, was a mid grey/ brown clayey silt, which did not contain any finds. Pit F1089 was adjacent to Pit F1093, but the fills were similar and so no relationship could be established. It is possible that Pit F1089 cut Pit F1093.

Ditch F1091 (dimensions: 2.20m+ long x 1.25m wide x 0.34m deep) was linear in plan and aligned east to west. It had moderately-sloping sides giving way to a concave base. Its fill, L1092, was a mid grey/ brown clayey silt, which contained animal bone (<1g) and struck flint (182g). Ditch F1091 continued beyond Trench 6. It was truncated by modern disturbance and could not be clearly discerned.

Pit F1093 (dimensions: 0.30m long x 0.28m wide x 0.02m deep) was circular in plan. It had shallow sides giving way to a flattish base. Its fill, L1093, was a mid grey/ brown clayey silt, which did not contain any finds. Pit F1093 was adjacent to Pit F1089, but the fills were similar and the relationship between them could not be established. It is possible that Pit F1089 cut Pit F1093.

Excavation area

Figs. 2 and 4

All the archaeological features in the excavation area were cut into the mixed boulder clay/ glacial sand and gravel drift geology (L1009=L2004) and were sealed by a silt flood deposit (L1012=L2003).

Ditches and gullies

Ditch F2015 was stratigraphically the earliest of the dateable features in the excavation area. Dating evidence from the ditch comprised one piece of late

Iron Age pottery, recovered from Segment F. Ditch F2015 was aligned east to west. It curved slightly, heading towards the north-east, before turning back to a due eastward alignment as it continued beyond the eastern limit of the excavation. Ditch F2015 appeared to be cut by Ditch F2011. However, as F2015 was significantly shallower than F2011, it may simply have become silted up earlier than the deeper north to south aligned ditch, giving the impression that it was cut by F2011.

At the west edge of the excavation area, Ditch F2015 was cut by a large roughly rectangular pit (F2066); the ditch was only visible at the very base of the section, beneath F2066. No finds were recovered from F2066 and therefore its date and function remain unknown. A small, undated, slightly curving ditch (F2009), aligned north-west to south-east, was cut by F2015 close to the point where F2011 and F2015 intersected. The eastern part of Ditch F2015 passed close to a cluster of pits and postholes, but shared stratigraphic relationships with only two of these: shallow Pit F2064, which it truncated, and Posthole F2078, which was cut into the fill of F2015, close to the feature's northern edge, indicating that it was created after the ditch had fallen into disuse. During excavation, it was noted that the eastern portion of the ditch appeared to have been re-cut or redirected at some point. However, disturbance from a previous soil test pit prevented further interpretation. Despite becoming increasingly narrow towards its eastern end, it appears likely that F2015 represented a boundary. Its insubstantial nature, especially in comparison to F2011, indicates that the boundary may have been more symbolic than practical.

Ditch F2011 was the most prominent of the linear features on the site. It was aligned north to south. The ditch entered the excavation area from the south and terminated approximately 10m from the northern limit of the excavation area. A narrow, shallow gully (F2013), oriented east to west, cut Ditch F2011 approximately 2m north of Ditch F2015. Ditch F2011 contained two late Iron Age pottery fragments (21g). A probably Mesolithic/ Neolithic pink quartzite pebble hammer fragment was also found in the silt fill of the ditch (L2012), fairly high up and close to the ditch's northern terminus. A small quantity of animal bone (306g) was also found in the ditch. The ditch may represent part of a field or enclosure system.

A small, shallow gully, F2056, extended south-west from the western edge of F2011 for approximately 2.5m, terminating close to F2009. The irregular nature of the feature suggests that it may have been a natural, rather than archaeological, feature. A small piece of burnt stone was recovered from F2056.

Gully F2082 was the third of the three features within the excavation area to yield dateable artefactual material. It produced one sherd of possibly late Iron Age pottery, as well as some struck flint. This feature had previously been identified as F1026 during the preceding trial trench evaluation (Grassam, Nicholson and Weston 2005) and was thought to have been a truncated gully. It shared no stratigraphic relationships with any other feature, but was located close to a small cluster of late Bronze Age/ early Iron Age pits recorded during

the evaluation. Its location, to the north of and parallel to Ditches F2013 and F2015, suggests that F2082 may have shared a functional relationship, possibly representing a subdivision within an enclosure system. F2082 and F2013 were of similar width and had similar fills, although many features at the site displayed near-identical mid grey/ brown silty clay fills.

Curvilinear Ditch F2009 was aligned north-west to south-east and was located in the south-western corner of the excavation area. No finds were present, but F2009 was cut by Ditches F2015 and F2011, so was no later than late Iron Age. Its shallow depth renders a function as a boundary unlikely.

Feature	Context	Seg.	Dimensions (m)	Plan	Profile	Fill	Finds (count; weight)
F2009	L2010	A	15+ x 0.51 x 0.09	Curvilinear; aligned NW-SE	Moderately-sloping rounded sides, concave base.	Compact mid grey/ brown clayey silt.	-
		B	15+ x 0.35 x 0.12		Moderately-sloping rounded sides, concave base.	Compact mid grey/ brown clayey silt.	-
F2011	L2012	A	20+ x 1.56 x 0.47	Linear, tapering northern terminus, aligned N-S	Steeply-sloping concave side to east, shallow step to west; rounded base.	Compact mid grey/ brown silty clay.	SF 1: Quartzite pebble hammer (1; 73g), struck flint (1; 1g), Animal bone (1; 150g)
		B	20+ x 2.40 x 0.64		Steeply-sloping concave side to east, shallow step to west; rounded base.	Compact mid grey/ brown silty clay.	Pottery: flint and sand-tempered ware (1; 3g), organic ware (1; 15g)
		C	20+ x 0.69 x 0.24		Tapering terminus. Regular moderately-sloping sides and concave base.	Compact mid grey/ brown silty clay.	-
F2013	L2014	A	8+ x 0.41 x 0.20	Linear, irregular, gently-curving concave terminals, aligned W-E	Regular steeply-sloping sides and concave base.	Fairly compact mid grey/ brown silty clay.	-
		B	8+ x 0.49 x 0.15		Ditch terminus. Regular gently- sloping rounded sides, concave base.	Fairly compact mid grey/ brown silty clay.	-
F2015	L2016	A	20+ x 1.51 x 0.32	Linear, meandering, aligned E-W	Irregular, steeply-sloping rounded sides and concave base.	Compact mid grey/ brown silty clay with frequent orange silty inclusions.	Struck flint (2; 14g) Animal bone (1; 8g)

	B	20+ x 0.72 x 0.28						Moderately-sloping side to south, shallow step to north; tapering base.	Compact mid grey/brown silty clay with frequent orange silty inclusions.	-			
	C	20+ x 0.46 x 0.13						Moderately-sloping sides; concave base	Compact mid grey/brown silty clay with frequent orange silty inclusions.	-			
	D	20+ x 0.45 x 0.14						Moderately-sloping sides; concave base	Compact mid grey/brown silty clay with frequent orange silty inclusions.	-			
	E	20+ x 0.65 x 0.25						Moderately-sloping sides; concave base (surviving underneath F2066)	Mid grey/ brown silty clay with frequent orange silty inclusions.	Pottery: prehistoric flint, organic and grog temper (1; 24g)			
	F	20+ x 2.57 x 0.57						Steeply-sloping rounded side to south, shallow step to north; concave base	Compact mid grey/brown silty clay with frequent orange silty inclusions.	-			
	G	20+ x 0.95 x 0.14						Gently-sloping side to south, shallow step along north edge; concave base	Compact mid grey/brown silty clay with frequent orange silty inclusions.	-			
F2056	L2057	2.50 x 0.50 x 0.15						Gully terminus with gently-sloping rounded sides and flat base.	Fairly compact mid brown/ grey silty clay.	Burnt stone (1; 21g)			
F2082 =F1026	L2083	1.60 x 0.55 x 0.30						Gently-sloping sides; flat base.	Fairly compact mid grey/ brown silty clay.	Struck flint (8; 39g)			

				terminus			

Table 11: Ditches and gullies in excavation area

Pits and postholes

Figs. 4, 5 and 6

In addition to the ditches and gullies discussed above, 34 further features were present within the excavation area. These comprised pits, hollows and postholes; they are described in Table 12. Some of these features formed three loose clusters: one at the western edge of the excavation area, one on the east side and the third close to the centre. Other discrete features were scattered with no discernible groupings.

Pits F2007, F2052, F2060, F2054, F2034, F2036 and F2042 and Pit/Posthole F2038 were located at the western edge of the excavation area. They lay to the west of Ditch F2011 and to the north of Ditch F2015. This group of features was arranged on a rough north to south linear alignment and may indicate the position of a fence line running approximately parallel to the boundary demarcated by Ditch F2011. Pit F2048 may also form part of this group, although it was located some 4.2m north of the last pit in the alignment (F2042) and was offset slightly to the east. No dateable artefacts were recovered from any of these features and none of them displayed stratigraphic relationships with any other feature. Pit F2060 yielded a single piece of struck flint which hints at a prehistoric date, although it is possible that this was residual. It seems likely, on the grounds of their spatial relationships, that these pits were of a similar date to the late Iron Age boundary ditches (F2011 and F2015).

Pits F2019, F2024, F2026, F2030, F2032, F2064, F2072, F2074 and F2076 and Postholes F2022, F2028 and F2078 were located on the eastern side of the site close to the earlier of the two late Iron Age Boundary Ditches, F2015. None of the features produced any dateable finds. The group as a whole appeared to display no structural configuration and stratigraphic relationships were limited. Posthole F2022 cut the north-eastern edge of Pit F2019 but no other relationships were observed between features comprising this group. These features were obviously not all contemporary with one another. Pit F2064, the only feature amongst this group to produce finds (a single piece of burnt stone) lay immediately to the south of Boundary Ditch F2015 with its northern edge cut by the Iron Age feature. Posthole F2078, however, cut the upper fill of F2015, indicating that it was cut after the possible Boundary Ditch had become filled in; its own fill was similar in character to the deposit within the ditch that it cut. This posthole may form a pair with Posthole F2022 which was of a similar size and lay in close proximity to the north. Although speculative, this may indicate the presence of some kind of small structure. Two-post structures, recorded on Iron Age sites, have been explained as drying racks for grain or skins (Megaw & Simpson 1981, 382). The presence of F2015 may have, in some way, influenced the concentration of features in this area but there is insufficient evidence to support or deny such speculation. Additionally, the amorphous nature of some of the features (e.g. F2072 and F2074) might suggest that they are the result of natural phenomena. It is therefore likely that this group represents a random

accumulation of pits and postholes, though some features amongst them may share functional relationships (i.e. Postholes F2078 and F2022).

Pits F2040, F2044, F2046 and F2050=F1018 (the latter previously identified during preceding trial trench evaluation) were located to the east of Phase 1 Ditch F2011 and to the north and north-west of the Phase 1 Gully F2082=F1026. These features were undated and displayed no relationships with other features to hint at their date. However, Pit F2040 was located in an area that would suggest that it would have cut, or been cut by, the truncated Iron Age gully F2082=F1026.

Pits F2058, F2062, and F2068 were located towards the north-eastern corner of the site. They were undated and isolated from other features. F2058 and F2062 contained similar light grey brown semi-compact silty clay fills while that of F2068 was substantially different in colour and texture.

Other pits were located in apparent isolation from features of a similar nature. Pit F2070 was located to the east of Ditch F2011, close to its terminus. Its mid brown grey silty clay fill contained four pieces of shell leading to the tentative suggestion that it may have functioned as a refuse pit into which organic material or food waste was dumped. It was not, however, dissimilar in size and shape to the many other pits recorded at the site and therefore probably served a similar function, though there is insufficient evidence to determine what this function may have been.

Pit F2017 lay between the southern boundary of the excavated area and the possible Boundary Ditch F2015. It was circular and contained a mid brown grey silty clay similar to the fills of many other features recorded at the site. Its irregular sides may indicate that it was not deliberately cut but was in fact a naturally occurring geological or topographical feature.

Pit F2084 lay close to the north-western corner of the site. It was irregular in shape suggesting that, like other, features it may have been of natural origin. It was located, however, directly opposite the terminus of late Iron Age Ditch F2011. This may suggest that Pit F2084 represents a remnant of the continuation of the boundary system that F2011 represents. A piece of wood (6g) and a single piece of struck flint (23g) were recovered from Pit F2084. The wood was modern in appearance while the struck flint was potentially of prehistoric date. It is therefore evident that the wood was intrusive in the feature or that the struck flint was residual, or that both are true and these finds are not representative of the true date of the feature.

Pit F2066 was a large sub-rectangular feature that lay at the western edge of the site with its own western extent disappearing beyond the edge of the excavated area. It was undated and produced no finds of any kind. It cut the upper part of the late Iron Age possible Boundary Ditch F2015, completely obscuring the western extremity of this feature in plan although the continuation of the ditch beneath F2066 was visible in section.

Feature	Context	Dimensions (m)	Plan/Profile	Fill	Findings
F2007	L2008	0.57 x 0.49 x 0.13	Oval, irregular, moderate sloping sides, concave base	Mid brownish-grey clayey silt, compact.	-
F2017	L2018	1.10 x 1.0 x 0.10	Circular, irregular, gently sloping sides, concave base	Mid brown-grey silty clay, sticky.	-
F2019	L2020	0.63 x 0.60 x 0.33	Circular, irregular, moderate sloping sides, concave base, east edge truncated by post hole F2022	Mid blue grey silty clay compact, with small orange silty inclusions	-
	L2021			Mid grey brown silty clay, organic component & charcoal flecks. Semi compact.	-
F2022	L2023	0.22 x 0.20 x 0.12	Circular, irregular, steep sloping sides, concave base, truncates east edge of F2019	Mid grey brown silty clay with an organic component. Semi compact.	-
F2024	L2025	0.61 x 0.51 x 0.09	Oval, irregular, moderate sloping sides, concave base	Mid greyish brown silty clay, compact.	-
F2026	L2027	0.55 x 0.56 x 0.11	Circular, regular, moderate sloping sides, conical base	Mid greyish brown silty clay, compact.	-
F2028	L2029	0.34 x 0.30 x 0.07	Circular, regular, moderate sloping sides, concave base	Mid grey brown silty clay, sticky.	-
F2030	L2031	0.66 x 0.30 x 0.04	Rectangular, irregular, gentle sloping sides, concave base	Mid grey brown silty sand, sticky.	-
F2032	L2033	0.30 x 0.30 x 0.08	Circular, irregular, moderate sloping sides, concave base	Mid blue-grey silty clay, sticky.	-
F2034	L2035	0.70 x 0.67 x 0.22	Circular, regular, moderate sloping sides, concave base	Mid brown-grey silty clay with an organic component, semi-compact.	-
F2036	L2037	0.63 x 0.73 x 0.10	Oval, regular, gentle to moderate sloping sides, concave base	Mid grey brown silty clay semi-compact.	-

F2038	L2039	0.30 x 0.28 x 0.07	Circular, regular, gentle sloping sides, concave base	Light blue-grey silty clay, sticky.	-
F2040	L2041	0.54 x 0.53 x 0.12	Circular, regular, moderate sloping sides, concave base	Mid grey brown silty clay semi compact.	-
F2042	L2043	0.60 x 0.60 x 0.08	Circular, regular, moderate sloping sides, concave base	Mid grey blue silty clay sticky and compact.	-
F2044	L2045	0.60 x 0.80 x 0.11	Oval, regular, moderate sloping sides, concave base, truncated by F2046	Mid grey brown silty clay sticky.	-
F2046	L2047	0.24 x 0.19 x 0.29	Circular, irregular, moderate sloping sides, concave base, truncates F2044	Mid blue grey clay, compact, sticky.	-
F2048	L2049	0.74 x 0.45 x 0.17	Oval, irregular, moderate sloping sides, concave base	Mid brown grey silty clay, compact.	-
F2050	L2051	0.82 x 0.89 x 0.17	Oval, regular, moderate sloping sides, concave to flat base, west terminus of F1018-TT eval.	Mid grey brown silty clay semi compact.	-
F2052	L2053	0.61 x 0.51x 0.10	Circular, irregular, gentle sloping sides, concave base	Mid grey brown silty clay, semi compact.	-
F2054	L2055	1.20 x 0.65 x 0.10	Oval, regular, moderate sloping sides, concave to flat base	Mid brown grey silty clay, sticky.	-
F2058	L2059	0.40 x 0.40 x 0.10	Circular, regular, steep sloping sides, flat base	Mid brown grey silty clay, compact.	-
F2060	L2061	0.24 x 0.26 x 0.05	Circular, regular, steep sloping sides, flat base	Mid brown grey silty clay, semi compact.	Struck flint (1;4.0g)
F2062	L2063	0.41 x 0.40 x 0.15	Circular, regular, steep sloping sides, flat base	Mid brown grey silty clay semi compact.	-
F2064	L2065	0.70 x 0.60 x 0.12	Oval, regular, moderate sloping sides, concave to flat base, truncated by F2015 at Seg. D	Mid orange grey sandy clay, friable.	Burnt stone (1;35.0g)

F2066	L2067	0.18 x 0.20 x 0.06	Irregular, steep-moderate sloping sides, flat, irregular base, overlies F2015 (Seg. E).	Grey-orange-brown silty clay, semi compact.	-
F2068	L2069	0.50 x 0.46 x 0.12	Circular, regular, moderate sloping sides, concave base	Light orange grey, silty clay, compact, sticky.	-
F2070	L2071	0.81 x 0.59 x 0.19	Oval, regular, steep sloping sides, concave base	Mid brown grey with blue-grey mottles, silty clay. Compact.	Shell (4;1.0g)
F2072	L2073	1.28 x 0.52 x 0.02	Oval, irregular, moderate sloping sides, shallow, concave base	Dark brown-grey silty clay, slightly compact.	-
F2074	L2075	0.67 x 0.65 x 0.06	Circular, regular, steep sloping sides, flat base	Mid blue grey silty clay. Sticky.	-
F2076	L2077	0.80 x 0.70 x 0.10	Circular, irregular, gentle sloping sides, flat base	Mid grey brown silty clay, semi compact.	-
F2078	L2079	0.20 x 0.20 x 0.20	Circular, regular, steep sloping sides, conical base, truncates F2015 at Seg. G	Mid grey brown silty clay semi- compact.	-
F2080	L2081	0.87 x 0.79 x 0.15	Oval, irregular, steep sloping sides, flat base	Mid grey brown silty clay, compact.	-
F2084	L2085	2.0 x 0.88 x 0.10	Oval, irregular, gentle sloping sides, shallow, flat base	Mid grey brown silty clay with flint gravel. Semi compact.	Wood (1;6.0g) Struck flint (1;23.0g)

Table 12: Pits and postholes in excavation area

PLATES



Plate 1: Site during machining, view N towards fen



Plate 2: Site under excavation, view S towards higher ground



Plate 3: Location of column sample taken from Test Pit 1, showing sequence (upwards from base) of natural Kimmeridge Clay, alluvial silt, lower peat, upper peat, subsoil and topsoil.



Plate 4: Shallow late Bronze Age/ early Iron Age (Phase 2) Pits F1020, F1022 and F1024, view S



Plate 5: Late Iron Age (Phase 3) Ditch F2015 (Seg. C), view E



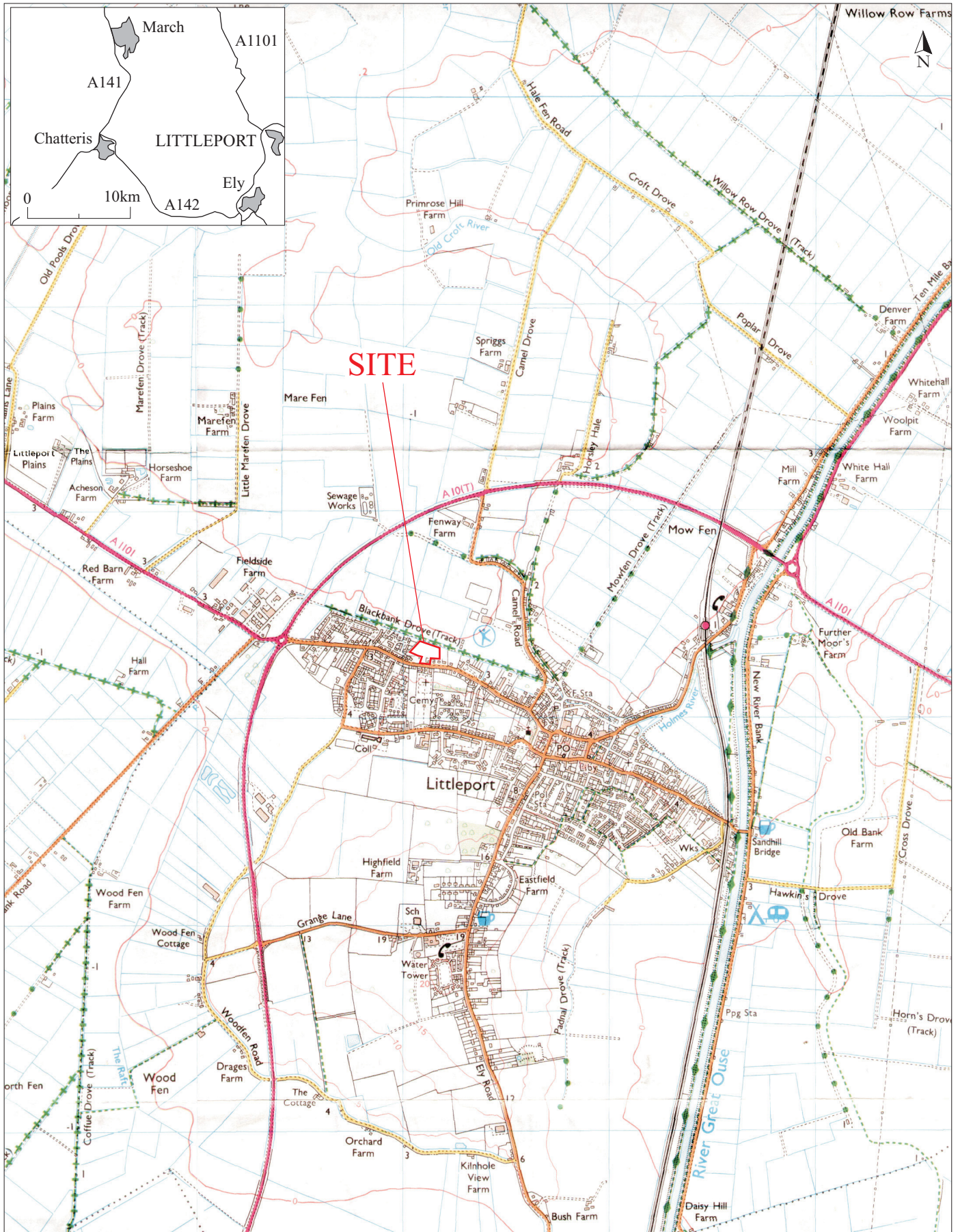
Plate 6: Late Iron Age (Phase 3) Ditch F2011 (Seg. A), view S



Plate 7: Late Iron Age (Phase 3) Ditch F2011 (Seg. B), view N

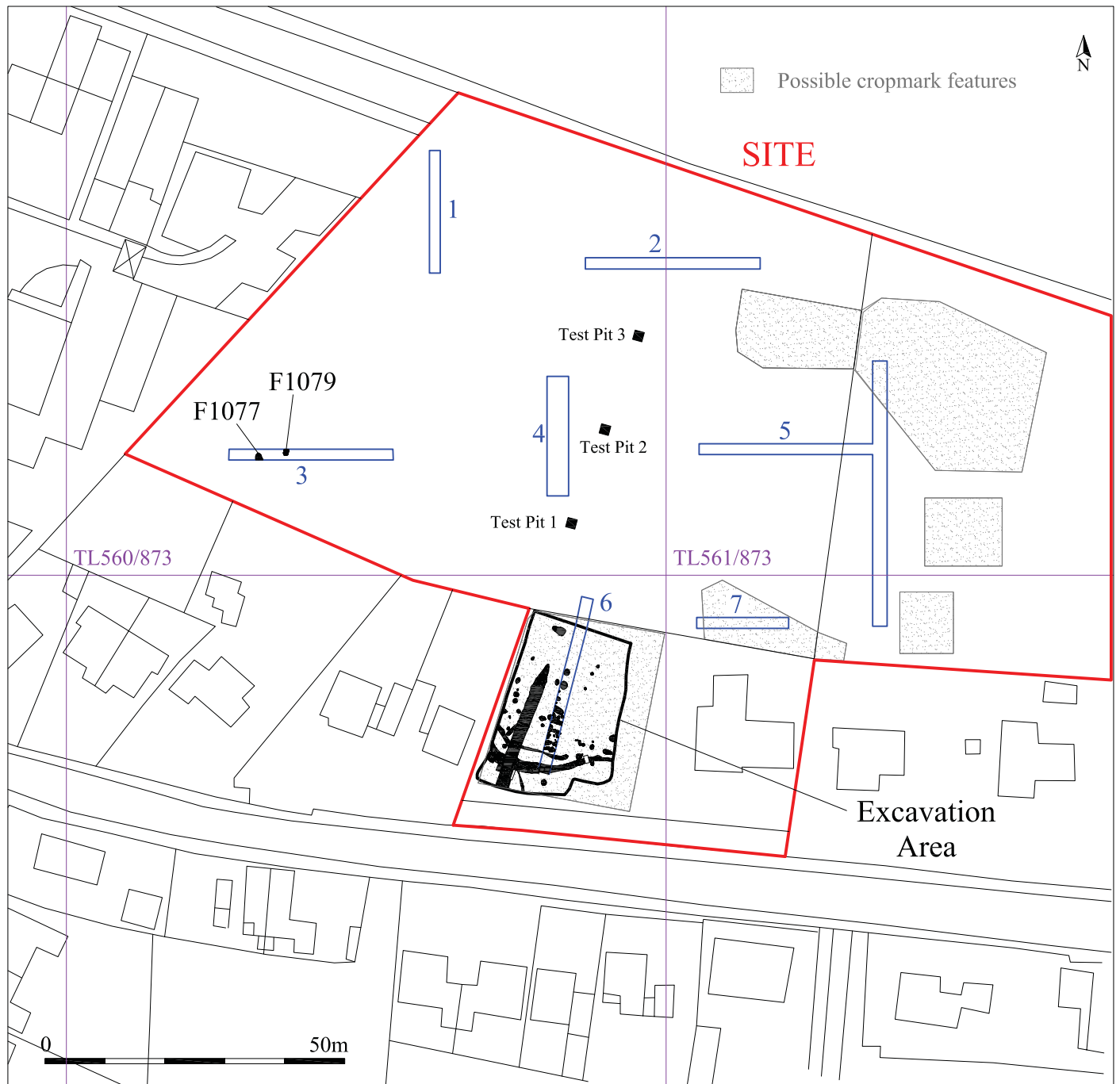


Plate 8: Residual/ curated Mesolithic/ Neolithic quartzite pebble hammer found in terminus of late Iron Age (Phase 3) Ditch F2011



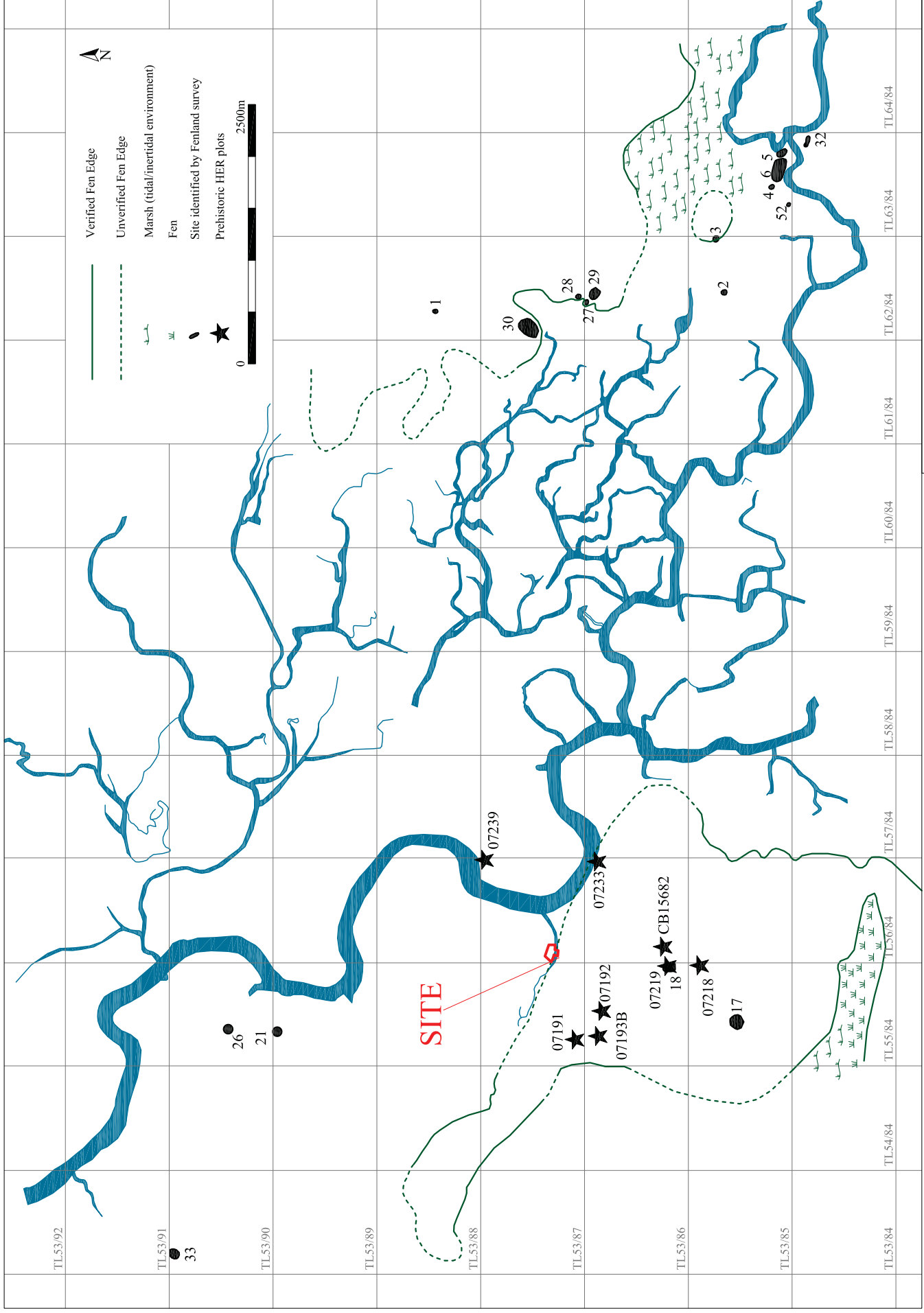
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Fig. 1 Site location plan
 Scale 1:25,000 at A4



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Fig. 2 Detailed site location plan
 Scale 1:1000 at A4

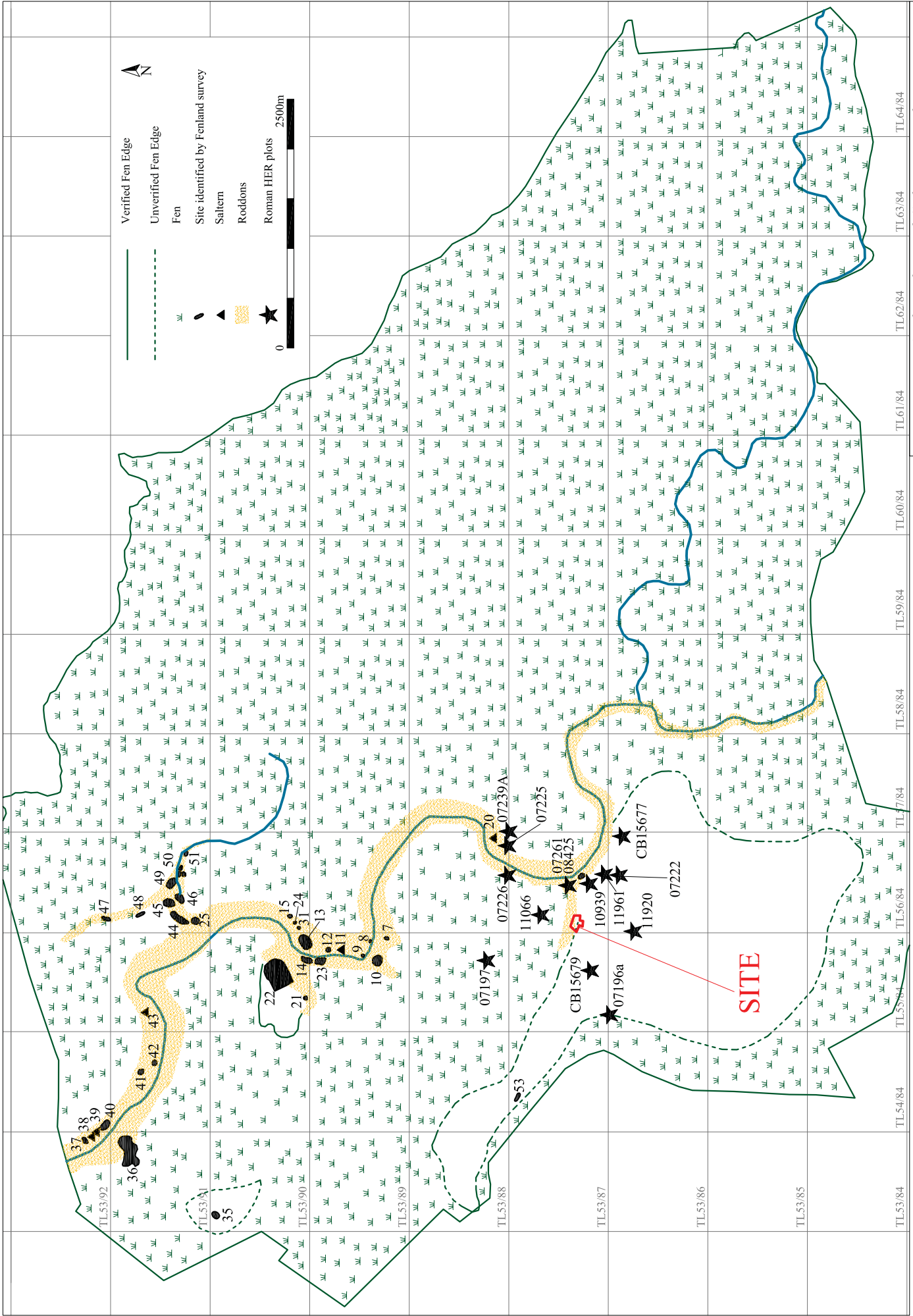


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Fig. 3a Prehistoric Littleport

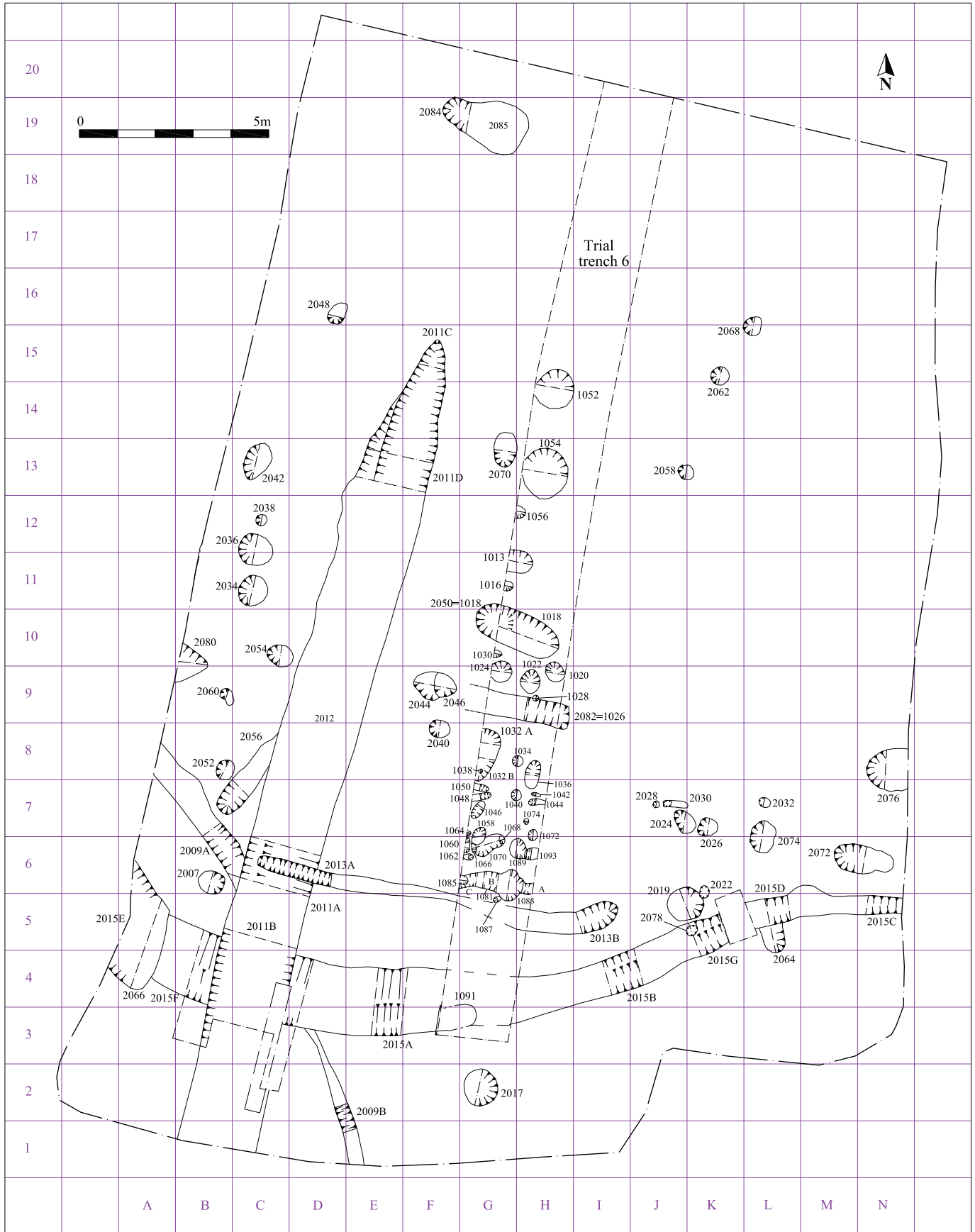
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'Based on the Fenland Survey (Hall 1996, 23, fig. 11)

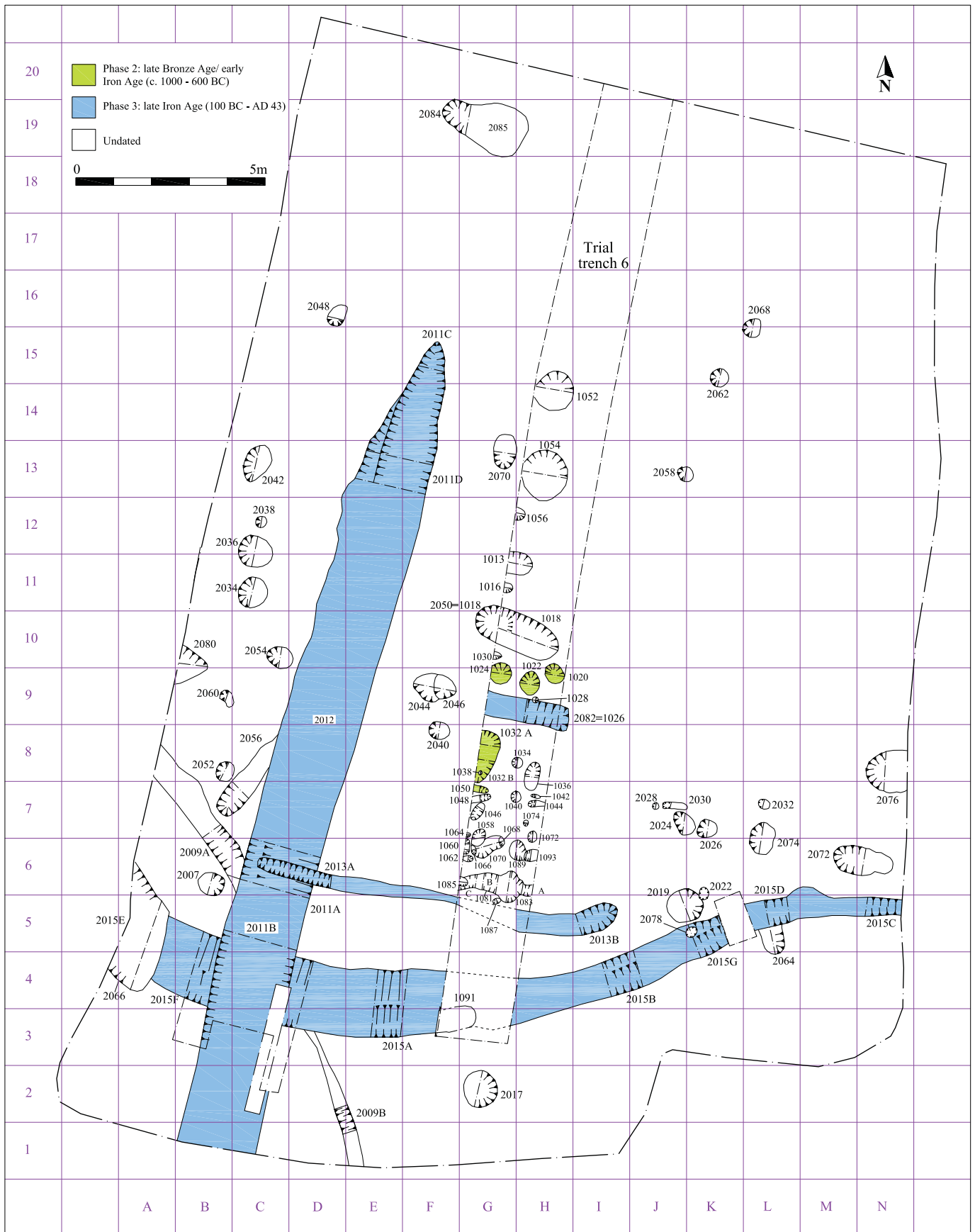


'Based on the Fenland Survey (Hall 1996, 24, fig. 13)

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Fig. 3b Roman Littleport
 Scale 1:50,000 at A4

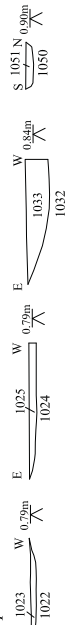


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Fig. 4 All features plan
 Scale 1:100 at A3

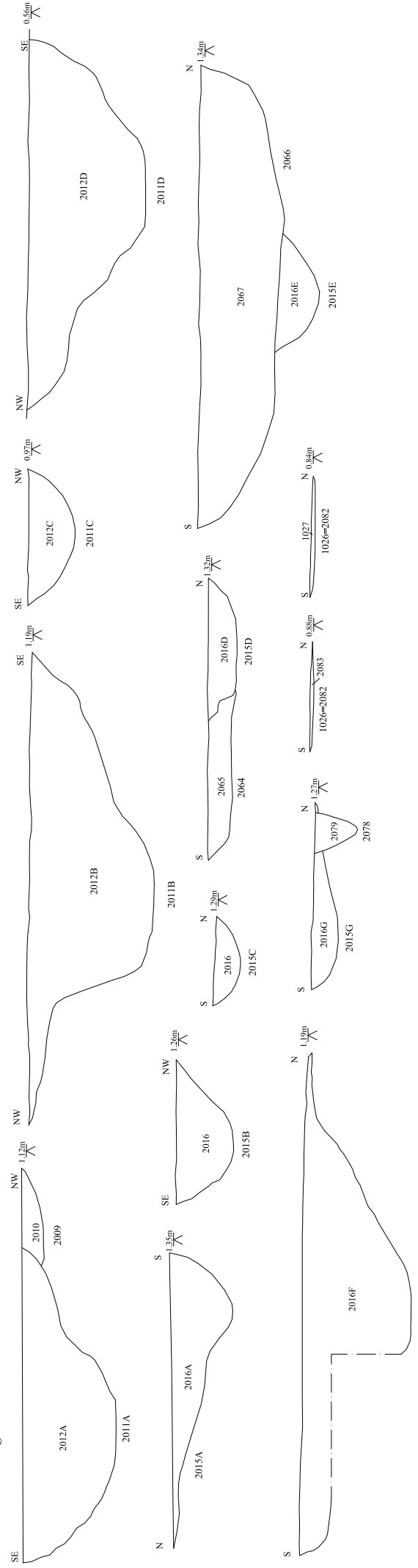


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Fig. 5 Phase plan
 Scale 1:100 at A3

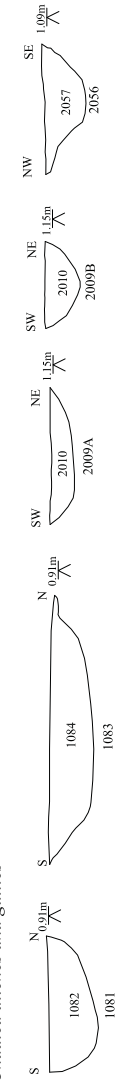
Phase 2 pits



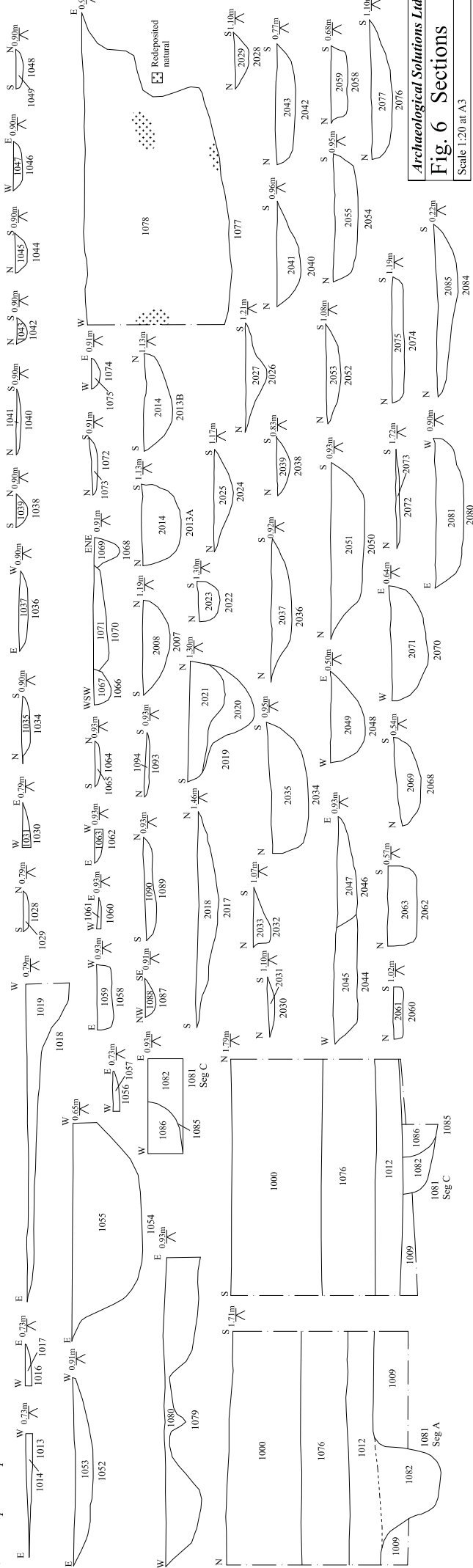
Phase 3 ditches and gullies



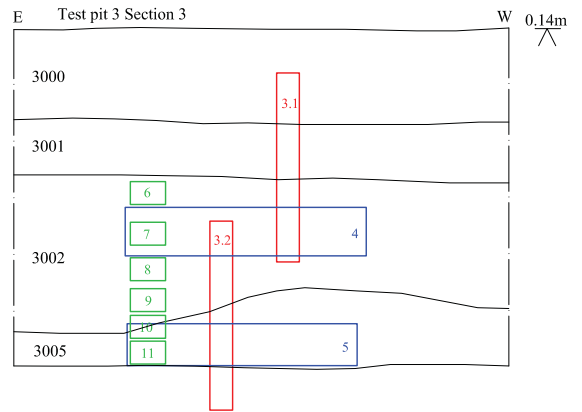
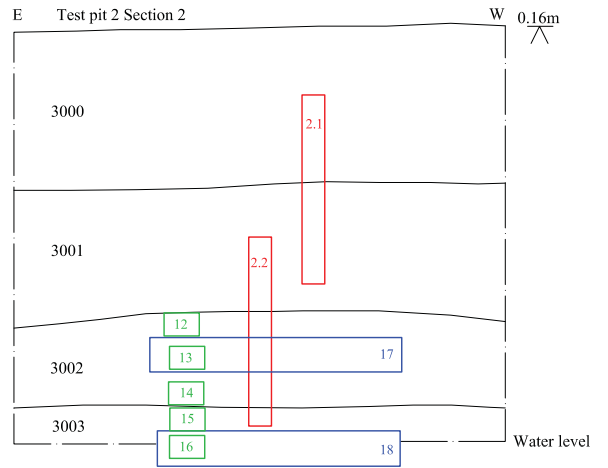
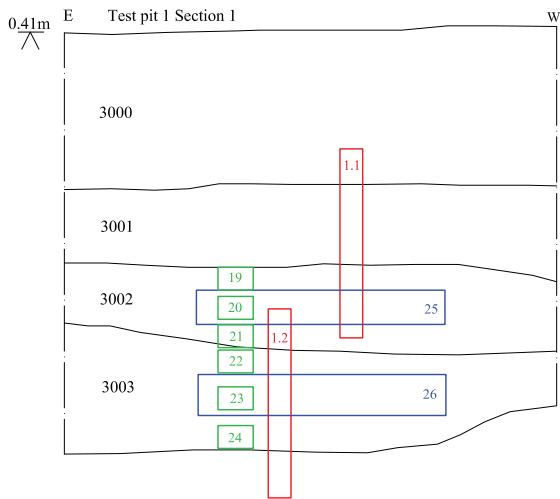
Undated ditches and gullies



Undated pits and postholes



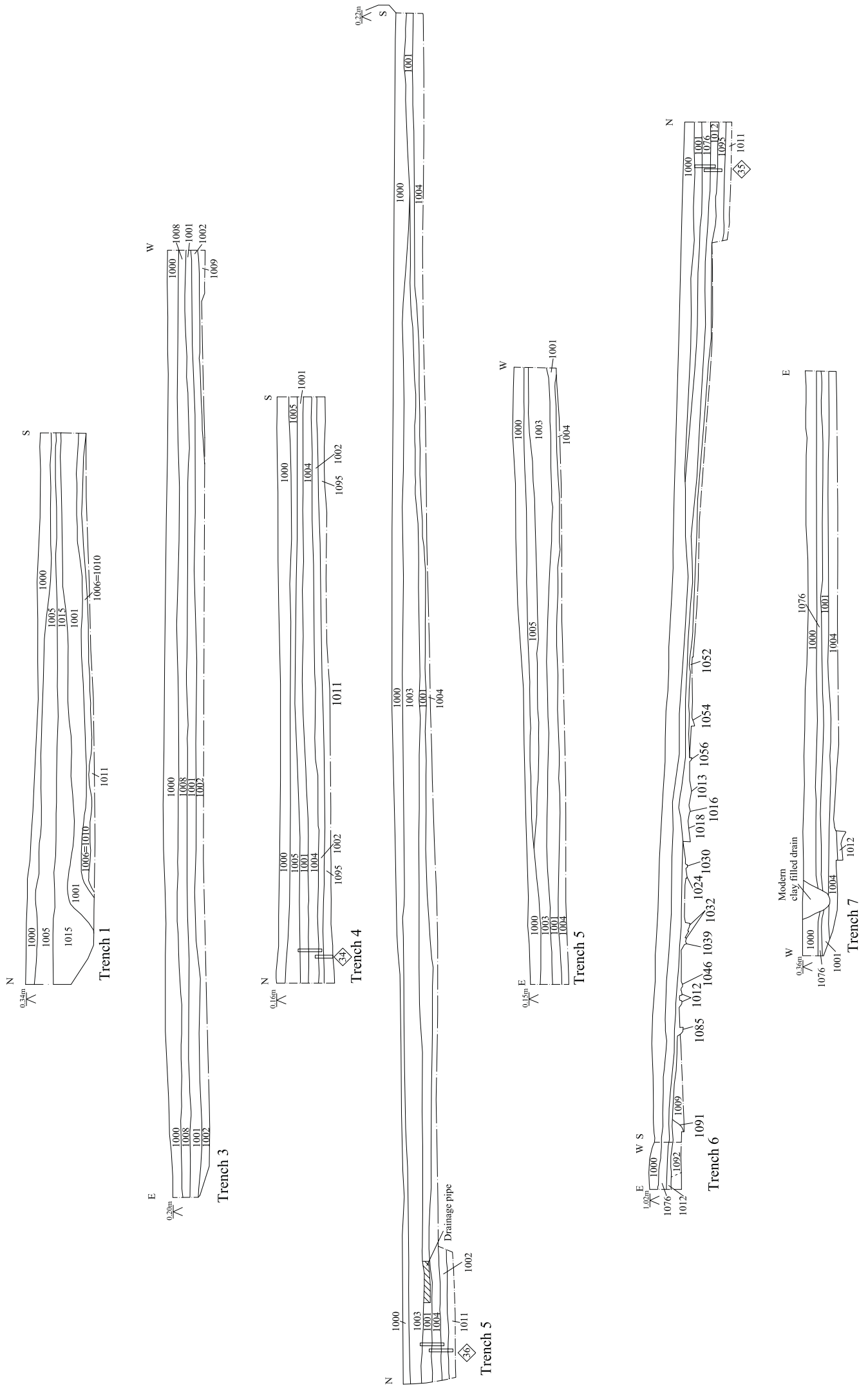
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Fig. 6 Sections
 Scale 1:20 at A3



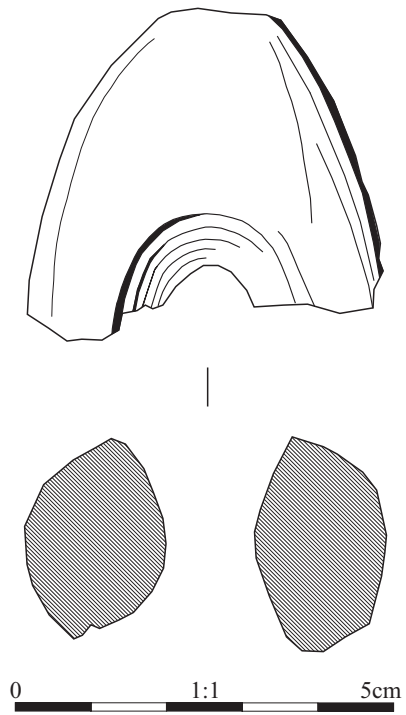
Bulk sample
 Column sample
 Letterbox sample



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Fig. 7 Sections of Test Pits 1 - 3
 Scale 1:20 at A4



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Fig. 8 Sections of trenches 1-7
 Scale 1:100 at A3



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Fig. 9 Quartzite hammer stone
Scale 1:1 at A4