ARCHAEOLOGICAL SOLUTIONS LTD

LAND ADJOINING 80 WISBECH ROAD, LITTLEPORT, CAMBRIDGESHIRE

AN ARCHAEOLOGICAL EXCAVATION INTERIM REPORT

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OASIS SUMMARY SHEET

Project details

Project name Land adjoining 80 Wisbech Road, Littleport, Cambridgeshire

Project description (250 words)

In January 2008, Archaeological Solutions (AS) Limited carried out an archaeological excavation at Wisbech Road, Littleport. The preceding trial trench evaluation, conducted in June 2005, revealed archaeological features of prehistoric, primarily late Iron Age, date. These comprised a dense cluster of pits, postholes and ditch and gully termini, all cut into the same deposit (L2004) in Trench 6, on the higher ground of the southern part of the site.

The excavation was conducted in the vicinity of Trench 6 (the southern transect that fronts Wisbech Road). Two late Iron Age ditches, two gullies, postholes, and numerous pits were identified. It is possible that late Iron Age Ditches F2011 and F2015 represent a single enclosure or land division system, however, it is also possible that they represent two non-contemporary but successive field systems or enclosures. This evidence indicates that the division and enclosure of land occurred even on the most marginal of land at the fen edge. Many of the other features recorded at the site appeared to be of natural origin. However, some were clearly deliberately cut features and their locations may have been influenced by the presence of the large boundary ditches.

Finds recovered from the features comprise pottery, struck flint, flint tools, a quartzite pebble hammer, animal bone and burnt stone, all in a somewhat abraded condition. Finds were also recovered from overlying soil layers and comprise pottery of Roman and late Iron Age date.

Project dates (fieldwork)	December 2007- January 2008				
Previous work (Y/N/?)	Y	Future w	ork (Y/N/?)	Ν	
P. number	2466	Site code	¢	AS 90)5
Type of project	An Archaeo	logical O _l	pen Area Exc	avatior	1
Site status	Unoccupied	l			
Current land use	Pasture				
Planned development	Redevelopm	nent			
Main features (+dates)	Pits, postho	les, ditche	s, gullies – la	nte Iron	n Age, Roman
Significant finds (+dates)	· ·		Late Iron A	ge, and	l Roman
	Struck Flint				
	Quartzite H	ammer Pe	bble		
Project location	•				
County/ District/ Parish	Cambridges	shire	East Cambridge.	shire	Littleport
HER/ HER for area	Cambridges	shire HER			
Post code (if known)	-				
Area of site	0.7 ha				
NGR	TL 5608 87.	32			
Height AOD (max/ min)	3m				
Project creators					
Brief issued by	Cambridges	shire Arch	aeology Plan	ning &	Countryside Advise
Project supervisor/s (PO)	Richard Gro	eene			
Funded by	Cheffins				
Full title	Land Adjoining 80 Wisbech Road, Littleport, Cambridgeshire:				
	An Archaeological Excavation Interim Report				
Authors	Richard Greene				
Report no.	3008	3008			
Date (of report)	February 20	008			

LAND ADJOINING 80 WISBECH ROAD, LITTLEPORT, CAMBRIDGESHIRE: AN ARCHAEOLOGICAL EXCAVATION INTERIM REPORT

Summary

During December 2007 and January 2008, Archaeological Solutions (AS) Limited carried out an archaeological open area excavation which followed a desk-based assessment and a trial trench evaluation conducted in 2005 at land adjoining 80 Wisbech Road, Littleport, Cambridgeshire (NGR TL 5608 8732). The evaluation revealed archaeological features of prehistoric, primarily late Iron Age, date. A dense cluster of pits, postholes and ditch and gully termini (almost of all of which were truncated) were all cut into the same deposit (Trench 6, L1009-phase I, L2004-phase II), on the higher ground of the southern part of the site. Two tree hollows were cut into the same deposit in the western part of the site (Trench 3). A waterlogged clay deposit (L1095-phase I, L2005-phase II) in Trench 4 and the northern part of Trench 6, may indicate a contemporary area of standing water north of the archaeological features.

The excavation was conducted in the vicinity of Trench 6 (the southern transect that fronts Wisbech Road). Two late Iron Age ditches, two gullies, post holes, and numerous pits were identified. It is possible that late Iron Age Ditches F2011 and F2015 represent a single enclosure or land division system, however, it is also possible that they represent two non-contemporary but successive field systems or enclosures. This evidence indicates that the division and enclosure of land occurred even on the most marginal of land at the fen edge. Many of the other features recorded at the site appeared to be of natural origin. However, some were clearly deliberately cut features and may have had their locations influenced by the presence of the large boundary ditches.

Finds recovered from the features comprise pottery, struck flint, flint tools, animal bone and burnt stone, all in a somewhat abraded condition. Finds were also recovered from overlying soil layers and comprise pottery of Roman and late Iron Age date.

1 INTRODUCTION

1.1 During December 2007 and January 2008, Archaeological Solutions Limited (AS) conducted an archaeological excavation of land adjoining 80 Wisbech Road, Littleport, Cambridgeshire (NGR TL 5608 8732) (Figs. 1 and 2). The excavation was commissioned by Matthew Homes prior to proposals to redevelop the site (Planning Ref. E/07/00298/FUM).

1.2 The archaeological excavation was conducted in accordance with a brief issued by Cambridgeshire Archaeology Planning & Countryside Advice (CAPCA, dated 14/09/07), and a specification compiled by AS (dated 24/09/07). The project followed the procedures outlined in the Institute of Field Archaeologists' *Code of*

Conduct, Standard and Guidance for Archaeological Field Evaluation (revised 1999). It also adhered to the relevant sections of *Standards for Field Archaeology in the East of England* (Gurney 2003).

1.3 The primary objective was to preserve the archaeological evidence contained within the site by record and to attempt a reconstruction of the history and use of the site.

1.4 Specific research priorities of the project were;

- To investigate and characterise the prehistoric settlement remains at the northern Littleport fen edge; and
- To model the northern Littleport fen edge by environmental reconstruction

Prehistoric settlement

• The evaluation revealed the presence of flints, animal bone and ceramic artefacts, which have the potential to characterise and securely date the early settlement present on the site.

Environmental reconstruction

- To use the spectrum of environmental techniques appropriate to this aspect of the investigation in order to attempt to identify botanical/microfaunal indicators of diet economy and the natural environment during the different phases of activity on the site, and to model the transformation of the natural landscape by the inhabitants of the settlement, as appropriate to the results of the project.
- 1.5 Other research priorities included;
 - A priority of the excavation was to establish, if possible, the chronological sequence of activity and occupation of the site.
 - The recovery of environmental and economic information will provide comparative material for past and future prehistoric excavations in this part of the fenland.

2 SITE DESCRIPTION

2.1 The site is located on the western side of Littleport, and on the northern side of Wisbech Road. It is located to the rear of Nos. 88 to 96 although a short transect fronts onto Wisbech Road. It is bounded to the north by Blackbank Drove and to the west by a modern housing development. To the east, the site is bounded by gardens lying to the rear of Nos. 74 and 76. The site is currently pasture and covers an area of 0.7ha. Land within the site will be subject to residential development including access routes and services (Figs. 1 and 2).

2.2 The site lies on the northern edge of the former fenland 'island', above the fen to the north. The island is comprised of solid Kimmeridge Clay deposits overlain by a tongue of bolder clay till and capped with glacial sand and gravel. The channelled course of the river Ouse runs to the east of the island. The majority of the town lies on Ashley deposits that are characterised as chalky till. This consists of fine loamy over clayey soils with slowly permeable subsoils, which are subject to slight seasonal waterlogging. There are some calcareous and non-calcareous slowly permeable clayey soils present. To the south lie Evesham 3 soils (Jurassic and Cretaceous clay), which are slowly permeable calcareous clayey soils. To the north of Littleport lie soils of the Downholland 1 association. These are marine alluvium and fen peat, which consist of deep stoneless humose clayey soils, calcareous in places (SSEW 1983).

3 ARCHAEOLOGICAL & HISTORICAL BACKGROUND (Fig. 3)

The historical and archaeological background to the project has been presented in previous reports for the site (Grassam, Nicholson and Weston 2005), and is summarised in the brief and also below;

3.1 *Summary*

3.1.1 Sparse evidence for prehistoric activity has been identified in the vicinity of the evaluation site, although ongoing excavations at Highfield Farm, c.1 km to the south are revealing evidence for possible ritual activity from the Neolithic and Bronze Age periods. Extensive evidence for occupation and salt working, dated to the Roman period, has been identified in Littleport, predominantly to the east of the site. Documentary evidence demonstrates the presence of a settlement at Littleport from at least the later Saxon period. However, few medieval remains have been located. It is probable that the core of the medieval settlement corresponds with the modern settlement, to the east of the site.

3.1.2 A desk-based assessment and trial trench evaluation were conducted on the site by Archaeological Solutions Ltd in 2005 (Grassam, Nicholson and Weston 2005). The desk-based assessment indicated that, although there was no evidence to suggest a specific archaeological potential for the site, the prehistoric, Romano-British, medieval and post-medieval periods are represented in the local archaeological record.

3.1.3 The majority of prehistoric activity, previously identified in the area, has been recovered as a result of a fieldwalking programme around the Ely Bypass (e.g. CHER07239, CHER07225; see Fig. 3). Finds of flint implements dating to the Neolithic and Bronze Age (and generically to the prehistoric period) were recovered to the north and west of the site, suggesting occupation of the gravel terraces of the Old Croft River. Archaeological investigations at Highfield Farm (Dymond 1999) revealed pits dating to the Neolithic and Bronze Age (as well as the Early Iron Age and Romano-British periods). These have been interpreted as possible evidence for ceremonial activity (Gdaniec, pers. comm.).

3.1.4 The trial trench evaluation revealed archaeological features of prehistoric, possibly late Bronze Age/ early Iron Age date. These comprised a dense cluster of pits, postholes and ditch and gully termini. A waterlogged clay deposit may indicate a contemporary area of standing water north of the archaeological features. The presence of deeper peat/alluvial layers in the northern part of the site indicate that the prehistoric evidence was located on the very edge of the contemporary fen island, with a roddon indicating a former watercourse traversing this part of the site. The

evaluation revealed no evidence of utilisation of the watercourse. The late Bronze Age/early Iron Age features recorded during the evaluation are significant as they provide the first clear evidence for human activity on the edge of the fen island of Littleport during this period. Although the excavated evidence at the Highfield Farm site may be more extensive, the differing topographical locations of the two sites suggests that the nature of the activity represented may differ between them.

3.1.5 The brief also notes the presence of a Romano-British saltern and associated settlement some 250m to the east, indicative of the importance of the local salt-making industry at this time (CHER ECB 139/140), in addition to evidence of salt-working at sites such as Apes Hall (MCB8809) and Camel Road (MCB14077), the latter some 100m to the east of the site. Such salterns and associated evidence are known from a number of sites along the line of the Old Croft River (which was the previous course of the Great Ouse). Saxon activity continued at a number of the sites, dependent on the variable influx of water levels surrounding the Littleport island, for instance at Apes Hall some distance to the northwest (MCB11020), although Saxon settlement evidence is rare from the core of Littleport.

4 METHODOLOGY

4.1 *Excavation and recording*

4.1.1 The open area excavation started with the excavation of 19 1x1m test pits oriented north to south on a 5m grid within the area of Trench 6; the southern extension of the building site that fronts Wisbech Road. This was carried out in order to test deposits representing former prehistoric land surfaces. The site was visited by soil micromorphologist Richard Macphail; his report is presented below. The test pits were excavated through subsoil deposits L2001, L2002, and L2003, stopping at the natural soil deposits L2004, L2005, and L2006 (the topsoil, L2000, had been stripped from the approximately 20x30m excavation area). The results of the test pit excavations confirmed the soil deposit model established as a result of the Trial Trench phase. It also exposed the surfaces of potential features cut into the natural soil deposits, confirming the presence of cultural features within the study area.

4.1.2 Following completion of the test pitting, the study area was stripped of overburden under close archaeological supervision using a mechanical excavator fitted with a toothless ditching bucket. A 10x10m planning grid was established, covering the approximately 30x20m excavation area. Exposed surfaces were cleaned by hand and all further excavation was undertaken manually. Deposits were recorded using *pro-forma* recording sheets and planned and photographed as appropriate. In addition, the excavation area and the spoil were checked and scanned for finds with a metal detector.

4.1.3 Pits and postholes were half sectioned while linear features were excavated in slots providing a minimum of 10-20% coverage. Slots were positioned for optimal determination of inter feature relationships. Intrinsically interesting features (e.g. hearths, structural features) were 100% excavated.

4.2 Test Pit excavation

On 21 and 22 April 2008, the site at land adjoining 80 Wisbech Road, Littleport, Cambridgeshire was backfilled. At the same time, three test pits were opened in a straight a line to the north of the site, 15 metres apart and aligned with the western edge of the 2008 excavation area (Figure 2). These pits were excavated using a 360° mechanical excavator down to the natural to reveal the full stratigraphic sequence

5 DESCRIPTION OF RESULTS (Figs. 4-7)

5.1 Summary

5.1.1 The excavation revealed two large ditches, two small gullies, and numerous pits which produced struck flint, a quartzite pebble hammer, animal bone, burnt stone, shell, and a pottery assemblage of late Iron Age and Roman dates. Two intercutting ditches were found in the south-western quarter of the site, possibly forming a field boundary system. There were a number of small undated pits that were located alongside one of the ditches, as well as two small gullies, one of which was cut by both ditches, while the other cut Ditch F2011 Numerous natural features (predominantly clay deposits) were located across the site.

5.2 Phasing

5.2.1 Based on the evidence of stratigraphic relationships and the limited dateable finds recovered during excavation, recorded features can be seen to represent a single phase of activity (see Fig. 5). This activity dates to the late Iron Age (c. 100BC-43AD). Only three features can, with confidence, be assigned to this phase; these are the two intercutting ditches, F2011 and F2015, and the narrow gully, F2082, recorded during the preceding trial trench evaluation as F1026. All other features recorded at the site, although potentially contemporary with the Phase 1 features, displayed insufficient dating evidence and are therefore regarded as undated (Fig. 5)

5.3 *Linear Features (Table 1; Figs. 4, 5 & 6)*

5.3.1 Ditch F2015 was the stratigraphically earliest of the dateable features recorded. Dating evidence from the Ditch comprised one piece of late Iron Age pottery, recovered from Segment F Ditch F2015. Ditch F2015 was oriented east/west. It curved slightly, heading towards the north-east, before turning back on to a due easterly alignment as it disappeared beyond the site perimeter. F2015 was cut by Ditch F2011 (Plate 1), suggesting that F2015 was infilled prior to the excavation of F2011. The exact nature of the relationship between the two, however, was unclear; as F2015 was significantly shallower than F2011 it may have become silted up earlier than the deeper north/south aligned ditch giving the impression that F2015 was cut by F2011.

5.3.2 At its western extreme Ditch F2015 was cut by a large sub-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 function remains unknown. A small undated ditch (F2009), aligned north-west/south-east, was cut by F2015 close to the point where F2011 and F2015 intersected within the south-west quadrant of the

site. Towards the east, the ditch 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 became disused. 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 represents a boundary. Its insubstantial nature, especially in comparison to F2011, indicates that this may not necessarily have been a physical barrier but instead may have been a symbolic boundary.

5.3.3 Phase 1 Ditch F2011 was the largest of the linear features recorded at the site (see *Table 1* for dimensions). It was aligned north/south. The ditch entered the site from the south and terminated approximately ten metres from the northern boundary of the site. A narrow, shallow gully (F2013), oriented east/west, cut Ditch F2011 approximately two metres north of F2015.

5.3.4 Two late Iron Age pottery fragments, making it one of three features to produce dateable artefacts, and a pink quartzite pommel or hammer stone fragment (which also suggests a prehistoric date) were recovered from L2012, the fill of F2011. Late Iron Age pottery (21g) and animal bone (306g) were recovered from other excavated segments of the feature. The dimensions of F2011 indicate that it would have been substantial enough to act as a boundary. It is therefore possible to suggest that this feature represents part of an enclosure or field system. It is not possible to conclusively state whether or not this field system would have also incorporated Ditch F2015.

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

5.3.6 Gully F2082 was the third of the three recorded features that yielded dateable artefactual material. It produced one sherd of possibly late Iron Age pottery along with 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 pits and to the east of Ditch F2011. Its location, to the north of and parallel to Ditch F2013, suggests that F2082 may have shared a spatial relationship leading to the tentative interpretation that with this feature could possibly represent a small sub-enclosure or part of a trackway. F2082 and F2013 had similar fills, although many features at the site displayed mid grey brown silty clay fills. Both features were similar in width.

5.3.7 Curvilinear Ditch F2009 was aligned north-west/south-east and located in the south-western corner of the site. No finds were recovered, but F2009 was cut by Ditches F2015 and F2011. It is possible that it may represent some kind of boundary. However, it was shallow (see Table 1) and the portion of it to the north-west of the junction of F2011 and F2015 was much wider than the portion to the south-east. This suggests that its suitability as a boundary ditch was limited.

Feature	Context	Seg.	Dimensions (m)	Plan	Profile	Fill	Finds (count; weight)
F2009	L2010	А	15+ x 0.51 x 0.09	Linear, irregular, aligned NW-	Ditch junction. regular curved moderately sloping sides, concave base	Mid grey brown clayey silt, compact.	-
		В	15+ x 0.35 x 0.12	SE	Regular curved moderately sloping sides, concave base	Mid grey brown clayey silt, compact.	-
F2011	L2012	А	20	Linear, conically shaped	Ditch junction. Regular curved steeply sloping sides, W edge: shallow step/shelf concave base	Mid grey brown silty clay, compact.	SF 1: Quartz pommel stone (1;73g) Struck Flint (1;1g) Animal Bone (1;150.g)
		В	20+ x 2.40 x 0.64	terminus, aligned N-S	Ditch junction. Regular curved steeply sloping sides, W edge: shallow step/shelf, concave base	Mid grey brown silty clay, compact.	Pottery; flint and sand tempered ware (1;3g) organic ware (1;15g)
		С	20+ x 0.69 x 0.24		Ditch terminus. Regular moderate sloping sides and concave base	Mid grey brown silty clay	-
		D	20+ x 2.30 x 0.60		Regular steeply sloping sides. W edge: shallow step, concave base.	Mid grey brown silty clay, compact.	Animal bone (1;156g)
F2013	L2014	A	8+ x 0.41 x 0.20	Linear, irregular,	Ditch junction. Regular steeply sloping sides and concave base	Mid grey brown silty clay semi compact.	-
		В	8+ x 0.49 x 0.15	gently curved, concave terminus, W-E	Ditch terminus. Regular curved gently sloping sides, concave base	Mid grey brown silty clay semi compact.	-
F2015	L2016	А	20+ x 1.51 x 0.32	Linear, irregular, slightly	Irregular, curved, steeply sloping sides and concave base	Mid grey brown silty clay frequent orange silty inclusions. Compact.	Struck flint (2;14g) Animal bone (1;8g)
		В	20+ x 0.72 x 0.28	curved, aligned E-W	Regular curved moderately sloping sides. N edge: shallow step/shelf. Concave- conical base	Mid grey brown silty clay frequent orange silty inclusions. Compact.	-

		С	10+ x 0.46 x 0.13		Regular curved moderately sloping sides with a concave base	Mid grey brown silty clay frequent orange silty	-
		D	10+ x 0.45 x	-	Ditch-feature junction with regular	inclusions. Compact. Mid grey brown silty clay	
			0.14		curved moderately sloping sides and concave base	frequent orange silty	
		E	10+ x 0.65 x	-	Regular curved moderately	inclusions. Compact. Mid grey brown silty clay	Pottery; Prehistoric flint,
			0.61		sloping sides with a concave base lying underneath F2066	frequent orange silty inclusions. Compact.	organic and grog temper (1;24g)
		F	10+ x 2.57 x 0.57		Ditch junction. Regular curved steeply sloping sides. N edge: shallow step/shelf concave base	Mid grey brown silty clay frequent orange silty inclusions. Compact.	-
		G	10+ x 0.95 x 0.14	-	Regular curved gently sloping sides with a shallow step or shelf along north edge and a concave base cut by a post hole	Mid grey brown silty clay frequent orange silty inclusions. Compact.	-
F2056	L2057	-	2.5 x 0.36 x 0.15	Linear, irregular, concave terminus, NW-SE	Gully terminus with regular curved gently sloping sides and flat base, most likely natural due to erosion	Mid brown grey silty clay. Semi compact.	Burnt stone (1;21g)
F2082	L2083		0.60+ x 0.55 x 0.02	Linear, slightly irregular, terminus. NW-SE	Oval, irregular, gentle sloping sides, shallow, flat base, east terminus of F1026-TT eval.	Mid grey brown silty clay, semi compact.	Struck flint (8;39g)

Table 1. Ditches and gullies

5.4 *The Pits & Postholes (Table 2; Figs. 4, 5, & 7)*

5.4.1 In addition to the linear features discussed above 34 further features were recorded at the site. These comprised pits, pit-like features and postholes; they are described in Table 2. These features formed three vague clusters; one at the western extreme of the site, one at the eastern side and the third close to the centre of the site. Other features were scattered across the site.

5.4.2 Pits F2007, F2034, F2036, F2042, F2052, F2054 and F2060 and Pit/Posthole F2038 were located at the western extreme of the site. They lay to the west of Ditch F2011 and to the north of Ditch F2015. Although this group of features were arranged in a roughly linear pattern it seems unlikely that this relates to any structural configuration. Their distribution in this linear pattern may, however, have been dictated by the presence of the possible Boundary Ditch F2011. Pit F2048 may also be considered to form part of this group although it lies apart from the other features, at a distance of 4.2m from F2042. 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 though it is possible that this is residual. It is possible that these pits were of a similar date to the probable Boundary Ditches F2011 and F2015.

5.4.3 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).

5.4.4 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.

5.4.5 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.

5.4.6 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.

5.4.7 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.

5.4.8 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.

5.4.9 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	Context Dimensions (m) Plan/Profile		Fill	Finds
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	Mid blue grey silty clay compact, with small orange silty inclusions	-
	L2021		F2022 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	6 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	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 baseDark brown-grey silty clay 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 2 Late Iron Age Pits/Features

5.5 Test Pit survey

The stratigraphy of each test pit is tabulated below (see Fig. 8).

-	Test Pit 1					
	Sample section:	South En	d, North Facing			
	0.00m = 0.41m	AOD				
	0.00m - 0.42m	L3000	Topsoil. Mid brown sand/silt/clay mix with frequent small			
			stones (<10cm).			
	0.42m - 0.62m	L3001	Light grey-brown clayey silt with some orange mottling.			
	0.62m - 0.86m	L3002	Dark grey-black peat with occasional rooting and wood			
			inclusions.			
	0.86m - 1.12m	L3003	Dark brown peat with moderate wood and organic			
			inclusions.			
	1.12m +	L3004	Natural. Light grey-brown silty clay with orange mottling.			

Test Pit 2

Sample section:	Sample section: South End, North Facing				
0.00m = 0.16m	AOD				
0.00m - 0.42m	L3000	00 Topsoil. As above (TP 1).			
0.42m - 0.75m	L3001	Subsoil. As above (TP 1).			
0.75m - 1.01m	L3002	Upper peat. As above (TP 1).			
1.01m+	L3003	Lower peat. As above (TP 1). Test pit submerged up to			
		this point almost instantly. Natural observed directly			
		below as pit was being cut but no measurements were			
		possible.			
	L3004	Natural. As above (TP 1).			

Test Pit 3

Sample section: South End, North Facing						
0.00m = 14m A	$0.00\mathrm{m} = 14\mathrm{m}$ AOD					
0.00m – 0.26m L3000 Topsoil. As above (TP 1).						
0.26m - 0.40m	L3001	Subsoil. As above (TP 1).				
0.40m - 0.69m	L3002	Upper peat. As above (TP 1).				
0.69m - 0.89m	L3005	Mid grey-brown clayey silt with orange mottling. May				
		represent a pocket of natural that varied slightly from the				
		rest of the site.				
0.89m +	L3004	Natural. As above (TP 1).				

6 CONFIDENCE RATING

6.1 It is not felt that any factors restricted the identification of archaeological features or the recovery of artefacts or ecofacts during the excavation.

7 **DEPOSIT MODEL**

7.1 Topsoil L2000, was present across the site and varied in depth between 0.28 and 0.45m. There was no discernible pattern to this variation. Beneath the topsoil, the site's deposit model exhibited spatial variation. Deposits at the site were subject to soil micromorphological analysis (see Macphail, below).

7.2 Within the southern half of the excavated area, Topsoil L2000 overlay L2002, a mid to dark brown clay with an organic component; this layer is thought to have been an alluvial deposit in the process of becoming a clay-rich subsoil. It was found predominantly in the southern half of the site and varied in thickness between 0.13 and 0.28m, being deeper in the north-western part of its extent.

7.3 Black peat Deposit L2001 was found within the northern half of the excavated area. The thickness of the deposit varied between 0.07m and 0.36m, showing no particular pattern in its variation. It is possible that deposits identified on site as L2001 represented two episodes of peat formation; the layer was identified overlying L2002 in the northern part of the excavated site area, but underlying L2002 in other parts of the building site (outside of the excavated area). Alternatively, L2001 may have represented a single episode of peat formation, while L2002 may have represented two episodes of alluvial deposition.

7.4 Buried Land Surface or Soil L2003 was identified across the excavated site area. This comprised mid grey/orange/yellow clayey silt. L2003 varied in thickness between 0.06m (in the north end) and 0.12m (in the south end). The archaeological features were overlain by L2003. L2003 contained struck flint and five pieces of Roman/late Iron Age pottery.

7.5 L2004 was a mixed deposit of yellow/ orange sand, silt and clay with flint gravel, and was the predominant layer in to which the features were cut, as well as the lowest level reached during the initial excavation/stripping of the southern half of the site. L2004 appeared to overlie gleyed clay Deposit L2006 within the southern half of the excavated area. This was identified as the natural deposit at the site but it overlay L2005, a grey/ brown clay deposit with occasional organic content located within the northern half of the excavated area. The relative depths beneath the modern ground surface at which these deposits were encountered were as follows: L2004 from 0.63m to a maximum of 1.18m, and L2006 from a minimum of 1.16m to an unknown depth. Struck flint (a small thumbnail scraper) was recovered from the surface of L2004.

7.6 L2005, a grey/brown clay deposit with occasional organic content, was found to underlie L2004 in the northern half of excavated site area. Like L2004, this layer is thought to have been deposited by water. It varied in thickness between 0.22 and 0.37m.

7.7 The gleyed blue/grey clay deposit L2006 was present at the bottom of the stratigraphic sequences throughout the majority of the excavated area, but it was highly visible within the northern half of the excavated site area. The surface of L2006 was encountered at a depth of 1.16 and 2.04m, with its greatest depth in the northern half of the excavated site area.

8 **DISCUSSION**

8.1 *Summary of the archaeology*

8.1.1 The earliest datable evidence for human activity on the site was the discovery of two late Iron Age ditches (F2011 and F2015) which together contained 3 sherds (45g) of late Iron Age pottery, animal bone (306g), struck flint (15g), and a broken quartz pommel stone (73g). One sherd of Romano-British pottery (9g) and four sherds of late Iron Age pottery (63g) were recovered from Subsoil Layer L2003. Wood (6g), struck flint (80g), shell (1g), and burnt stone (56g) were recovered from five pit-like features.

8.1.2 The two ditches (F2011 and F2015) crossed each other within the south-west quadrant. They may have formed part of a single enclosure or field system. The stratigraphic relationship between the two was unclear. It is possible that they were contemporary and that natural processes caused the shallower F2015 to be come infilled sooner than the more substantial F2011 giving the impression that the latter cut the former. A considerable number of pits, most of which were undated, were located across the site; several of these were clustered in close proximity to the two large possible boundary ditches.

8.2 Interpretation of the site: archaeology and history

8.2.1 The open area excavation revealed features comprising a dense cluster of pits, postholes, two ditches, and ditch and gully termini (almost all of which were truncated), on the higher ground of the southern part of the excavated area. The dateable features are of late Iron Age date and may have been located on the edge of a shallow expanse of water to their north, with a wooded area to the west. The fen edge location of these features is typical of evidence for Bronze and Iron Age activity. Additionally, the recovery of Romano-British pottery attests activity during this period.

8.2.2 These features provide the first clear evidence for human activity on the edge of the fen island of Littleport during the late Iron Age. Although the location close to the fen edge is typical of Bronze Age activity, evidence of early to late Iron Age activity has also been located within a similar setting. The presence of the two large ditches (F2011 and F2015) suggests a system, or systems, of land division in this area. This indicates that land was claimed and enclosed as far as the edge of the fen, or what may have been a significant body of water. Although no evidence of fishing or hunting activity was identified, these and other resource exploiting activities would have been common along the fen edge.

8.2.3 The larger of the two primary ditches (F2011) appeared to have been cut some time after the east/west aligned ditch (F2015) had become filled in. Excavation of the ditch juncture suggested the possibility that the two ditches may have been contemporary with one another and formed a ditched enclosure(s), possibly located to the south of F2015 and, either east or west of, F2011.

8.2.4 Numerous pits, as well as two postholes, were located along each ditch. A few were regular in shape, and five contained either burnt stone, wood, struck flint or

shell. It appears possible that the group of pits to the west of F2011 were deliberately cut features and that the group's linear formation was dictated by the presence of the possible Boundary Ditch. The curvilinear formation of Pits F2058, F2062 and F2068 is also suggestive of deliberate configuration and possibly indicates some kind of structural formation. Other groups of features, especially those towards the east of the site display no rationalised formation in their layout. Many features were very shallow, irregularly shaped depressions that contained fills very similar to the clay soil Deposit L2006, or evidence of plant growth and rooting indicating that they were possibly naturally occurring. Very few pit-like features were identified north of the terminus of Ditch F2011, which seemed to coincide with the northern edge of soil Deposit L2004, and may indicate the edge of a prehistoric body of water or marshland.

8.3 *Interpretation of the site: geology and topography*

8.3.1 The slope of the site's natural gleyed clay (L2006, Kimmeridge clay) did not mirror the gradual slope of the modern ground surface, but dipped at the northern end of the site. The deposits overlying L2006 varied across the site, probably largely as a result of the topographic variation.

8.3.2 On the highest ground, in the southern half of the site (where the depth of the natural beneath the ground surface is not known) L2004 overlay the natural clay. The late Iron Age date of features cut into L2004 provide a *terminus ante quem* for its deposition, though it is likely to have been deposited long before that time and may represent a mixed deposit of the bolder clay Till capped with glacial sand and gravel which is known to overlie the Kimmeridge clay in the Littleport area. Evidence of human (or indeed any dry land) activity was identified in areas of the site where L2004 was present. It is possible that L2004 was originally present across a wider area but that it was lost through truncation or erosion prior to the laying down of subsequent deposits.

8.3.3 Buried Land Surface/Soil L2003 was present within the majority of the site, overlying archaeological features cut into L2004, L2005 and L2006, and was therefore of late Iron Age date or later. The apparent truncation of features sealed by L2003 may indicate it was deposited a significant time after they were infilled, with erosion of the surface of L2004 occurring between these events.

8.3.4 In view of their stratigraphic positions (overlying L2004 and overlain by topsoil L2000 or peat deposit L2001) it seems likely that L2002 formed on the higher ground of the southern half of the site area at the time when the lower lying central area of the site was underwater. L2002 may have been deposited during the same period of inundation as L2003, the differences between the two deposits being a result of spatial variation and the subsequent development of L2002 into a soil, with the incorporation of an organic component.

8.3.5 It is possible that waterlogged clay deposit L2005 represents the early stages of inundation (or a previous period of inundation); its deposition may have occurred at the time when the features cut into L2004 were in use. This suggests that the features would have existed on the edge of a (probably shallow) body of water.

8.3.6 Subsequently peat deposits formed across the site. This comprised black peat (L2001) which was found in all, but the northern half, of the site and contained pottery of late Bronze Age date. The Fenland survey (Hall 1996, 23 (fig 11) and 25) indicates that the Bronze Age fen edge lay immediately north of the site; the findings of this investigation suggest that it lay slightly further to the south.

8.3.7 While the peat was forming, a water channel flowed along the northern edge of the site, this is visible on Hall's plan of the prehistoric landscape of the Littleport area (Hall 1996, 23, fig 11) and ran through the northern part of the building site; it can be seen in DP4 (photographic index). As it flowed, the watercourse accumulated clayey silt deposits on its bed. The site stratigraphy records two consecutive events in which the water course flooded, depositing its silty clay (L2003) load across the northern (in the first event) and northern to southern (in the second event) parts of the site. It is possible that L2002 was initially deposited in the same flooding event as L2003, the smaller clay particles being carried further from the watercourse than the larger silt particles. In the Roman period, when the Bronze Age peat dried out and shrank, the silty clay and clayey silt deposits in the bed of the former watercourse immediately north of the assessment site, remained, thus becoming an upstanding, bank like feature (a roddon), one of several shown on Hall's plan of the Roman landscape around Littleport (1996, 24, fig 13).

8.3.8 The fenland survey indicates that the fen edge encroached into the site area in the medieval period, but no evidence was found of this during the evaluation. It may be that following the drainage of the fens in the post-medieval period the peat deposits eroded, leaving no trace. The site may have been enclosed by the beginning of the 17th century; in this case the land would have been relatively intensively farmed. This would have had a negative impact on the preservation of the archaeology.

8.4 *Finds and environmental evidence*

8.4.1 A small pottery assemblage was recovered from the site. A single fragment of Romano-British pottery and four sherds of late Iron Age pottery were collected from Subsoil Layer L2003, into which the features were cut. Further pottery included two late Iron Age fragments from Ditch F2011 and one from Ditch F2015. Ditch F2011 also yielded a quartzite pommel or hammer stone; such objects were in use from the Mesolithic probably until the Bronze Age. The presence of this example in an Iron Age context may simply result from chance, although there are numerous examples of such artefacts appearing as curated objects in later periods (see Tingle, below) Other finds included struck flint (flakes and two thumbnail-size scrapers), burnt stone, wood, animal bone, and shell.

8.4.2 All of the finds (pottery, struck flint, burnt stone, shell, and animal bone) recovered from the features cut into L2004 were in a poor state of preservation. This may indicate they were not in their primary depositional context, being residual within the features. In support of this a small number of artefacts were recovered during the stripping of the site. Subsoil L2003 contained one piece of Roman pottery, four fragments of late Iron Age pottery and three pieces of struck flint.

8.4.3 Two bulk samples were taken for environmental analysis from the clayey silt fills of Ditches F2011 and F2015. These are yet to be analysed. As are four column

samples taken from the deposit sequences in Test Pits 14, 15, 18, and 19. All three of these included peat deposits, as well as waterlogged clays. There is a high potential for pollen to be well preserved in these samples.

8.5 *Research potential*

8.5.1 Research priorities were as set out in the specification, with relevant additions taken from the regional archaeological research framework documents (Brown and Glazebrook, 2000 and Glazebrook, 1997). The investigations aimed to clarify the extent, character, function, depth, density and state of preservation of any archaeology present. It was also aimed to interpret the nature of human activity at the proposed quarry site and assess the significance of the site at local, regional and national levels as appropriate.

8.5.2 The site clearly has the potential to further inform on the geographical and topographical development of the fenland area through time; it may provide evidence to compliment the already substantial body of work carried out on this subject. The presence of small-scale prehistoric activity, while sparse, adds further to the picture of the fen edge activity during the late Iron Age period. The evidence for boundaries/enclosures recorded at the site indicates that further research has the potential to inform on issues relating to the development of the agrarian economy during the Iron Age, an important research topic for the eastern counties as set out by Bryant (2000, 16)

DEPOSITION OF ARCHIVE

Archive records, with an inventory, will be deposited with the finds from the evaluation 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 evaluation site summary, it will be necessary to produce a summary of the artefactual and ecofactual data.

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APPENDIX 1 CONCORDANCE OF FINDS

AS 905: V Cambrid		oad, Littlepo	rt,					
Concorda	nce of finds	by feature						
Feature	Context	Segment	Description	Spot Date	Pottery	CBM (g)	A.Bone (g)	Other
2003			Subsoil	Roman	(1) 9g			Struck Flint (3) 14g
				Late Iron Age	(4) 63g			
2004			Subsoil					Struck Flint (1) 35g
				Late Iron				SF 1: Quartz pommel stone
2011	2012		Ditch Fill	Age	(2) 21g		150	73g
								Struck Flint (1) 1g
		D	Ditch Fill				156	
2015	2016		Ditch Fill				8	Struck Flint (2) 14g
		E	Ditch Fill	Late Iron Age	(1) 24g			
2056	2057		Gully Fill					Burnt Stone (1) 21g
2060	2061		Pit Fill					Struck Flint (1) 4g
2064	2065		Pit/Gully 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

APPENDIX 2 SPECIALIST REPORTS

The Flint

Andrew Peachey

Excavations produced a total of 14 fragments (89g) of struck flint, of which 3 (13g) were present in the subsoil. The assemblage includes a scraper or denticulate, two blades and a variety of flakes, possibly produced in the (Early?) Neolithic period.

Methodology & Terminology

The flint was quantified by fragment count and weight (g), with all data entered into a Microsoft Excel spreadsheet that will be deposited as part of the archive. 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' with 50-99%; 'tertiary' with 1-49% and 'non-corticated' to those with no dorsal cortex. A 'blade' is defined as an elongated flake whose length is at least twice as great as it's 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 is 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 gravel may have been collected from nearby surface gravels.

Composition & 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) of if 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 suggesting 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 Subsoil 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 the subsoil. 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 Linear F2082. Linear F2082 (L2083) contains unpatinated examples of three tertiary flakes (12g) and single primary, secondary, and uncorticated flakes (5g, 2g & 19g respectively). Further single examples of uncorticated and tertiary flakes were recorded in Ditch F2015 (L2016) (4g & 8g respectively); and a single uncorticated flake was recovered from Pit F2060 (L2061) (3g). An additional heavily patinated tertiary flake was also recovered from Subsoil L2003 (9g). The limited quantity and diagnostic qualities of this assemblage do not allow for any firm conclusions but it may be tentatively suggested this assemblage represents (Early?) Neolithic activity and that very limited retouching or basic blade production might have occurred on or near the site.

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Pottery

By Peter Thompson

The evaluation produced 9 sherds of abraded pot; one is possibly just baked or hardened clay, weighing 116g. The assemblage is heavily abraded and comprises pottery of later prehistoric date and one Roman sherd.

Feature	Context	Quantity	Date	Comment
	2003	1x9g RSO	Roman	RSO:Roman Oxidised ware
		2x50g	Prehistoric	PSSW – Prehistoric Sandy
		PSSW		Shelly Ware
		1x10g		POW – Prehistoric organic
		POW		tempered ware
		1x3g		PGSW – Prehistoric grass and
		PGSW		sand tempered ware
2011	2012	1x3g PFS	Late Iron	PFS – Prehistoric flint and sand
		1x15g	Age?	tempered ware
		POW?		POW – Prehistoric organic
				ware?
2015	2016	1x23g	Late Iron Age	PFOG – Prehistoric flint,
		PFOG		organic and grog temper.

2082	2083	1x3g PFSW	Iron Age	PFSW – Prehistoric fine Flint
			(Late?)	and sand tempered ware

L2003 contained 5 abraded body sherds. One is a Roman oxidised sandy ware, the other four, (two thick sherds with coarse sand temper with sparse shell and flint, and two with grass temper, one also containing sand), are of late Iron Age appearance, but could be contemporary with the Roman sherd. L2012 contained a 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; this is probably late Iron Age. Accompanying this was a piece of pot or baked material with a profusion of burnt out voids, probably from organics, but possibly shell. It has no fired surfaces and the abundance of inclusions suggests it is not actual pottery.

L2016 contained an abraded base in mixed fabric of flint, organics and a little grog and sand. There is just a hint of upward curvature of the base to an omthalmos form, but not enough survives to be sure and it might simply be slightly uneven. The fabric suggests a middle to late Iron Age date. L2083 contained a small abraded body sherd in fine flint and sand, also containing a small amount of grass. This is also Iron Age, and probably late Iron Age.

Quartzite Pebble Hammer

By 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 hour glass 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 may well when complete, have resembled an ovoid macehead.

Pebble hammers appear to 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 result from chance, 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 transluscent 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 concentrations in East Anglia and Sussex identified by Rankine seem less obvious as more have been found (Roe & Radley 1968, 169; c.f Rankine 1951, 55 & Roe, 1979 fig 15). A recent example from Gamlingay has been linked to a general cluster of pebble hammers centred on Cambridge, to which the Littleport example could also be ascribed (Crummy, 2004, 12).

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Animal Bone

Carina Phillips

Animal bone was hand excavated from two features, both of which have late Iron Age spot dates. The bone is of moderate condition, with little surface erosion, but some modern fragmentation. The animal bone assemblage is composed of only six fragments of bone. Cattle (*Bos* sp.) is the only species to be identified in the assemblage; one bone exhibited evidence of butchery. Further consideration of the animal bone through analysis will be limited by the small number of bone fragments forming the assemblage.

Environmental Samples

Ruth Pelling

Introduction

During evaluation excavations at the site of Wisbech Road, Littleport, Cambridgeshire, by Archaeological Solutions Ltd., samples of deposit were taken for the extraction and evaluation of charred plant remains. Features excavated included ditches, gullies and linear features of late Iron Age to Roman date. Two samples, both from late Iron Age ditch fills, were processed by bulk water flotation and resultant flots collected onto a 500µm mesh. Samples were submitted to the author for the examination of any charred plant remains present with the intention of evaluation the sites potential to produce charred material given future excavation.

Evaluation Method

Processed flots were evaluated by scanning under a binocular microscope at x10 to x20 magnification. 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.

Evaluation Results

Both flots consisted largely of recent roots and silt, with occasional fragments of indeterminate charcoal. A single recent seed of *Ranunculus acris/repens/bulbosus* (buttercup) was present in sample 2 (context 2016).

Discussion

There is no evidence from the samples examined for the presence of charred plant remains in any quantity on the site. However, it is not possible to determine the presence or absence of material in features not sampled or in other parts of the site not excavated. The presence of charcoal would suggest preservation of charred remains is possible.

Recommendations and Updated Research Design

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 area of the Fens is known for arable production during the Roman period. It must be considered that in the event of future excavation charred remains may be recovered and the Late Iron Age to Roman period is of great interest in terms of the development of arable production in the region. Future excavations should therefore include a comprehensive sampling programme.

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Soils Richard Macphail

Introduction

The Bronze Age site located in Land Adjoining 80 Wisbech Road, Littleport, Cambridgeshire, was visited on the 6th of December 2007 in order to evaluate the soils and sediments present, and to suggest future geoarchaeological sampling protocols with Gary Brogan (Archaeological Solutions); machining was underway during the visit. An archaeological evaluation by Archaeological Solutions in 2005, employing trial trenching, had found Bronze Age features and artefacts in Trench 6

(on the highest ground in the southernmost part of the area of study); this is believed to be the fen edge (Gary Brogan, pers. comm.). To the north, wetland deposits (humified peat) are reportedly approximately a metre thick over a mineralogenic substrate (Trenches 1-5 and 7). Exposed peaty topsoils, and a feature fill and associated soil profile in a re-opened part of Trench 6, were examined (Figs 1 and 2); one monolith and two bulk samples were collected (Goldberg and Macphail, 2006; Hodgson, 1997).

Results

Local soils

Peaty topsoils thicken northwards (from 30-50 cm in the current machined area; Fig 1). These presumably develop into earthy eutro-amorphous peat soils of the Adventurers soil series that is included within the Downholland 1 soil association formed in marine alluvium and fen peat, which dominates 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 area of Trench 6 has not yet been determined (see below).

Machining through the humic (peaty) topsoil exposed dark grey gleyed silty clay Context 1012, which both contains Bronze Age artefacts and apparently seals and infills Bronze Age features (Table 1; Fig 2). Context 1012 also overlies a gleyed and ochreous mottled subsoil Context 1009. A 30 cm long monolith (M1) was collected through contexts 1012 and 1009, as a preliminary sampling exercise to record the soil stratigraphy at the southern end of Trench 6. Two complementary bulk soil samples were also collected (Table 1).

Discussion

Fen and fen-edge soils associated with archaeological sites of Cambridgeshire have been studied by French (French, 2003, Chapters 8 and 9), who recorded palaeosols sealed by fen peat. The land adjoining 80 Wisbech Rd, Littleport apparently has a similar palaeosol sealed by a fen peat which thickens to the north. Here, however, the following are unclear:

- The relationship between Contexts 1012 and 1009: is Context 1012 an alluvium which precedes peat deposition during inundation, or is it an upper palaeosol horizon that has became gleyed?
- The relationship between Context 1012 and the ditch fill shown in Fig 1: is it a feature infilled through ditch silting or is it an alluvium-infilled feature?
- The exact nature of the palaeosol present in Fig 1: is it the strongly gleyed remains of the argillic brown earth soil (see French, 2003, 130) and representative a previously wooded landscape?

Soil micromorphology and bulk analyses (e.g., grain size analysis, P and LOI) can 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).

Some suggested sampling protocols

Given that a series of 2 m squares are to be hand-excavated in the area of Trench 6 (representing the Bronze Age? fen-edge – dry land boundary), whereas fen-edge Bronze Age? 'wetland' (Trenches 1-5 and 7) is to be the subject of a palaeoenvironmetal investigation (Fig 1), the following can be suggested.

- 1. In the area of Trench 6: monitoring of the palaeosol from the 'drier' southern end (see Fig 1) towards the 'wetter' north, with soil monolith columns (and complementary bulk samples) through the palaeosol, down to 30-50 cm (see Fig 2). Probably three locations would be able to monitor the palaeosol along this slope profile. Examples of associated feature fills could also be collected in the same way.
- 2. In the area of Trenches 1-5 and 7: in addition to the collection of samples suitable for macro- and micro-fossil (palynology) analyses, two or more monoliths or core samples (minimum 4-5 cm wide) through the palaeosol and palaeosol-fen peat boundary, would be able record the original soil cover and the type of sediment sealing the palaeosol according to increasing depth of inundation (northwards).

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Environmental Sampling from Test Pit survey

Walter McCall

Three test pits were opened in a straight a line to the north of the site, 15 metres apart and aligned with the western edge of the 2008 excavation area (Figure 2). These pits were excavated using a 360° mechanical excavator down to the natural to reveal the full stratigraphic sequence. Each pit was c.1.6m square. Twenty-six samples were

taken in all including 3 column samples, 6 bulk samples, and 17 letterbox samples (Figure 8). The column samples covered the full stratigraphic sequence in each test. The bulk and letterbox samples were taken from peat layers. Column samples have been sent to Rob Scaife for palynological analysis.