

ARCHAEOLOGY FIELD OFFICE FULBOURN COMMUNITY CENTRE HAGGIS GAP, FULBOURN CAMBRIDGE CB1 SHD Tel: 881614 (Fax





Archaeological Field Unit

# Iron Age and Medieval activity at Blackhorse Lane, Swavesey

Judith Roberts

September 1998

**Cambridgeshire County Council** 

Report No. 151

Commissioned by McLean Homes (East Anglia) Ltd

# Iron Age and Medieval activity at Blackhorse Lane, Swavesey

**Judith Roberts** 

1998

Editor Paul Spoerry Illustrator Jon Cane

with contributions by Jeremy Evans, James Rackham, BSc, MSc, and Paul Spoerry, BTech, PhD

Report No 151

© Archaeological Field Unit Cambridgeshire County Council Fulbourn Community Centre Haggis Gap, Fulbourn Cambridgeshire CB1 5HD Tel (01223) 881614 Fax (01223) 880946

#### **SUMMARY**

In July and August 1998 the AFU conducted an archaeological evaluation on land previously occupied by engineering works. The evaluation was designed to examine the disturbance to underlying archaeological remains caused by construction of industrial buildings in the 1960s, to determine the extent of surviving archaeological remains and the general sequence and periods of activity, to determine the line of the town ditch suggested by earlier work in Swavesey and investigate the possibility of street front properties extending along the High Street at the entrance to the development site.

The trenches in the northern part of the site (on the better drained gravel island) revealed a considerable density and complexity of archaeological features dating to late Iron Age, late Saxon, Saxo-Norman and medieval periods. Those trenches which extended beyond the gravel island onto the wetter land in the southern part of the site showed a lack of archaeological features.

The trench close to the High Street revealed a recut ditch along the street front which corresponds to a drain shown on early nineteenth century maps. Other trenches in the southern and western part of the site revealed a substantial ditch crossing the site from south-east to north-west in the western part of the site and extending northwards in trench 12. This ditch was identified in a trench dug in 1997 continuing northwards beyond the present site and here it appears to represent a continuation of the defensive line of the castle bailey which lies adjacent and to the north. The ditch may therefore be the line of the medieval town ditch.

# CONTENTS

1	INTRODU	JCTION	1
2	GEOLOG	Y AND TOPOGRAPHY	3
3	ARCHAE	OLOGICAL AND HISTORICAL BACKGROUND	3
4	METHOD	OLOGY	5
5	RESULTS 5.1 Trench 5.2 Finds	descriptions	5 5 16
6	DISCUSSI	ION	17
7	CONCLUS	SIONS	19
ACKN	NOWLEDG	EEMENTS	21
BIBL	IOGRAPH	Y	21
	NDIX 1 NDIX 2	Environmental assessment Post-Roman pottery assessment	22 27
	NDIX 3	'Belgic' pottery and kiln furniture assessment	31
	NDIX 4	Context list	33
APPE	NDIX 5	Finds types by context	35
FIGU	RES		
Figure	site	location plan	1
Figure	2 Tren	nch location plan	2
Figure	Plan	of trench 11	4
Figure	e 4 Plan	of trench 12	8
Figure	5 Plan	of trench 13	10
Figure	e 6 Plan	of trench 14	14

# Iron Age and medieval activity at Blackhorse Lane, Swavesey (TL 360/688)

#### 1 INTRODUCTION

This phase of evaluation followed several earlier evaluations and excavations in advance of development on the western edge of Swavesey (Fig. 1) (see previous AFU reports on School Lane and Blackhorse Lane: Sutherland & Hatton, 1996, Spoerry 1996, Cooper and Spoerry 1997, Heawood and Spoerry 1998, Roberts and Spoerry 1998). Much of the present area had been covered in industrial buildings since the 1960s. The initial building and subsequent demolition of the factory and office buildings and removal of foundations has caused considerable disturbance. Archaeological deposits were noted during removal of deep concrete foundations (Fig. 2).

Trenches 11 and 12 were located in the north-western part of the site (which had been under Romney huts) to establish whether the density of archaeological features noted in the 1997 excavation extended eastwards. The position of trenches 13 and 14 was designed to locate the edge of the gravel island and discover the extent of use of this marginal area during the medieval period. Trench 15 was sited off the gravel island to see if this area had been occupied at any time in its history. Trench 18 was positioned close to the High Street to investigate the possibility of medieval street front properties existing under the

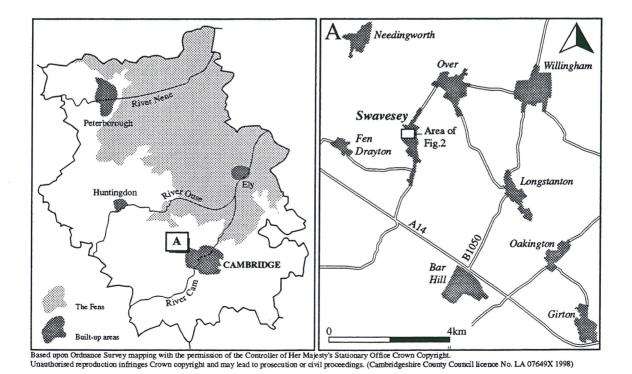


Figure 1 Site location plan

Based upon Ordnance Survey mapping with the permission of the Controller of Her Majesty's Stationary Office Crown Copyright.

Unauthorised reproduction infringes Crown copyright and may lead to prosecution or civil proceedings. (Cambridgeshire County Council licence No. LA 07649X 1998)

present made surface. Trenches 16, 17 and 19 were located along the southern edge of the site in order to investigate the possible route of the medieval town ditch discovered during excavations in 1984 (Haigh 1984) and postulated by Ravensdale's historical survey of the village (Ravensdale 1982). An earlier trench (trench 5) had failed to locate the medieval ditch close to the Turn Bridge.

Two futher ditches were opened in the south western part of the site but the high level of contamination and disturbance made it impossible to define archaeological features. The final trench (trench 20) investigated the western part of the site, which had not previously been available, to determine the route of the town ditch in this area

#### 2 GEOLOGY AND TOPOGRAPHY

The site lies on the junction between first and second terrace river gravels and Ampthill clay (British Geological Survey 1985). The gravels on which Swavesey is situated form the end of a spur leading out into the Ouse valley and the edge of the fen, where there is a covering of alluvium. The gravels overlie Ampthill clay which constitutes the main part of the spur of higher ground.

Swavesey lies 3km to the north-east of the A14 trunk road, 14km to the north-west of Cambridge and 13km south of Huntingdon. The site is generally flat and lies approximately 200m to the west of the village core at a height of around 6m OD. Local knowledge suggests that the area on the western side of the site contained a pond and earlier trenching indicated a former low lying wet area here. The site was used as an industrial estate from the 1960s until the present.

#### 3 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

The site lies in an area of dense activity and high archaeological potential. This extends from the late Iron Age into late medieval period and is associated in its final stages with the planned and defended town of Swavesey. The layout of the settlement appears to have been formalised in the thirteenth century. The town had over 1000 inhabitants by 1278 (Ravensdale 1984). Dry land access to this fenland port was along the present High Street and it is known that the suburban development around Cowfen Green, to the south-east, was in existence by the fourteenth century.

It was anticipated that the current phase of work would provide information concerning the medieval topography of Swavesey. It was hoped that the exact location of the town ditch could be identified. The town ditch was identified to the south of the site by Haigh (1984) and to the north of the site by trenching in 1997 (Heawood and Spoerry, 1998). A ditch was also noted running across the site in the aerial photographic survey (Palmer 1995) which corresponds to those found during trenching. Evaluation trenches 1-3 (Cooper and Spoerry 1997) in the central western part of the site failed to detect the ditch because of modern contamination and the nature of the subsoil/geology.



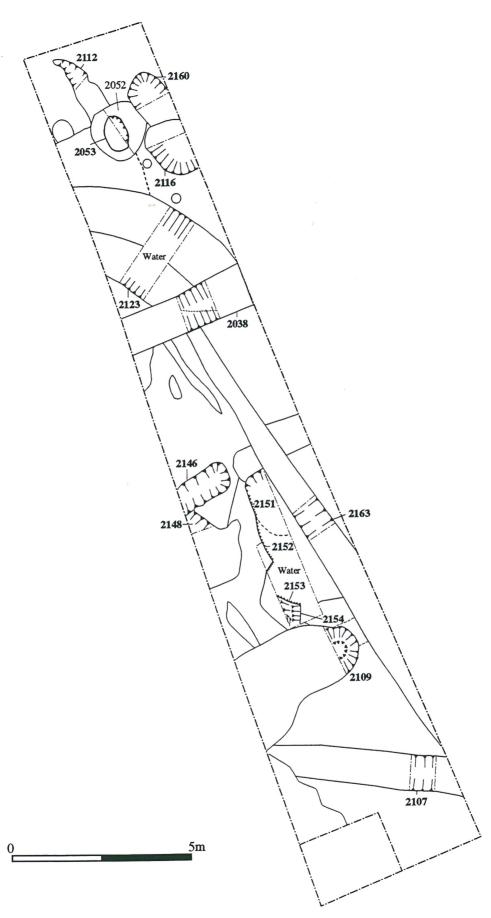


Figure 3 Plan of Trench 11

#### 4 METHODOLOGY

The trenches were opened by a tracked excavator with a 1.8m wide toothless ditching bucket. The depth of trenches was determined by the deposits. Levels were taken from the 5.63m benchmark on the northern side of the Turn Bridge. The location of the trenches and features were plotted using a Total Station and superimposed on Ordnance Survey map data. The trench and context numbers follow on from earlier work on the site. The trenches were cleaned and mainly excavated by hand although a machine was used to put sondages through larger features (e.g. ditches). The level of groundwater in some trenches impaired excavation but features was pumped out so that the profiles and fills could be recorded. Features were recorded using standard AFU techniques. The presence of petrochemical contaminants reduced the amount of excavation in some features. Column samples were taken from the fills of ditch 2001 and environmental samples were taken from various features in several trenches.

#### 5 RESULTS

#### 5.1 Trench descriptions

#### Testpit 00 by Scott Kenney

A small area of hardcore was removed in the extreme north-west corner of the site, close to 1997 areas A and B in order to test the hypothesis that the archaeology was close to the surface at this point. Hand excavation of a 1m square test pit (Test Pit 00) removed 0.05m of olive brown sandy silty clay containing brick fragments, possibly pressed into this layer from above. Below this was a packed gravel surface, upon which lay 38 sherds of pottery weighing 920g. These sherds were spot-dated to 1300-1450.

#### Anti-Vibration Trenches by Scott Kenney

Two trenches were excavated by a JCB using a 0.6m toothed bucket, parallel to the property boundaries of the closest buildings on Blackhorse Lane. This was done in order to minimise the transmission of vibrations whilst the concrete crusher was in operation. The northern trench (AV1), was L-shaped, 20m long in total, and showed only two layers in the section which might be considered archaeological. These layers had a total depth of 0.55m, and were sealed by 0.35m of concrete and hardcore. No cut features were observed in either the base or the section of this trench. The second trench (AV2) was a kinked dogleg in plan, 32m long in total. Diesel contamination meant that three possible linear features observed in the base at the bend in the trench could not be investigated, but their presence was noted. The only other feature was a probable pit at the northern end of the trench, approximately 4m wide with distinctly curving sides in plan. In the section, this feature could be seen to contain at least three fills, and to be sealed by 0.6m of modern overburden. No finds were recovered from this feature.

#### Trench 11 by Scott Kenney (Fig 3)

This trench was 25m long, approximately 4m wide and machine excavated to a depth of approximately 5.5m OD. It contained a high density of archaeological features, including linears, pits, at least two postholes and a possible kiln feature. The quantities of finds recovered exceeded expectations, in particular the amount of late Iron Age pottery found within pit 2123.

Ditch 2038 had a flat-based, V-shaped profile, was 1.13m wide, 0.6m deep, at least 4m long, and contained four fills. The upper fill, 2034, was a firm, sticky, very dark grey sandy silty clay, with occasional small subangular flints and orange flecks. Below this, fill 2036 was a soft, light olive brown sandy silty clay containing moderate small flints. Below this, fill 2035 was a soft, light olive brown sandy silty clay containing occasional flints and rare flecks of burnt clay. The lowest fill, 2037 was a very soft, greasy, black organic sandy silt containing occasional burnt clay flecks. At this level, water was welling up during excavation. Pottery recovered from 2034 and 2035 was spotdated to 1200-1400 and 1150-1200 respectively. Ditch 2038 was the stratigraphically most recent feature in trench 11, cutting 2119 and 2162.

## Northern Area, "Kiln" and Pits

Pit 2116, probably subcircular in plan, was 0.6m x 0.6m, 0.1m deep, and contained two fills. The upper fill, 2117, was a firm, very dark greyish brown sandy clay silt containing occasional charcoal flecks and occasional small subangular flints. The lower fill, 2118, was a soft, brownish yellow clayey sand containing rare small subangular flints. A tiny amount of animal bone was recovered from fill 2117, as well as sherds of pottery which have been spotdated to 900-1150. Pit 2116 cut the upper fill of 2160, but appeared to respect the edge of clay deposit 2052.

Pit **2160**, probably subrectangular in plan, was at least 1.5m x 0.95m, 0.45m deep, and contained three fills. The upper fill, 2157, was a firm, dark greyish brown sandy silty clay containing occasional small subangular flints. Below this, 2158 was a thin layer of brownish yellow sandy clay with no inclusions. The lowest fill, 2159, was a light greyish brown silty sand and gravel, most likely representing initial collapse and silting. Fill 2157 contained a small quantity of animal bone, and pottery which has been spotdated to 900-1200. Pit **2160** cut the edge of clay deposit 2052.

Feature 2112, a possible flue or stokehole, was irregular in plan, curving and narrowing to the north-west. The profile was similarly irregular, a shallow shelf 0.05m deep at the far northwest end dropping abruptly into a section 0.15m deep which itself sloped up towards the south-east. It contained a single fill, 2113, a firm, very dark greyish brown clayey silt containing occasional small flints. A small amount of animal bone was recovered from fill 2113, as well as sherds of pottery which have been spotdated to the late Iron Age.

Pit 2053, ovoid in plan, was 1.3m x 0.7m, 0.35m deep, and contained two fills. The upper fill, 2050, was a firm, very dark greyish brown sandy silty clay containing moderate small flints and occasional burnt clay flecks. The lower fill, 2051, was a soft, very dark greyish brown sandy clay silt containing rare small flints and rare burnt clay flecks. Both fills contained small quantities of animal bone and sherds of pottery dated to 900-1150. This feature apparently cut a subcircular deposit of olive clay, 2052, containing burnt flecks and fragments of poorly-fired clay. Deposit 2052 overlay an olive brown clayey sand and gravel which was not excavated, but appeared archaeological.

Feature 2123 could be either a very large pit, or part of a sinuous ditch. Both its profile and its shape in plan cannot be determined at this stage, due to the water table and the size restrictions of the trench. In the excavated portion of 2038, the edge was observed to curve around quite sharply, and the feature did not continue on the southern side of 2038. It was 2.8m wide, more than 0.65m deep, at least 6.0m long, and contained at least six fills. The upper fill, 2119, was a firm, very dark greyish brown clay sandy silt, with occasional small subangular flints and yellowish brown clayey sand flecks. Below this, fill 2121 was a soft, very dark greyish brown sandy clayey silt containing rare small and medium flints and occasional charcoal flecks. It also contained several olive silty sand lenses and a few charcoal rich patches. Below this, fill 2122 was a firm, olive brown sandy clayey silt containing rare medium flints and occasional chalky flecks and charcoal flecks. Below this, fill 2120 was a firm, dark greyish brown silty sandy clay containing rare medium flints. Of the lowest excavated fills, 2144 was a firm yellowish brown clayey sand and gravel, and 2164 was an olive silty sand and gravel. At this level, water was welling up during excavation. Pottery recovered from 2119, 2120, 2121, 2122, and 2144 has been characterised as 'Belgic' and dated to the period c AD30-70 (Appendix 3 and J. Evans, pers. comm.). A pierced and worn bone was recovered from fill 2144. A quantity of kiln bar fragments, including several near-complete specimens, was recovered from 2121.

#### South of Ditch 2038

Cut by 2038, linear 2163 was up to 0.9m wide, 0.05m deep, and at least 15m long. It contained a single fill, 2162, a firm, very dark greyish brown sandy silty clay, containing moderate small flints, from which no finds were recovered. Feature 2163 cut clay layer 2165 and the fill of gully 2114.

#### **Quarry Pits**

Almost the whole area of these pits had been "capped" with 2165, a layer of stiff olive clay containing chalky flecks. This is not shown on Figure 3 to aid clarity but the extent was recorded. Stratigraphically, it overlay the upper fill of 2109.

Pit 2109 cut the upper fill of the quarry pits and had a very different profile, with much less steep sides, and a rounded base that was reached before water was encountered. It contained two fills, the upper of which, 2110, was a firm, dark greyish brown clayey silt containing occasional small flints. The lower fill, 2111, was a firm, very dark greyish brown clayey silt containing occasional small flints. Pottery from 2111 has been spotdated to 900-1150. Gully 2114 led off the pit to the east, and the fill, 2115 was indistinguishable from 2110. Pit 2109 probably also cut the fill of ditch 2107, but this has not yet been proven by excavation.

Quarry pits 2151, probably subrectangular, 2152, probably subrectangular, 2153, probably subcircular, and 2154, probably subcircular, were all filled by the same two deposits. They formed parts of a complex of intercutting pits that extended beyond the limits of the trench. Despite their dissimilar shapes in plan, they all had steep or vertical sides. The upper fill, 2149, was a firm, very dark greyish brown sandy silty clay containing moderate small flints and numerous lenses of brownish yellow sandy clay. The lower fill, 2150, was a soft, very dark grey sandy clay silt containing rare small flints. It could not be fully excavated due to the water table. The upper fill contained only residual Roman pottery, however the lower fill also contained sherds spotdated to 1200-1400. These pits appeared to have been cut into an earlier deposit, possibly another phase of quarrying, which was not excavated at this stage.

Also cutting this deposit was pit 2148, irregularly shaped in plan and possibly consisting of more than one cut. It had a single observed fill, 2147, a firm, very dark greyish brown sandy silty clay containing rare flints and occasional chalky patches. Fill 2147 was in turn cut by 2146, a shallow, squarish possible butt-end of a linear feature, containing a single fill. This fill, 2145, was a firm, very dark greyish brown sandy silty clay containing occasional flints. Pottery from 2145 has been spotdated to 1150-1350.

Ditch 2107 was straight, 0.98m wide, 0.42m deep, and at least 5m long. It contained a single fill, 2108, a firm, olive brown clay silty sand containing moderate small and medium flints. No finds were recovered from this fill.

#### Trench 12 (Fig 4)

This trench was T-shaped (east-west trench 30m long, 3.5m wide, north-south trench 24m long, 2m wide), and machine excavated to a depth of 5.5m OD with a 1.8m wide trench 10m long at 4.9m OD at the western end.

#### Ridges

The latest features in trench 12 are two ridges of very compact clay silt, 2136 and 2068, oriented approximately north—south. Ridge 2136 has been dated, by the pottery, to 1350-1450 but no artefactual material was recovered from 2068. These ridges appear to be remnants of a soil which sealed the site but which has been disturbed and truncated by modern building. It is unlikely that they represent ridge and furrow agriculture as they are only 2.2m apart.

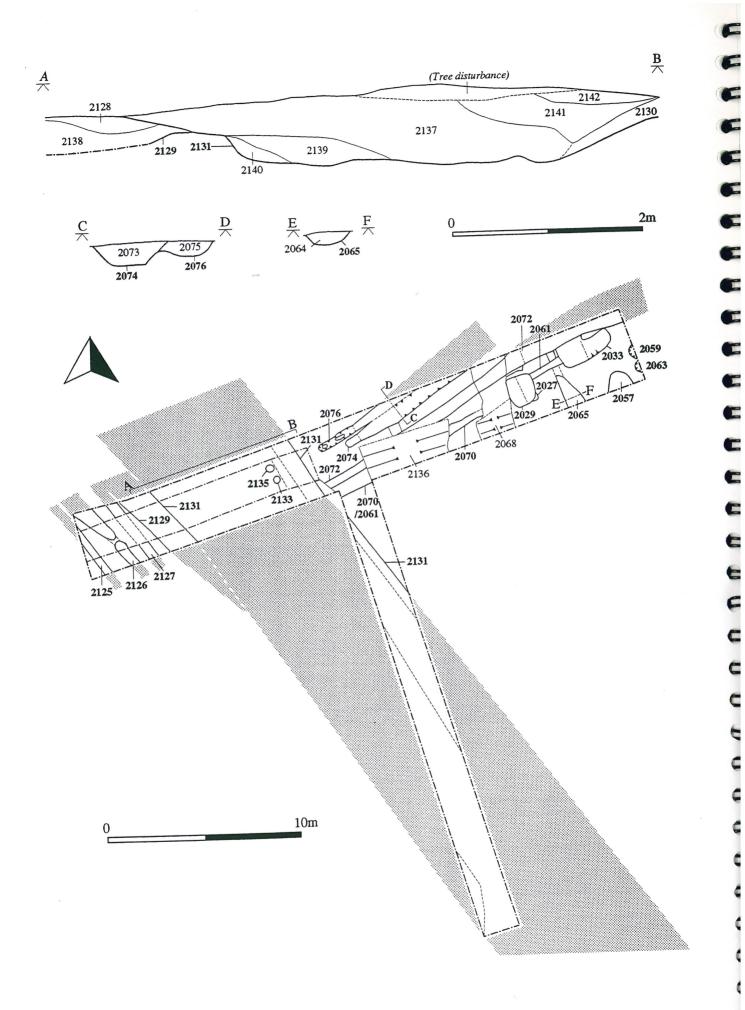


Figure 4 Plan of Trench 12 and key sections

#### 'Town Ditch'

The western part of trench 12 appears to contain the town ditch, 2131. Machine excavation and hand cleaning of this feature revealed it to be surviving to a depth of 1.15m. It was approximately 6.8m wide with a possible narrower re-cut towards its eastern edge. The main fill, 2137, was a firm, very dark greyish brown slightly silty clay. There was evidence of tree roots throughout the upper part of this fill and glazed pottery was recovered from the section. The basal fill, 2140, along the western edge of the ditch, was a dark orange brown very gravelly clay which was sealed by fill 2139, an olive grey clay with occasional small gravels. Two postholes (2133 and 2135) with diameters of 0.17m and 0.21m respectively were noted cut into the gravel base of the ditch, parallel to its eastern edge. Posthole 2135 was 0.08m deep and its fill, 2134, was the same as 2137 (above) and contained pottery dated between 1200-1450. This feature filled rapidly with water. Along the eastern edge of the ditch was a very dark grey sandy clay silt, 2130, which contained glazed pottery dated between 1500-1600. A very compact, plastic olive grey clay, 2141, was noted in the eastern part of the section and extended across the trench. This layer resembled deposits of clay in other parts of the site and had a shallow deposit of very dark grey silty clay, 2142, in a depression in its surface. Over fills 2137, 2141 and 2142 was a layer which had a considerable quantity of tree root still remaining in it. A similar stratigraphic sequence was also noted in test pit 12, to the north, during the evaluation earlier in 1998. Ridge 2136 could possibly be the remains of an internal bank, running parallel to the 'town ditch'.

To the west of ditch 2131 and with its eastern edge cut by it, was a further approximately north-west-south-east running ditch -2129. The surviving width of this feature was 1.8m and it appeared to have gently sloping concave sides and a flat base. The lower fill, 2138 (0.38m thick), was a very dark grey clay silt with occasional gravel. The upper fill, 2128 (0.18m thick) was an olive grey slightly sandy silty clay with very little gravel. No finds were recovered from either fill in this feature.

At the western end of trench 12 were three of shallow, narrow ditches or gullies which appeared to run parallel to the putative town ditch, 2131. Gully 2125 (0.4m wide, 0.35m deep and over 3m long) contained a single fill 2124, a dark greyish brown silty clay with occasional small stones which contained a single sherd of pottery and a small quantity of shell. Gully 2126 (0.8m wide, 0.42m deep and over 4m long) contained a single dark greyish brown silty clay fill. No artefacts were recovered from this fill. Gully 2127 (0.75m wide, 0.45m deep and over 4m long) again contained a single greyish brown silty clay fill with no finds.

#### Pits

In the eastern part of trench 12 were a group of pits. Pit **2027** (0.94m long 0.52 m wide, 0.05m deep) was heavily truncated but appeared to be rectangular, oriented east-west, with shallowly sloping sides and a flat base. The fill, 2028 was a sandy silt with occasional gravels. Pottery from this feature is spot-dated to 900-1450.

Pit 2029 (1.6m long, 1.43m wide and 0.35m deep), which truncated 2027 (above) was rectangular with rounded corners, steep, almost vertical sides and a flat base (although not all the pit was excavated because of contamination). The basal fill, 2030 was a dark greyish brown slightly sandy silty clay with occasional gravels and sandy patches, and contained sherds of pottery dating the feature to 1150-1250. The upper fill, 2031, was a dark greyish brown silty clay.

At the eastern end of trench 12 were two possible pits (2059, 2063) which extended beyond the trench edge, their exact shape can only be resolved through further stripping of the site. Pit 2063 (0.63m wide, 0.25m visible in trench, 0.23m deep) appeared oval with steep, almost vertical sides and a concave base. The single visible fill, 2062, was a very dark grey, loose slightly sandy silty clay with occasional gravels and flecks of charcoal. Pottery from this fill dates it to 1100-1200.

The adjacent pit, **2059** (the exact relationship can only be determined through further stripping of the site), had shallowly sloping, almost concave sides and base (1.19m wide, 0.32m visible in trench, 0.18m deep). The fill, 2058, was a very dark greyish brown sandy

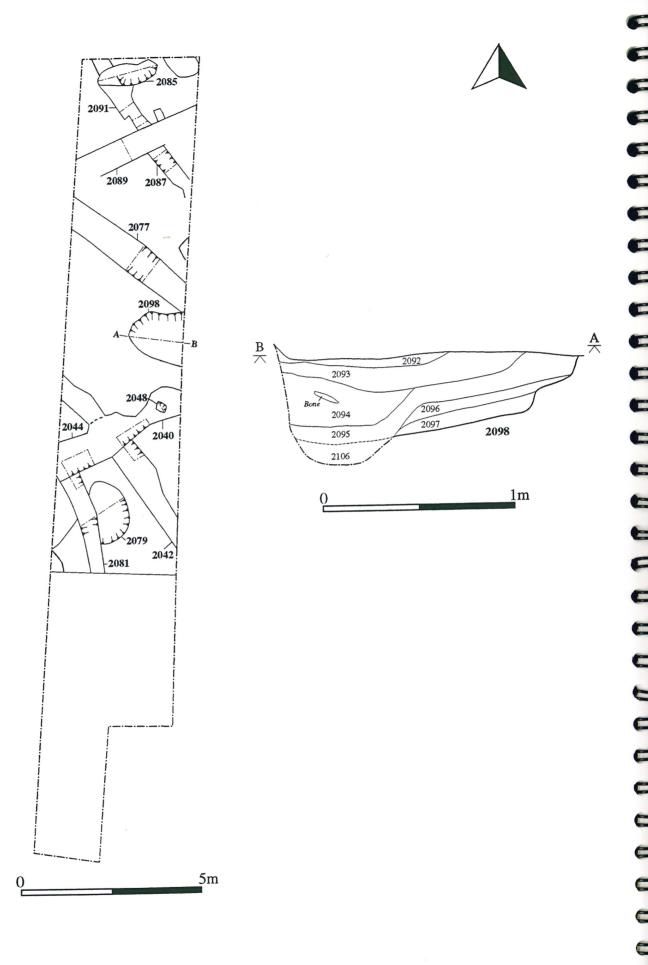


Figure 5 Plan of Trench 13

silty clay with frequent gravel and large fragments of pottery dating between 1150-1350, but two sherds of later pottery were noted on the machined surface of this feature.

Extending beyond the southern edge of the trench and very close to pits 2059 and 2063 was a further possible pit, 2057. This was 1.2m wide, over 1.05m long, and over 0.15m deep (the fill was not fully excavated because of contamination) with steep (60°) sides. The excavated portion of the fill, 2056, was a compact dark olive grey slightly sandy silty clay with frequent gravels and pottery dating to 1200-1450.

A further pit in the eastern end of trench 12, 2033, was an irregular oval (2.9m long and 1.2m wide) with steep sides and slumped gravel natural over the western end. This feature was not excavated below 0.33m because of contamination and the base was not reached. The fill, 2032, was a fairly loose dark greyish brown slightly sandy silty clay with occasional gravels which contained pottery and animal bone. A date of 1200-1350 is suggested for this context based on the pottery.

#### North-east-south-west gullies and ditches

In the central part of trench 12 several linear features appeared to run parallel in a south-west-north-east direction. Two (2074 and 2076) butt ended close to the eastern edge of ditch 2131 and converged towards the east. Two further gullies (2072/2067 and 2061/2070) ran parallel and to the south of 2074 and 2076. The western end of these had been truncated by ditch 2131 and the eastern portions had been cut by pits 2029 and 2033.

Gully 2076 (over 4.2m long, 0.48m wide and 0.17m deep, increasing in depth at the western end to 0.34m) had gently sloping concave sides and a concave base. The fill, 2075, a clay silt with moderate gravel contained a small quantity of pottery dated around 1050-1200. Fill 2075 was cut by gully 2074 which had straight even sides and a flat base. The fill, 2073, was a clay silt with moderate gravel which contained pottery dated to 1150-1250. In the base of the western end of the gully (but not visible cut through the fill) were two postholes, one 0.6m long and 0.23m wide, the other 0.28m long and 0.2m wide, both approximately 0.15m deep. These postholes were not assigned separate numbers as it was impossible to distinguish their fills from 2073 and it is possible they were cut at the same time as the gully.

Gullies 2061/2070 and 2067/2072 (dug in different sections but the same feature) were oriented approximately south-west-north-east and parallel to 2074 and 2076. Gully 2061/2070 was 0.3m wide, 0.28m deep and over 6.2m long. It had straight, even sides (45-50°)a concave base and the single fill, 2060/2069, was a very dark grey slightly sandy silty clay with moderate amounts of gravel. There was no dating material from this feature.

The final ditch or gully (2067/2072) in this group appears to be more substantial with a V-shaped profile. The excavated section suggests the ditch is 0.74m wide, 0.27m deep and over 5m long. The sides were straight and even, sloping at approximately 45°. The fill 2066/2071 was a dark grey silty clay with very occasional gravel fragments and small quantities of sand. Pottery from this feature dates to 1150-1350.

A shallow linear feature, **2065** (0.44m wide, 0.14m deep and over 0.77m long), oriented north-west-south-east, was cut by **2067** and **2061**. This feature had concave, gently sloping, sides and a concave base and contained a single fill, 2064. The fill was a very compact olive brown silty clay with sandy patches and contained a small quantity of pottery dated 900-1150.

#### Trench 13 (Fig. 5)

This trench (23m long, 3.5m wide) was sited to locate the edge of the gravel and establish the extent of occupation on the dryer land in this part of the site. Gravel was encountered at approximately 5.4m OD at the northern end of the trench. The gravel shelved gently to the south and the edge was noted 8m from the southern end of the trench. At this end modern rubbish was found to a depth of 5m OD and appeared to have been dumped into a wet, very dark grey silty clay. This part of the trench filled with

water soon after excavation but dried slowly, after three rainless weeks. It was inappropriate during the evaluation to extend the depth of the southern end of trench 13.

The earliest feature near the southern edge of the gravel was a shallow pit, 2079, oriented approximately north-south, 1.5m long, 0.17m deep and at least 1.6m wide, although its western edge had been truncated by 2081. The sides were concave, the base slightly concave and inclined from east to west. The single fill, 2080, was a compact dark yellowish brown sandy silt with frequent gravels. A sherd of St. Neots type pottery (AD 900-1100) was recovered together with a piece of daub and a small quantity of animal bone.

Pit 2079 was cut by a north-south oriented linear feature, 2081 (0.6m wide, 0.15m deep and 2.5m long) with gently sloping concave sides and a concave base. The fill, 2082, was a very compact silty sandy clay with occasional small stones and contained no artefactual material. This feature was excavated at its northern end where it was cut by an east-west running linear. At this junction this feature was given the number 2046 (2046 = 2081).

Ditch 2046, was 0.6m wide and 0.17m deep with a gently sloping edge and a concave base. The ditch sloped gently northwards. The fill, 2047, was an olive brown silty clay with moderate amounts of gravel. No finds were recovered from the excavated section. At its northern end 2046 was cut by the south-west-north-east running ditch, 2044/2040 (the two numbers represent a western and an eastern section through the same feature). Ditch 2044 was 1.1m wide and 0.48m deep with steeply sloping, slightly stepped, sides and a flat base which sloped gently to the west. The fill, 2045, was a very dark greyish brown silty clay with moderate gravel. The eastern excavated section of this ditch (2040) was shallower and narrower (0.29m deep and between 0.4m and 1m wide). It had steep, slightly concave sides and a flat base. The fill, 2041 (equivalent to 2045), contained two sherds of St. Neots type pottery, dated between 900-1150.

The final feature in this group was another north-south oriented ditch **2042**, which was also cut by ditch **2040/2044**. This ditch was 0.12m deep and 0.77m wide with a visible length of more than 2.5m. It had shallowly sloping sides and a concave base which sloped towards the north. The fill, 2043, was an olive brown slightly silty clay with occasional gravels, no finds were recovered from it.

It appears that both 2046/2081 and 2042 ran parallel, draining down to ditch 2040/2044 which probably drained to the wetland to the west. A further, unexcavated, feature to the north of 2040/2044 may be a continuation of 2042 or may be a further ditch draining the land to the north. This complex of features requires further clarification.

Cut into the eastern end of fill 2041 was posthole 2048. This was slightly oval (0.46m x 0.4m and 0.22m deep) with regular sides, sloping at approximately  $70^{\circ}$  to a slightly concave base. Fill 2049 was a very dark grey clay silt with occasional gravels and flecks of charcoal. The fill contained large packing stones towards the base and a relatively large quantity of St. Neots type pottery dated between 900-1150 (including some sooted sherds).

In the central part of trench 13 was a large oval pit that extended eastwards beyond the trench edge. Pit 2098 had steep, stepped western and northern sides, sloping down to a concave base close to the trench edge. The pit was over 1.6m long, 1.56m wide and 0.59m deep and contained seven fills. The basal fill, 2106 (0.2m thick) was a moderately compact, very dark grey clay with charcoal flecks and occasional gravels which contained no artefactual material. Along the western stepped edge was layer 2097 (0.09m thick), a light olive brown clay with occasional small stones and grit. Overlying this, again on the western edge of the pit, was layer 2096 (0.08m thick). This was a moderately compact dark olive grey clay silt with occasional gravel which contained St. Neots type pottery dating between 900-1150. Fills 2106 and 2096 were sealed by 2095, which extended across the pit. This fill was a very dark greyish brown clay silt (0.45m thick) with charcoal flecks and moderate gravel and contained a single sherd of St. Neots type pottery. In the central part of the pit was fill 2094 (0.3m thick) which was a very dark grey clay silt with occasional charcoal flecks and contained pottery dated 900-1200, fragments of a lava quern and animal bone. Sealing fill 2094 and extending over part of

fill 2095 was fill 2093, a black silty layer (0.17m thick) with very occasional small stones and charcoal flecks. Animal bone, shell, daub and a considerable quantity of pottery dated between 900-1200 was recovered from this fill. The truncated upper fill, 2092 (0.08m thick), was a loose very dark grey clay silt with occasional small stones, which contained animal bone and pottery dating between 900-1150.

Just to the north of pit 2098 was ditch 2077 which ran north-west-south-east across trench 13. The relationship between the two features was not clear but both continued beyond the eastern edge of the trench. Ditch 2077 (0.97m wide and 0.19m deep) had gently sloping concave sides and a slightly concave base. The western end of the feature was truncated by a modern service trench. The fill, 2078, was a very dark greyish brown silty clay with occasional gravels and pea grit in the base. No dating material was recovered from this feature.

At the northern end of trench 13 was an irregular oval pit, 2085 (1.77m long, 0.68m wide and 0.31m deep), with a shallow, stepped western edge and a concave eastern edge and base. This feature contained two fills, 2084 (0.11m thick) and 2083 (0.22m thick). The basal fill, 2084, was contained in the eastern, deeper, part of the pit. It was a loose sandy silt with frequent small stones and flecks of charcoal and contained mussel shells. The upper fill, 2083, was an olive brown sandy clay silt with occasional stones, flecks of charcoal, mussel shell, animal bone and a small quantity of pottery.

Pit 2085 and the modern service trench cut through a north-west-south-east running gully 2087/2091. This feature varied in width between 0.45m and 0.56m and in depth between 0.13m and 0.16m and had 45° sides and a concave base. The fill, 2086/2090, was a very dark greyish brown clay silt, with gravel and chalk flecks, which contained pottery, dating between 900-1150, animal bone, stone and daub/mortar.

The service trench which carried an electricity cable was given the number 2089, and it fill was 2088.

#### Trench 14 (Fig. 6)

This trench was located behind The Old House and revealed considerable post-medieval disturbance related to the farm buildings (shown on nineteenth century maps) and the industrial buildings which succeeded them. The trench was machined to a level (approximately 5.5m OD) at which features could be seen cut into the gravel natural. Many of these were truncated by foundations of the later buildings. A sondage was dug by machine to ascertain the depositional sequence at the southern end of the trench. This sondage showed a very dark greyish brown silty clay overlaying a very dark grey, slightly silty clay with a small quantity of organic material.

Crossing the trench in an east—west direction was a gravel layer (1.4 wide and 0.4m deep), possibly a path, which overlay a dark brown clay silt layer. The gravel was sealed by a layer of very dark greyish brown silty clay which also sealed the dark silty clay deposit in the southern part of the trench. This appeared to be a layer of natural silting, against the edge of the natural gravels, which contained small fragments of bone and medieval pottery. To the north of the gravel path was feature 2104, a narrow oval cut, 1.7m long, 0.4m wide and 1.3m deep, cut from relatively high in the section, just below a sealing layer of crushed brick. The sides were steep, almost vertical, and cut into the gravel natural in the base of the trench (approximately 5.5m OD). The base was flat and the orientation was approximately north-west—south-east. The single fill, 2105, was a loose dark brown clay silt, with moderate gravels and occasional flecks of charcoal, and contained the bones of an old dog but no artefactual material. It appears that this pit was dug in the post-medieval period (probably fairly recently) to bury a dog and was backfilled immediately.

To the north of the path natural gravel was encountered at 5.6m OD. This was sealed by a layer of re-deposited clay silt (between 0.1 and 0.3m thick) with gravels and charcoal flecks which dipped sharply to the north. This, in turn was sealed by a very stiff olive brown clay, 2102, (0.2m thick) with very small quantities of gravel and chalk flecks. This clay layer was cut by relatively modern wall foundations and postholes (at least one



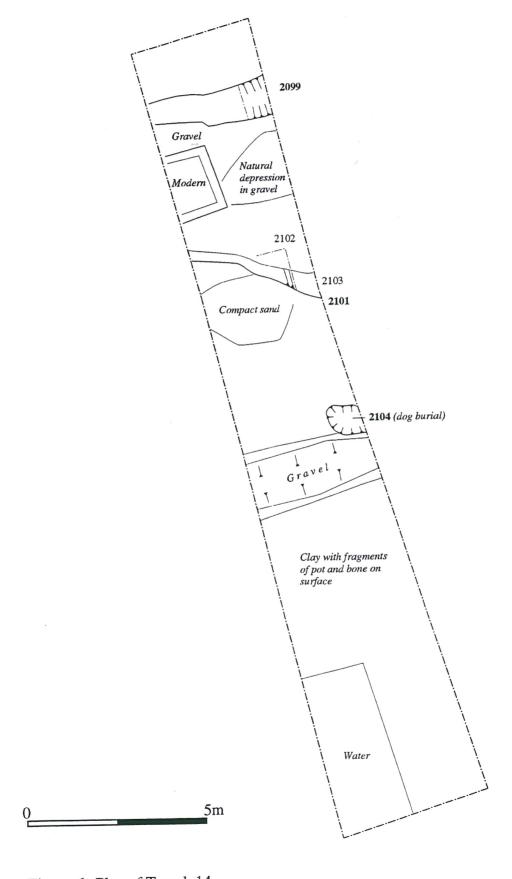


Figure 6 Plan of Trench 14

of which still contained a post). Layer 2102 sealed a ditch, 2101, which was only partially excavated. Ditch 2101 ran north-west-south-east and was approximately 3m wide. Its southern edge sloped gently to a depth of at least 0.3m, but its base was not reached. The only fill encountered, 2103, was a compact very dark greyish brown silty sandy clay with moderate gravel. Ditch 2101 was truncated by modern concrete foundations which were not removed during this evaluation. An apparently linear feature cut by ditch 2101 was excavated but turned out to be a very shallow natural depression in the gravel. At the northern end of trench 14, cut into the gravel at a depth of approximately 6m OD was a ditch, 2099, 1.1m wide, 0.17m deep and over 3.5m long, again oriented approximately east—west. The single fill, 2100, was a dark yellowish brown silty clay with frequent small stones and sand, and a small quantity of late Saxon/medieval pottery, animal bone and shell.

#### Trench 15

Trench 15, 35m long and 2m wide, revealed a sequence of silty clay deposits overlying natural clay. This trench was machined to a height of 4.8m OD. The high groundwater level made hand excavation impossible during the evaluation. A sondage was machine excavated at the northern part of the trench to confirm the depositional sequence. A ceramic field drain was noted running approximately east—west across the trench 10.5m from its northern end. Two linear features with dark grey, organic rich clay fills were cut into the underlying clay. They were 10.65m and 28.2m from the northern end of trench 15. These were not excavated and no artefactual material was noted on their surface. The presumed ditches (1.8m and 1.57m wide respectively) flanked a layer of gravel (0.8m thick and 7.05m wide, 19.5m from the northern end of the trench) which extends across the trench in a north-west-south-east direction and overlay the natural clay. This was sealed beneath a deposit of silty clay with plant remains, probably relating to the orchards which occupied this part of the site during the nineteenth century. No artefactual material was recovered from the trench.

#### Trench 16

The western section of trench 16 was cleaned but the base was only revealed after pumping out groundwater. A shallow flat bottomed ditch (2001), 3.32m wide and 1.18m deep, was noted in the western section of trench 16. This ditch contained four fills: 2002 (0.52m thick), an olive clay with very occasional small fragments of gravel; 2003 (0.18m thick) a very slightly sandy, silty dark olive clay with a high proportion of medium gravel, thick and containing a fragment of medium-sized mammal bone; 2004 (0.26m thick) olive clay with very occasional small gravels; and 2005 (0.32m thick) an olive brown clay with small quantities of organic material and a small amount of flint. The surface was sealed by debris from the recently demolished buildings and the southern end of the trench had been disturbed by modern building foundations to a depth of 0.7m.

#### Trench 17

Trench 17, 7.3m long, revealed a sequence of natural deposits with a blue/grey clay in the base with patches of sandy gravel sealed by a oxidised slightly silty clay layer with occasional small stones. This in turn was sealed by a layer of silty clay with very occasional larger stones. A single fragment of animal bone was noted in the upper layer.

#### Trench 18

A considerable amount of modern disturbance was encountered in trench 18 (7m x 6m), this included live electricity cables and deep drains. A ditch, 2018 and its re-cut 2013, was noted in the northern section. A section was hand excavated and revealed a sequence of fills suggesting slow silting up of the ditch. Ditch 2013 was 0.7m deep, 0.95m wide and over 5.6m long and was oriented approximately north—south. It had a flat base and steep, even sides but with a slight stepping in the western side. The single fill, 2012, was a very dark bluish grey, firm, silty clay with occasional small stones and a

sherd of undiagnostic Roman or medieval grey ware Sealing ditch 2013 was a very dark brown slightly clay silt with grit and gravel which contained modern (nineteenth and twentieth century) material and was heavily disturbed by modern service trenches. Ditch 2018 (0.85m wide and 1.1m deep) was oriented north-south with a complex stepped western edge. The basal fill, 2021, was a very dark bluish grey clay, 0.32m thick, with occasional back organic flecks and very occasional small stones. Above this fill was an area of very dark bluish grey clay with frequent mottled patches and streaks (fill 2020). Sealing 2020 was a very dark bluish grey silty clay with frequent organic flecks and occasional small gravel fragments - fill 2019. Fill 2017, sealing 2019, was a sandy clay with mottles and streaks, 0.6m thick and 0.7m wide. It contained micaceous medieval coarseware, and pig bone. Overlying 2017 was a silty clay, 2016 (0.22m thick and 0.85m wide) with frequent organic flecks, and containing medieval north Essex type coarseware sherds, dating from the thirteenth-fourteenth century. Fill 2015, over 2016, was a greenish grey silty clay with occasional small gravel fragments, 0.2m deep and 0.75m wide. Layer 2014 (0.12m deep and 0.32m wide), in the top of 2015 was a firm but slightly crumbly dark olive grey sandy silty clay with occasional small gravel fragments. Sealing both ditches was a very dark grey, friable slightly clay silt containing modern material (deposit 2010). The natural at the base of this trench comprised a blue/grey clay.

#### Trench 19

This trench, 9.3m long, contained a ditch, 2026, 2.6m wide and 0.7m deep, which appears to be an eastern extension of that seen in trench 16 (ditch 2001) although it appears narrower and shallower because of modern truncation. No artefactual material was recovered from the fills of this ditch but a single, abraded, fragment of animal bone was noted in the silty clay deposit through which the ditch had been cut. The upper fills corresponded to those in ditch 2001, i.e. 2022=2004, 2023=2003, 2024=2002, but the basal fill, 2025 (0.16m thick) was a loose sandy clay with frequent small stones and gravel and appeared to have no parallel in ditch 2001.

#### Trench 20

Trench 20, 10m long, excavated to a depth of 4.7m OD, was opened to confirm the route of the presumed town ditch line exposed in trench 12. There was a considerable depth of dark, slightly silty clay with a high organic content in the western end of the trench. This appeared to be the eastern edge of the town ditch, cut into the dark grey natural clays. The base and western edge of the ditch were not revealed as this part of the site was still in use and covered in heaps of soil and materials being used on the adjacent building site. There was no artefactual material visible in the section or the fill of the ditch.

#### 5.2 The finds

The assemblage comprises approximately 800 sherds of pottery weighing a total of 6746g dated mainly to the Late Iron Age/Romano-British period (see Appendix 3) and the Late Saxon to medieval period (AD900-1400) from the northern parts of the site (see Appendix 2). Kiln furniture (fragments of kiln bars and burnt clay) were also recovered from trench 11 and these are discussed briefly in Appendix 3. Worked stone varied from occasional flint flakes to fragments of quern (Neidermendig lava type). Animal bone was ubiquitous (3371g of bone and 315g of shell, mainly mussel) and fish bone and scales were recovered from all the environmental samples (see Appendix 1). The finds and environmental samples suggest a posible Iron Age ceramic production site and large quantity of late Saxon—medieval domestic refuse with domestic pottery types and grain and pulses, commonly eaten animals, fish and shellfish together with juvenile horse bones indicative of local horse breeding. Snails were found in all environmental samples and these indicate a diversity of

environments with shade-loving species as well as damp grassland and aquatic species

#### 6 DISCUSSION

#### Trench 11

Given the proximity of this trench to those of Evans (1990) it is not surprising that Late Iron Age pottery was recovered from the present site. The quantity of both pottery and kiln bars is, however, greater than might have been expected and it is suggest that the clay layer/lining, 2052, and flue-like feature, 2112, are parts of a kiln (Appendix 3).

This area has been used for a variety of different purposes throughout its history. Individual feature types were not unusual, with the exception of the 'kiln', but the apparent lack of relationships between spatially close features is more intriguing. Ditch 2038 has removed evidence of any relationship that existed between 2123 and 2163, and since neither continues beyond the limits of that ditch, we can speculate that 2163 respected the edge of 2123, or that an earlier boundary was removed or restated by the cutting of 2038. Generally, the dating and stratigraphy suggests that a phase of kiln building and demolition, presumably in association with nearby settlement, occured in the late Iron Age or early Roman period. This was followed by a gap in the record, unless, perhaps, there was later Roman quarrying. Late in the Saxon period, and into the medieval period, there was quarrying in the southern part of the trench, and this was followed by the cutting of ditches, one probably a boundary, then later, one for drainage. The anomaly in this scheme is ditch 2107, which is neither securely dated nor placed firmly in the stratigraphic sequence. No Saxon or medieval occupation features were recognised in this trench.

#### Trench 12

Ditch 2131 in trench 12 follows the line of the town ditch and is broadly similar to other excavated segments of the ditch. It does not seem to have been as deep as the ditch revealed in Haigh's excavation (1984), which he records as being over 2m deep as compared to only 1.15m in trench 12. The ditch does, however, have a broadly similar profile (wide with fairly steep sides and a flat base) and its shallowness may be the result of truncation in the northern part of the site. The presence of postholes in the base suggests a fence along the line of the ditch. Ridge 2136 could possibly be the remains of an internal bank, running parallel to the 'town ditch', but has a very small clay component which suggests it is not upcast from the period when the ditch was dug. The ridges in trench 12 appear to be remnants of a soil which sealed the site but which has been disturbed and truncated by subsequent building. It is unlikely that they represent ridge and furrow agriculture as they are only 2.2m apart.

The narrow gullies to the west of ditch 2131 may be related to the town ditch or merely represent a shifting boundary or drainage system. There is no stratigraphic relationship between these gullies and the town ditch. Further

excavation could provide dating evidence from this group of features. They were probably also recorded in area A of the 1997 excavations but there they were not identified as separate features.

The group of gullies in the central and eastern part of the site appear to have had structures associated with them. At least one had postholes cut into its base. They run approximately at right-angles to the town ditch and may be associated but no relationship was seen in the limited area of trench 12. Further excavation in this area will reveal the significance of these features. It is possible they lie on the edge of the medieval settlement and acted as boundaries, possibly with fences.

The pits at the eastern end of the trench indicate use of this area for rubbish dumping in the later phases of occupation. They cut the earlier ditches and gullies and pottery spot dates suggest they were in use some time in the period between 1200–1350.

#### Trench 13

The features in trench 13 include rubbish pits including one, 2098, which contained domestic refuse (charred cereal and weed seeds, nuts and legumes, ashy material, mammalian, avian and fish bones, shellfish), and snails indicative of a damp environment (aquatic and terrestrial species). Pottery spotdates from this pit suggest it was in use earlier in the 'medieval' sequence than many other features seen. The environmental assessment suggests the storage and accidental charring of cereals before grinding, but after primary processing.

No certain structural evidence has been found for this date but it is possible that it exists close by given the richness of the domestic refuse. The linear features appear to be related to drainage but are heavily truncated. The presence of a posthole in the fill of the east—west linear does, however,t suggest possible structures in the vicinity. The exact function of these can only be determined by excavation of a larger area around this trench.

#### Trench 14

The southern edge of the gravel island was apparent in trench 14. There was considerable modern disturbance along the trench which appears to have truncated earlier features. The main feature which survived was an east—west running ditch. It is also possible that the gravel path over the east—west running silt ridge formed a flood-defence bank on the edge of the gravel island. It was noticeable, however, that beyond the limit of the gravel in the silty clay deposits sherds of medieval pottery and animal bone were recovered.

#### Trench 15

Trench 15 reinforces the interpretation that the southern area was off the gravel island and was subject to periodic flooding and as a consequence was used mainly as orchard and/or rough pasture. Land drains indicate attempts in the

post-medieval period to drain the land but as recently as 1947 it had flooded (Ravensdale 1984).

#### Trench 16

The ditch revealed in trench 16 (2001) and trench 19 (2026) does not appear to be part of the town ditch. It is probably a later drain, cut through flood deposits, which converged with the town ditch south of the present site boundary. A pond shown on the 1886 Ordnance Survey Map, to the east of Snake Lane (1838 and 1886 maps) indicates the low lying and wet nature of this part of Swavesey.

#### Trench 17

The absence of features in this trench suggests that the town ditch and more recent drains and boundaries lie to the south, close to the present site boundary and beyond.

#### Trench 18

The line of ditch 2018/2013 follows a boundary shown on the 1838 Enclosure Map. Ditch 2013 possibly represents the recutting of an earlier, medieval ditch (2018), which ran along the western side of the High Street. This ditch possibly links up with the Public Drain (on the 1838 Enclosure Map) which ran southwards, to the rear of the High Street properties and was noted in the 1984 excavations (Trench 3, Haigh 1984, 48).

#### Trench 19

The ditch seen in trench 16 can be seen to continue eastwards through trench 19 but was not seen in any of the other trenches in this part of the site. It would appear to be a drain which ran to the north of the town ditch line and the present site boundary but which may have turned south and fed into the town ditch.

#### Trench 20

The presence of the eastern edge of a ditch cut into the underlying clay supports evidence for the route of the town ditch crossing the western part of the site.

#### 7 CONCLUSIONS

Trenches 11 and 12 confirm the presence of dense archaeological features dating from the late Iron Age through to the medieval period on the gravel island in the north of the site. The limitations of the trenches made it impossible

to identify structures but features associated with a kiln, together with various pits and ditches show considerable activity in the vicinity.

The 'Belgic' pottery and kiln material in trench 11 and in the field to the north (Evans 1990) suggest a large area used as a production site with dispersed industrial features exploiting the clay and water on the edge of the gravel island. The lack of settlement features in this area may be a result of the position of the evaluation trenches or may reflect Iron Age settlement further up on the gravel island with this peripheral area using local resources. Further work will help to elucidate the nature of the Iron Age activity in this area and whether it has been largely destroyed by-subsequent occupation.

Pit 2098 is a clear indication of pre-1150 occupation of the gravels, close to trench 13. This confirms the identification in an evaluation trench in this area (trench 7, Cooper and Spoerry 1997) of a late Saxon to Saxo-Norman occupation of this part of the site. The area to the north (trench 8, Cooper and Spoerry 1997) and north-west (Heawood 1997) and the present trenches 11 and 12 are indicative of a Saxo-Norman and medieval domestic occupation along a lane to the north of the present site. Timber structures and surfaces similar to those found in the previous year's excavation were not identified but this may be a reflection of the position of the trenches, to the south of the lane. If this is the case the features identified in evaluation trenches 11–14 are to the rear of the structures and probably represent property boundaries and back yard activities.

It is clear that occupation was limited to the gravel island during the Iron Age and in subsequent periods, probably with grazing on the wetter land to the south

Trenches 13 and 14 identified the southern limit of the gravel island in the north-eastern part of the site with a fall-off in density of features towards the south-east. Trench 13 contained a variety of features with at least one dating from the late Saxon/Saxo-Norman period but the limited area available makes interpretation of the features and their stratigraphic relationship impossible at this stage.

In the southern part of the site the land has been heavily truncated by the modern industrial estate. The scarcity of finds makes it difficult to date any of the features but they appear to be late or post-medieval ditches. This area does not appear to have been occupied or used for domestic refuse disposal, or even used for arable agriculture, where incorporation of domestic rubbish during manuring may have occurred. The presence of pottery and animal bone in the fills of ditch 2018 is probably a result of its proximity to the High Street and the houses along the street, to the north. The build-up of soil visible in trenches 15 and 18 is consistent with the land being pasture, orchard and a green (Thistle or Thistleham Green) since the early nineteenth century and probably before this date. There does not appear to have been building along the street front in the extreme south-east of the site at any time.

The present evaluation tends to support the course suggested in Haigh's article (1984, Fig. 1) and Palmer's aerial photographic survey (1995), i.e. that the town ditch runs approximately east-west to the south of the present site boundary and turns northwards where the site boundary turns south-west (approx. grid ref. TL5360 2687) and runs north-south across the western part of the site where it

6 6 6

was noted in trenches 12 and 20. Observation of the road and service routes through this part of the site may pinpoint the exact route of the town ditch.

#### **ACKNOWLEDGEMENTS**

The author wishes to thank McLean Homes (East Anglia) Ltd. for funding the project and Colin Sells, Site Manager, and his staff. Thanks also to the site staff: Scott Kenney (Supervisor), Glen Bailey, Sean Damant, Carole Fletcher, Bob Hatton, and Project Manager Paul Spoerry who also assessed the medieval pottery. The illustrations were by Jon Cane. The brief was supplied by Claire Halpin, archaeological consultant. The work was carried out in consultation with Simon Kaner of the Cambridgeshire County Council Archaeology Office (Development Control).

#### **BIBLIOGRAPHY**

- British Geological Survey, 1985 One Inch Series Reprint, Sheet 187
- Cooper, S, and Spoerry, P, 1997 Late Saxon and Medieval Activity at Barwells Engineering Site, Blackhorse Lane, Swavesey. Cambridgeshire County Council Archaeological Field Unit Report no. 136.
- Evans, C, 1990 Archaeological investigations at Swavesey, Cambridgeshire 1990, Cambridge Archaeological Unit report
- Haigh, D, 1984 Excavations of the Town Ditch at Swavesey, 1984, *Proc. Cambridge Antiq Soc* Vol 73, 45-53
- Heawood and Spoerry 1998 Late Saxon, Saxo-Norman and medieval settlement remains between School Lane and Blackhorse Lane, Swavesey, Cambridge (Phase 2 Excavation), unpubl. report
- Palmer, R, 1995 School Lane, Swavesey, Cambridgeshire: Aerial Photographic Assessment, in T. Sutherland and A. Hatton, 1996, Medieval Features outside the Town Defences at Swavesey
- Ravensdale, J R, 1982 History on your doorstep, BBC Publications
- Ravensdale, J R, 1984 Swavesey, Cambridgeshire: A Fortified Medieval Planned Market Town, *Proc. Cambridge Antiq Soc* Vol 72, 55-58
- Roberts, J and Spoerry, P, 1998 Late Saxon and medieval activity at Barwells Engineering Site, Blackhorse Lane, Swavesey, unpubl. report
- Spoerry, P, 1996 Late Saxon and medieval activity and ditch systems between School Lane and Blackhorse Lane, Swavesey. Cambridgeshire County Council Archaeological Field Unit Report no. 130
- Sutherland, T, and Hatton A, 1996, Medieval Features outside the Town Defences at Swavesey, Cambridgeshire County Council Archaeological Field Unit Report no. 124

#### APPENDIX 1

#### Environmental assessment

James Rackham, BSc, MSc

#### Introduction

One box of excavated animal bone and the animal bone and flots from five environmental samples were submitted for assessment. The samples were processed by the Archaeological Field Unit, Cambridge County Council, following their normal processing procedures. The samples include the primary fill of a tenth–eleventh century ditch, the tertiary fill of a pit and primary fill of a linear feature of eleventh–twelfth century date, and a backfilling layer of possible late Iron Age or Romano-British date, and a second undated pit fill (Table 1).

Table 1 List of samples whose flots were submitted for assessment

sample no	trench	context	feature	vol. in <i>l</i> . 20 20 10 10 20	fill	date
201	13	2078	ditch 2077		primary	900–1100
202	13	2093	pit 2098		tertiary	1000–1150
203	13	2086	gully 2087		primary	1000–1150
204	13	2083	pit 2085		secondary	no date
205	11	2121	ditch 2123		backfill	LIA/RB?

### Results

#### The samples

Most of the samples produced some uncharred plant seeds (Table 2) but could not be described as 'waterlogged'. Given the location of the site, however, on the fen edge, it is possible that some of these seeds are contemporary with the formation of the deposits rather than intrusive, since these include specimens of goosefoot (*Chenopodium* sp.), elder (*Sambucus* sp.) and blackberry (*Rubus* sp.), all very robust seeds.

Sample 201, context 2078, primary ditch fill

This sample is rich in charred material with many small fragments and twigs of charcoal, one or two of which would be identifiable to species. Charred cereal remains and weed seeds are abundant (Table 2) with barley, wheat, oat and pea/bean present and some chaff. Very little bone was present but the flot included numbers of fish scales and clearly fish remains must be present in the deposit. The flot also included some fired sediment which suggests that the deposit included ash or fire debris which may well have been deposited with the charred material.

A number of snails in the sample reflect that the ditch environment was at least seasonally aquatic with shells of *Bithynia leachii*, *Planorbis leucostoma* and *P. laevis* 

present. Terrestrial species included *Hygromia hispida*, *Cecilioides acicula*, *Cochlicopa* sp. and *Vallonia pulchella*. These give little indications of the contemporary environment except that the latter, *V. pulchella*, favours damp habitats.

#### Sample 202, context 2093, tertiary pit fill

The flot from this sample is almost entirely composed of charred cereal grains. Charred weed seeds are also present in abundance with some charcoal, but no chaff was observed. Wheat, barley, oat and possibly rye were present in the assemblage which does not appear, after this preliminary scan, to be dominated by any one cereal type. Charred hazelnut, pea and bean, with some plant stem or straw fragments are also present. The bone sorted from the residue included fragments of pig, cattle and chicken, with a number of burnt and calcined bones. Fish bones, including vertebrae and head bones, and many fish scales in the flot, occurred among which are freshwater cyprinids.

The mollusc assemblage includes aquatic and semi-aquatic species, *Planorbis* carinatus, *P. contortus* and *Succinea* sp., with a terrestrial suite of *Cecilioides acicula*, *Hygromia hispida*, *Cochlicopa* sp., *Vallonia pulchella* and *Vertigo* sp.

Table 2. Summary of finds from the flots.

sample no.	context	flot vol. (ml)	char- coal	charred * grain *	charred chaff *	charred seed #	water- logged seeds #	snails #	bone *	comments
201	2078	20	4	4	2	3/3	2/2	2/2	1	barley, wheat, oat?, pea/bean; frog/toad, fish
202	2093	250	3	5+		4/3	4/2	4/2	2	wheat, barley, oats, pea, bean, hazel-nut, straw; pit, cattle, chicken, fish
203	2068	6	2	3		2/2	3/2	3/2	2	wheat, barley; cattle, sheep, pig, fish, chicken; mussel
204	2083	1	1	2		1/1		2/2	1	newt, fish
205	2121	10	1	2	2	1/1	2/1	3/2	1	wheat, barley, chaff,; cattle, rodent, fish

<sup>\*</sup> frequency of items: 1=1-10; 2= 11-50; 3=51-150; 4=151-250; 5=>250 # frequency/diversity; the latter recorded as follows: 1=1-3; 2=4-10; 3=11-25; 4=26-50 taxa.

#### Sample 203, context 2086, primary fill of linear feature

The flot from this sample is fairly small, but even so charred wheat and barley grains, and weed seeds are common. Animal bone is more abundant in this sample than any of the others and includes fragments of cattle, sheep, pig and chicken, with a number of fish scales in the flot. Twelve grammes of marine mussel fragments were sorted from the residue.

There is again an aquatic element in the mollusc assemblage. *Planorbis leucostoma*, *P. carinatus* and *Bithynia leachii* are present with the following terrestrial species, *C. acicula*, *Cochlicopa* sp., *H. hispida*, *V. pulchella*, *Oxychilus* sp. and *Retinella* sp. These latter two species are generally associated with woodland and have a preference for shaded habitats.

Sample 204, context 2083, secondary fill of cut 2085

The environmental finds from this sample are relatively poor. Small quantities of charcoal and charred seeds, including identifiable cereal grains, were present. Among the bone fragments from the residue nothing was identifiable, although some of the fragments were burnt. A newt vertebra and several fish scales were present in the flot.

In contrast to the other samples there was no aquatic element in the snail fauna from this sample. The assemblage included *C. acicula*, *H. hispida*, *Pupilla muscorum*, *V. pulchella*, *Vertigo* sp. and *Oxychilus* sp. This suite includes species typically found in both open-country and woodland habitats.

# Sample 205, context 2121, backfill deposit

Charred material is present in the flot but not abundant. Charcoal, charred wheat and barley grains, chaff and weed seeds are present, and also some mineralised wood. A few grammes of bone were sorted from the residue but only a fragment of cattle metatarsus could be identified. Burnt bone, fragments of rodent and a few fish scales were present.

The snail fauna included aquatic species, *Planorbis leucostoma*, *P. laevis* and *Valvata cristata*, while the terrestrial suite includes *C. acicula*, *H. hispida*, *V. pulchella* and *P. muscorum*.

# The excavated animal bone

A total of 154 fragments of bone were recorded using the recording system of the Environmental Archaeology Consultancy (Appendix 1, in the archive but not included in this report). A number of these fragments had modern breaks and were comprised of a few pieces. The number of fragments of each species are presented within their broad phases in Table 3.

Table 3: Frequency of excavated bone fragments of each species by period.

species Horse	date	IA/Roman	Roman 2	900- 1200 1	1150- 1250	1200- 1400 2	1500- 1600 2	topsoil	undated 2 2
Cattle		16	1	6 14	1	1	4	3	3
Cattle size		1	1	14		•			
Sheep or goat		6		5		2	1	2	
Sheep size		4		8	1	7		1	
Pig		3		4		1	1	1	3*
Dog		1				1		1	3
Small animal				3		1			
Chicken Goose cf dom	ectic			í		1			
Indet bird	CSUC			2					
Indet		1		15	_	2	1.0	1.0	1 1
	Total	39	3	59	2	20	10	10	1 1
		7 7 7	1 - 4-	~					

\* includes a partial skeleton of a dog

The condition of the bone is very good and only about five fragments show any evidence of surface pitting and erosion. Fragmentation is relatively high, a few bones

were dog gnawed. Relatively few measurable bones were present, and only one mandible with more than a single tooth was present in the assemblage.

Context 2105 included a large part of the skeleton of an old dog with pathological lipping on the vertebral column and hip joint. Context 2017 included a very fragmented partial horse skull and other horse remains indicate very small juveniles were present. Juveniles horse bones are relatively rare on archaeological sites and these perhaps suggest that horse breeding was taking place on or near the site. A cattle metatarsus from context 2144 shows considerable polish on the shaft and distal condyles, and has had a hole made in the proximal articulation. This bone was certainly used, but what its function was is not clear.

#### Marine shell

The hand collected marine shell has been identified (Table 4) and includes shells of common mussel, oyster and cockle.

Table 4: Excavated shell

Context 2000 2058 2075 2083 2084 2086 2093 2100 2103 2117 2124	Trench 14 12 12 13 13 13 14 14 11 12	Shell oyster, Ostrea edulis – 1 lower valve; mussel – 1 frag; cockle, Cardium edule – 1 valve; mussel, Mytilus edulis – 3 valves; mussel – 60 valves + fragments; mussel – 38 valves + fragments; mussel – 1 valve; mussel – 4 valves + fragments; mussel – 60 valves + fragments; mussel – 1 fragment;
		•
2128	12	mussel – 1 fragment; <i>Helix aspersa</i> – 5 shells;
2130	12	<i>Helix aspersa</i> – 18 shells; <i>Helix nemoralis</i> – 2 shells

#### Conclusion

The samples indicate a relatively high input of what appears to be domestic rubbish, and although chaff was present in two of the samples the charred cereal and pulse remains would appear to derive from material charred during preparation prior to consumption. This can only be verified by a detailed analysis of the charred plant remains to identify the weed seed component. The very high cereal content in sample 202 suggests an event where stored grain or grain being prepared for milling or consumption was accidentally burnt.

The presence of numbers of fish scales in the flots suggests that fish were a more significant component of the deposits than the sorted or hand excavated bone would suggest. These may all be freshwater fish, but since marine mussel, oyster and cockle are reaching the site, marine fish may also occur.

The excavated bone included fragments of horse, cattle, sheep, pig, dog, chicken and domestic goose. This material is in very good condition and, apart from dog

scavenging, is unlikely to have been subject to any post-depositional loss. The juvenile horse bones perhaps indicate local horse breeding.

The waterlogged, and charred, plant remains and molluscs may all yield information on the local environment. The mollusca indicate that most of the sampled features had an aquatic input, either through waterlogging, flooding or the input of material collected from nearby aquatic habitats. The terrestrial molluscs show a low diversity in which species of both open country and shaded habitats are represented. A damp grassland is perhaps suggested by *Vallonia pulchella*, *Pupilla muscorum* and *Vertigo* sp. but the occurrence of *Oxychilus* sp.and *Retinella* sp. indicate more shaded habitats.

#### Recommendations

The samples are fairly to very rich and indicate that dietary, and possibly functional evidence, is preserved in the deposits on the site. The charred plant remains and animal bone are very well preserved and therefore preservation does not constitute a limiting factor. The pattern of the charred plant remains may reflect the nature of the activity on the site during the Iron Age/Roman and medieval phases of occupation, potentially indicating a consumer or producer site. The juvenile horse bones, found in both Roman and medieval contexts, could indicate an agricultural rather than urban context and the presence of juvenile or neonatal bones of cattle and sheep may clarify the character of the site during the different periods of occupation.

Palaeoenvironmental evidence may be more limited but snails are common, and occasionally abundant. There is a possibility that waterlogged material will have survived in the deeper features and would justify sampling.

Any further excavation work should include a programme of sampling for charred plant remains and fish bones, with samples of 30 litres being collected from suitable contexts. The occurrence of marine, as against freshwater, fishes might reflect an 'urban' site and a reasonable sample of fish bones, and other environmental finds, would be needed to show any changes in the development of the site during the medieval period. The excavation of bone rich contexts should be encouraged to recover large samples of the well preserved bones on the site.

The palaeoenvironmental history of the site, and the possible influence of periodic flooding, should be studied through surviving waterlogged remains and mollusca. These aspects are best sampled through a series of column samples taken from suitable dated ditch or pit sections where the sedimentary history of the feature may reflect the broader contemporary environment of the site.

#### **Bibliography**

Cameron, R.A.D. and Redfern, M. 1976 British Land Snails. Linnean Soc. Synopses of the British Fauna No. 6

Evans, J.G. 1972 Lands Snails in Archaeology, Academic Press

Macan, T.T. 1976 A key to the British Fresh- and Brackish-water Gastropods, FBA Scientific publication No. 13.

© D.J.Rackham

#### APPENDIX 2

#### Post-Roman pottery assessment

Paul Spoerry BTech, PhD

This assessment report (and Appendix 3) considers all ceramic material recovered in 1998 from Trenches 11 to 18 and from associated observation work.

Pottery was recovered from 45 contexts. Of these nine groups have been provisionally identified as probably of Late Iron Age/Early Roman (LIA/ER) date (see Appendix 3) with another five groups of uncertain period (either LIA/ER or medieval). Thus there are between 31 and 36 context groups of post-Roman date which break down roughly as follows:

900-1150/1200	20 groups
1150/1200-1350/1450	13 groups
1350–1450	1 group
1500-1800	1 group
1800+	2 groups

Those in the first group (LS to Saxo-Norman) are mostly represented by St Neots type ware, with Thetford ware the second most common component. The second group (High Medieval) is mostly represented by Ely ware variants, but with better dating deriving from less common types such as Grimston, Hedingham and Lyveden-Stanion wares. The late medieval group is dated by virtue of similar types, but with a generally later feel to the forms and from an absence of decoration on the fine wares.

All of these groups tend to suggest that the standard range of domestic forms are present; the assemblage being unremarkable in that sense. Groups tend to either be very small with small, abraded sherds, or medium sized with larger, less abraded sherds. The former are probably often residual and may derive from occasional and accidental inclusion into fills, rather than being the product of deliberate disposal. The latter probably derive from secondary deposition around a domestic occupation site.

The presence of Late Iron Age and early Roman features, often containing fabric types that are quite similar to the medieval coarse wares makes absolute identification difficult in some cases.

The almost complete absence of late medieval and early post-medieval groups indicates a definite abandonment/change of use in this period, with little depositional activity up until quite recently.

In conclusion, this evaluation assemblage spans the period of expected activity on the site up until around 1400, but not beyond, with a few good Saxo-Norman and High Medieval groups. Late medieval pottery is surprisingly rare.

The assemblage produced so far currently warrants no further study at this stage but in the context of proposed major excavations its potential is raised. These results indicate that normal hand-recovery of ceramics from pits and other features representing deliberate disposal will provide a good, but unremarkable domestic assemblage for the site/settlement. In the context of local/regional study the opportunity to analyse an

urban assemblage from this settlement, both individually and in its class as a small Fenland town and port, is, to date, unique. Potential value for comparison with assemblages from the larger ports and market centres of the Fenland region is high and will enable models of distribution and trade to be further developed. Potential for comparison with rural assemblages from neighbouring villages is also significant, albeit less so. Potential for detailed analysis of functional and property-specific assemblages is moderate, but if excavation reveals discrete property units and refuse-disposal features can be linked to these, then potential for valuable analysis is greatly increased and such an opportunity should be taken.

# Post-Roman pottery spot dating

Context	Fabrics	Context date-range	Comments
2000	Modern x 3	1850+	
2000	Mel x 1		
	Thet x 1		
	Pmr x 1		
2011	Modern	1850+	also mod glass
2012	LIA/ER x 1	LIA/ER?	771 (77)
2016	Thet x 2	900-1200	but poss LIA/ER?
2017	Hedi x 1	1200-1400	
2028	Neot/Shw x 1	900-1450	tiny
2030	Hedic x 1	1150-1250	no high dec types
	Neot x 3		suggests pre 1250
	Mel x 1		date
	Hedi x 1		
2031	Mel x 2	1200-1450	
2032	Shw x 15	1200-1350	
	Neot x 1		
	Mgc/Hedi x 1		
	Mel x 2		1 1
2034	LIA/ER? x 1	1200-1450	no dec or glazed so
	Mel x 39		difficult to date.
	Thet x 2		?Poss Ipswich
	Shw/Neot x 9		
	Ipsw? x 2		
		1150 1000	looks like a good
2035	Neot x 1	1150-1200	example of pre 13
	Neot/Shw x 1		cent group.
	Shw x 5		echt group.
	Mel x 6		
	Thet x 3		
	LIA/ER? x 1	900-1150	
2041	Neot x 1		
2049	Neot x 7	900-1150	xfit with 2051?
2050	Neot x 3	900-1150	Allt With 2001:
	LIA/ER? x 1	000 1150	xfit with 2050?
2051	Neot x 3	900-1150	Alit with 2000:
	LIA/ER? x 1	1200 1450	
2056	Mel x 2	1200-1450	
	Grim x 1		

2058	Shw x 13	1150-1350	Llores Charles losts
2036	Neot x 1	1130-1330	large Shw jug looks
	Mel x 1		like Lyveden-Stanion examples
	Esmic? x 2		examples
	Unk x 3		
2062	Neot x 1	1100-1200	?early Mel
2002	Mel x 1	1100-1200	learly Mei
1	Thet x 1		
2064	Neot x 2	900-1150	Shsw look Mel like
2004	Shsw x 1	900-1130	Silsw look Mei like
2066	Shw x 1	1150-1350	
2000	Shw/Neot x 3	1130-1330	
2073	Mel x 5	1150-1250	
2073	Shw x 1	1130-1230	
	Thet x 2		
2075	Stam x 1	1050-1200	Type 2 gloge Stem
2073	Thet x 3	1030-1200	Type 2 glaze Stam
2078	Neot x 1	900-1050	0.00011 0.0010 0.0001
2079			small early vessel
2079	Neot x 1	900-1100	<u> </u>
2083	Neot x 1	900-1150	tiny sherd, pos. Roman?
2086	Stam x 1	1000-1150	
	Neot x 1		
2092	Neot x 6	900-1150	
2093	Neot 18	1000-1150	good early group
	Thet x 1		
2094	Neot x 3	900-1200	
2095	Neot x 1	900-1150	also poss LIA/ER?
2096	Neot x 2	900-1150	also poss LIA/ER?
2103	Thet/Emw x 9	1150-1200	
	Lyst x 1		
2111	Neot x 1	900-1150	also poss LIA/ER?
2113	LIA/ER? x 4	LIA/ER?	
2115	Thet x 1	1000-1200	pitcher handle
2117	Neot x 8	900-1150	pitener nandie
2119	LIA/ER? x 3	LIA/ER?	
2120	LIA/ER? x 9	LIA/ER?	
2121	LIA/ER? x 97	LIA/ER?	
2122	LIA/ER? x 1		
2124	Shw x 1	LIA/ER?	
		1150-1450	jar base
2130	Pmr x 1	1500-1600	
2124	Colnc x 1	1000 1450	
2134	Mel x 1	1200-1450	
2136	Neot/Shw x 2	1350-1450	a bit mixed
	Grim x 2		
	Thet x 5		
	Mel x 6		
	hedi x 1		
2127	Lyvd x 1	1,000 1500	
2137	Pmr x 1	1600-1700	Essex fabric 40
	Lesmic x 3		micaceous variant

		T = = 1 1770	
2143	LIA/ER? x 27	LIA/ER?	
2144	LIA/ER? x 22	LIA/ER?	
2145	LIA/ER? x 1	1150-1350	all vague IDs and
2143	Mel x 2		could all be LIA/ER?
	Lyst x 1		
2149	LIA/ER? x 2	LIA/ER?	
2150	Lyst x 1	1200-1400	a bit mixed
2130	Neot x 3		
	Shw x 1		1
	Thet x 1		
	Mel x 2	·	
	LIA/ER? x 2	/	
2155	Dstam 1	1150-1250	, , , , , , , , , , , , , , , , , , , ,
2133	Neot x 6		
2157	Neot x 1	900-1200	Thet may be Roman
	Thet x 2		greyware
	LIA/ER? x 2		

#### APPENDIX 3

### 'Belgic' pottery and kiln furniture from Swavesey - assessment report

Jeremy Evans

Around 170 sherds of 'Belgic' pottery were recovered from the Swavesey evaluation trenches along with 61 kiln bar fragments and c 210 fragments of fired clay representing kiln lining, luting, possible oven floor and clay plates.

The material is generally in a good condition and un-abraded. At least three reduced and four oxidised 'Belgic' fabrics seem to be represented, incorporating varying quantities of sand, calcareous inclusions, grog, ironstone and flint, but most fabrics were quite sandy, with few 'soapy' textured grogged pieces. All the forms represented were jars, generally necked jars with a cordoned neck. The material should date within the range late Iron Age—AD70 and probably falls within the earlier part of that range. The kiln bars were of a long square—sectioned type with tapering ends, generally oxidised, but a few examples in a reduced fabric were found. There were a few pieces which could represent broader, thinner rectangular—sectioned bars, but this is far from clear.

The majority of the kiln bars and pottery, 97 sherds, 42 kiln bar fragments, come from ditch fill 2121, immediately adjacent to the circular feature 2052 with a linear extension **2112**, which represents a 'Belgic' type kiln and flue (Woods, 1974), possibly of type IIA. A further kiln was excavated by Evans (1990) in the Blackhorse Lane field to the north. The site, thus, appears to have the potential to produce evidence of a pottery production site, with kilns and associated structures across quite a wide area.

#### **Potential**

This is of regional significance for several reasons:

- firstly, kilns of this type are not frequently recovered and the layout of such sites is not very well known, because they are predominantly surface features and this is one of few kiln sites of this general type found in the county;
- secondly, there is, as yet, no evidence of mid-Iron Age occupation on this site so there will be no residual material in the assemblage;
- thirdly, the evidence from Blackhorse Lane suggests that quite a large area associated with pottery production may be preserved here. The location of this site on the Great Ouse suggests it may have had the potential to distribute its products over quite a wide area, as well as being in communication with the greater concentration of kilns of this type up–river, possibly through the fenland system to the Nene in Northamptonshire;
- the possibility of waterlogged deposits in the base of cut features on this site also enhances its potential, should this prove to be the case the site might prove to be of national interest.

Further work should consider the possibility of thermoluminescence and archaeological magnetic dating of any kiln structures and examination of charcoal from any kiln flues for environmental data on the fuel being used.

# Bibliography

Evans, C, 1990 Archaeological investigations at Swavesey, Cambridgeshire

Woods, P J, 1974 Types of late Belgic and early Romano-British pottery kilns in the Nene Valley, Britannia V, 262-81

	Dite	1830+						portmed	1850-1930	36.400			1300-1400									0/1 (1/6)	200	1150-1256	1300-1450	1300 1350		300 1430	130.130					900-1150						900-1150	900.1130				1300 1450	000	1150-1356			1100 1200	001100	200	1150-1350					1150-1250		1050-1200	T	900-1050	901100	900-1100		900-1150	T	1000-1150	T		-
	Dog.	330	=		+	Н	+	Н	4	+	H	-	χ	4	-	1	L	Ц		-		-		2		"	-	=		-	$\perp$	П	1	$\perp$	Ц	Ţ			_	-	3			1	ļ		7	Ţ			Ţ	L	-	ļ			ļ	-		×	I	٩	I	I		-	I	ŝ	I	$\prod$	_
	flist abell bons		+	H	+	H	+	H	+	+	H	+	H	+	+	+	Н	H	-	+	+	+	+	-	_	-	+	-	+	+	$\dashv$	Н	+	+	H	+	+	+	+	+	Н	Н	_	+	+	Н	1	+	$\vdash$	+	+	+	4	+	Н	+	+	$\vdash$	Н	+	+	$\dashv$	+	+	H	===	+	7	+	H	_
	10 M	П	T	П				П	T			T	П	1	T			П	1	1	1							1	Ī	Ī	П	П	T	П	П	T	1		1	1	П			1			T	T		1	T			1		1	T		П	T	T	П	T		П	†	T	T	$\dagger$	П	_
	No No		T		T							T			T					1		Ī					1	2		Ī	П	T	T	П	П	Ī				T	П			T			T	T		7	T					T		П	П	T		П	T	П	П	T	П	T	П	П	-
			#		1		ļ					1	Ħ	#	İ			#	1	†	†			Ц	1	†	+	†	†		H	#	#	Ħ		#	†		1				1	#			#	1		1	1		#			1	İ	H	$\pm$	#		#	1	П		$\pm$	Ц	1	∄		-
	glass from stag		+	H	+	+	+		8	Н	+	+	H	+	+	Н	Н	+	+	+	╁	-	-	Н	+	+	+	+	-	-	Н	+	+	H	+	$^{+}$	t	Н	+	+	H	+	+	+		Н	+	+	Н	+	+	H	+		-	+	-	Н	+	+	Н	+	+	Н	+	+	H	+	H	+	
	(you boo	П		T	T					П	T		T	1	Ħ		П	1	Ī	1	T				-	67	2	-	Ī			†	T	П	Ť	1	Ī		İ	1	-	0		T			-	T	П	1	T	П	T	П		Ť		П	†	T	П	$\dagger$	1	П	†	†	П	_	Ħ	T	-
1	later (non pot)	H	+	$\dagger$		+		$\dagger$	i	H	+	Н	$\dagger$	+	Н	П	7	+	†	1	t		_	7	†	+	t	t	-	-	H	†		Н	t	t	-		+	Н	+	$\dagger$	+	+		1	$\dagger$	-	1	$\dagger$			+	H	+	+		H	$\dagger$	t	H	$^{+}$	+	H	+	+	Н	+	H	+	-
		H		+		†		1		H	†	П	+	t	П	П	7	+	1	1	-	-		1	†	1	t		İ		I	†	t	Ħ	1	t	-	Ī	t	H	+	+	1	T		1	1		+	+		-	1		+	t		1	$\dagger$			2			†	+	H	+	H	+	-
	Pattery 74	П	П	T	П	T		=	=	П	†	-	-	1	П	Ī	1	T	i	T	-	~		46			219	3			1	†	-	П	Ť	T		Ī	15	2	2	1	İ	Ī	20	1	2		1	2	91	1	=		1	İ		79	=		Ī	-	F	П	†-	-		9	H	Ť	-
1	% -	8 8	8	8 8		T		Ī	Ī	Ī	T	Ī	Ī		Ī	Ī	Ī	Ī	]	]		Ī	=	=						Ī	Ī	Ī	Ī	Ī	Ī	Ī		1	Ī	Ī	Ī	Ī	Ī			Ī	Ī	Ī	Ī	Ī	Ī	7	7	Ī	Ī	Ī		Ī	T	Ī		Ē.	Ħ	Ī	ğ	Į	Ī	ê	П	Ŧ	1
	  -	4		$\perp$		1		$\pm$			$\dagger$		-			1	1	t	-	-	-		~	1	1	-				-	+	-		-	-	+	-	1	-		$\dagger$	-	1			+	-		+	-		-	-		-	+	-	†	+	-	-	-	H	+	+	H	7	+	H	+	1
	om of	modera		Bodera			modern	modera			SIS	100		3613								808		-		3006							2048	3041	200													2033 & 2029			2061 & 3GGT												1802				4000	4003		2085	-
		94 · 95								Z.S			N.S		-				-	NW . SE	E. W			-		NE . SIV												0 2								N.S.	1		E. W	1		N.S	E.¥	N.S							MW . SE	NW . SE		MW . SE			E.W	NW . SE			
100	-	Redus Asped								Bridgel		1	g squel		T		-		-	Sivp	DCG.E					-		_		1	†			Ť				1		1	t	T				DO See B	g squs		non	la dual		I Page	BCNe	1	-			T			inpud	gradusi		graduel			atharbe	hone	+		
2	+	$\dagger$	$\parallel$		+		-		+	+	$\frac{ }{ }$	+			+	+	-	_	_	_	1		(2)	-		pane			1	-	+	H		+	H		-	-		-	+			-	-	+		4	1	Н	1	_		_	-		1	-				$\parallel$	4	+	$\frac{ }{ }$	Н	+		+	-	
2			+		-		-		_	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		_	ě		+	+	-		_	שינ	4	1	==			continuinwed	_							_				CCBCBVe		-	-				_	200	stmoot flat		div.	COBCOVE		NI III	CODCAVE	_			-	-	Ц	1	=	ě	4	COBCEVE			COBCOVE	CONCAVE	_		
Side		MARA 9708							A	4 - 30 1/4 d E - 6			stepped				-			sten even	shillow stope	place of most vesting				attep											-	65 70, even							60° but the courters	1	shallow, concave	3	200	100	200000		maigh 60							100 000	2000	shallow, concave	maxed days	STER CORPORA		14. 1,000	Winde Repped, e even	even, 45+*			
Ships		Tipe II							distate curving	Total Control			stright							Stride	rectangular	ath.rectanentia				inegula oval				licen								ovil a postpipe							loval		Poval	lien		loval	liner		lineur	IIVE						linear		oval	linew		I	breenler ovel	Deguie ore.	linear			
Cost tas last ion		BON	Non	Bone			root worm	100																									CA 187 WOLD	Tool		too and warms	tool and weem		16.3			1						-					3	3											WORE						
Cossinency		compact	compact	compact	compact	2000	frieble	compact	I'm, Plank	firm, country		fem. cromtly		will range	zill pluk			compact stiff	200		Ī			-	****		lim, stely	1	The state are seen				my compact	fuily compad	-	fuith compact	furly contract		57	× Y				Compact		acool		COMPICE	loose		na comban	compact	compact	compact		compact					mod compar	Daumer.	compact	compact	mod compact	2000	compact	Ī		compact	
Соми совром в		v. occ gravel	oce ame il flints	occ small flints	alk and gravel	h mivel pockets	. medium stones	Bow & grit	C Maria Rose	oc. millgum		nod v. small stores		frequent and grave		occ small stones	and and at one		Irequest smull stones		Occasional prevel		Occ gravel	-	occ gravels	1	occ flore	7	Т			+	and the same	occ grave	+	Boderate grive	Boderate mavel	_	occ proved + packing	rue fines				frequent mayel		frequent grave!	moderate an arrange	Date British	Occ gravel	200		v. occ gravel	oderate mavel	occ gravel		v. ec. grivel	occ gravel		occ gravel		oce. grave!	frequent mayer	-	1-1	from and stones		OCC gravel	1			
Fine component C	+	clay	ay v	A	A.	1		slightly clay silk	,,,,	1 1	silve les for anical	1 1	-  -  -	chy fres	Ranics)	aky clay o	niky clay he	clay		+	clay at o	H	mady silly clay		andy sulty clay	4	stody silvely	_	1_		1	illustra.	-	slightly silty day	4	+	nity city R			surdy clay silk			-	sandy silty clay fi	Н	sundy slity clay 1	+	-	andy silty clay	andy ailty clay	$\vdash$	Н	-	Н	4	┿	ali.	+	1		clay	nky as pd	+	Н	+	+	4	+	H	dy sk	
Fig.			N Da M			1	-			Mudy	ally clay	20 02	1								da		neh.		r Apar	and a	netra	sylan	310			1		shipt-tly	1	1410	Alle		all o	1 that	5			s abdas		s Apare	a Maria		sper	a bdv a		sundy silty clay	diy	sandy silty clay		Sabdy clay sell	clay sik		clay aik		siky clay	y all		to to	sandy clay silt	Mary	dry sit			clay sundy silt	
Colour		57.44	3,45	2 2	257 473	24.40	257 2/1	257 372 SB VI		57.3/2	N N	\$8 XI	12 43	28.2	38 Y.I	37.24	27.22	21 42	7.5.1				257.30	-	77 167							217 10		25743	SY 403		257 4:4		7 7					SYM		10YR 3/2	SYVI		10YR 3/1	257 43		25730	5Y 30	57.31		11.71	25730		237.3/1		257.32	10YR 3.6		2.5Y 44	257 40		10YR 3/2	1.		2.57 47	
Width	63.33		++	-	П	1	П	-	-		200			636			- 1	- 1		0.52	-	19	-	1	=	1	-		_	=	+	_	11.0	-	0 0	-	-	-	-	H	-	70	t		=	2	6	60	190	0 60	999	074				074	190	50	250	0.97	001	9 9	90	90	990	064	550	ξ.		0.56	
The bassed a north	2	2	~	2	П	T		>3.6	, 26	4	+		>36	-	-	1	1	1	1	10		9.1	1	1	-	Ť				74	1	222	>25		× ×					H	=	2	T				2 ~	ž	× :	0.0	>071	× :	2 7	ž	7 7	× ×	77	7	* *	×	7	22	52	2:	8	E	Ď.	, .		<u> </u>	
P. P. P. P. P. P. P. P. P. P. P. P. P. P	0.2.0.3	83	920	3 8	ď	88	8	012		3	022	90	= 8	G	033	024	2	2 0	8	000	-	>0.35	-		111					90	. 000	029	0.12	77		013	013	200		П	10	6					0.28						023	0.28	029	027	0.34	035	5			017						2	. 5	613	
Citegory	Surface	2	=	deposit	deposit	droom!	deposit	fill	2	=	2	2	2 2	=	3	2	2	= =	810	3	F	9	3	2 3	95	E	2	2	E.	an a	7	7		2		7		3 :		L L	depout	ě		=	5	2	2	П	7	2			deposit		_	10	7	_	$\overline{}$		7			_	2	П	_		2 5	=	
equivalent to		T	П			T		T					T	П		3	600	To a						1						1	100	1		†	2			T		1	†	T	T	Ħ	+	†	T	H	†	T	H	100	1	3060		П	1	†	T	H	1	H	366	†	+	H	+	Ħ	1	1	
Context equi	0000	2002	ŏ.	2008	2000	2000	000	2013	100	100	2010	2013	8100	900	H	+	-	+	3036	not	8008	600	00.00	100	2033	707	2035	9000	2037	803	+	+	2013	S Z	+	H	2047	2048	30,00	1502	1502	30%	203	90,00	2021	200	3060	3061	SE	300	Н.	+	$\mathbb{H}$	4	2071	2013	203	2014	3000	201	2018	2080	H	2082	7084	2085	2086	2088	3080	200	
Retur	₩.	†		_	_	Partra	_	+	dich	1		14	+	H	+	+	+	-	dich	- Ne	Н	2	1	+	2			1	╛	dich	- dich		dich	ditch		dich		posthole		$\dagger$	25	1			2	_	_	rully.	2	П	dich	diech	17	_	A A	dich	_	Milk	gully		2	$\top$	dich	$\dagger$	П	2	$\dagger$	-	Mrvice	1	
Reture No.	+	22	8	Н	7	Ť	+	++	-	200	2 2	+	+	8100	910	970	NO.	9000	_	Н	100	+	200	100	100	800	3036	80%	4	+				2042			970	4	1053	500	- 1			Н	4	+	1902	-	+-	3065	-	+	+	2010	-	Н	+	-	+	-	-		4	2 2	88	Ş	5 5	++	2089		
Trench/ Area	19	=	91		= :	=	= :	==	+	=	=	===	=	H	+	6 0	+	-	6	2	=	2	1	2 2	2	=	=	=	=	=	+		П	2 2	П	=	=	1	=	===	1	=	=	2	+	2 2	2	=	1	2	_	2 2	+	2 2	7	П	=	Т	2	2	Т	2	=:	100	П				==		
-			$\perp$					ш		_			لىلا	Ш.			1	1		- 1	-	1		1	1	Ш	_!	-	1	1		$\perp$			1	_		1			1						$\perp$	$\perp$	1	Ш		$\perp$			1	1	1	1	1 1		1	11	- 1	1	1	1	1	11	-	1	

	-	00-1150	1000 1150 8/01.130	00.1150	00:1130		031100		1150 1300						900-1150	pre-400	VX.1 VW.1		9:00-1150	pre-400	fre-400	Pre-430		1150-1450				1500 1600	П	1200-1450	7360	1600 1700				Fre-450	1150 1350			Pre-4001	0011001			1150-1250		900-1200					
in sing of	, -	2	F =	100	88	Н	-		-	$\forall$	$\dagger$	Н	$\vdash$	П	+	11	Ť		7			≅.		1	T	791	6	2	П		8	6					<u>ء</u> ح			2		Ц	$\perp$	Ц		8	Ц	Ш	Ц	Ц	4
3	× _	$\neg$	=	Н	Ť	H	-	H	†-	П	$\dagger$	П	Т		T							Ī		=		]		2							_	Ц	_	Ц		Ц	_	Ц	4	Щ	4	-	Ц	-	Н	otag	4
3			Ī	П	1	П	1	П	1	П	1	П	Į.	П	1	П	Ţ	П	4	-		-	1	+	+	+	+	+	H	+	+	+	+	+	+	Н	+	+	+	H	-	H	+	H	-	=	$\forall$	+	H	H	+
2	Note		~					Ш		Ц		Ц		Ш	$\perp$	Ш		Ц	1	L	Ц	ē	Ц	_		4	Ц	4	Ц	_	Ц.	$\perp$	4	$\sqcup$	4	H	-	4	+	-	+	H	+	H	+	-	$\forall$	+	+	Н	$\dashv$
Worked	200	П	1																																					12						2	Ц		Ц	Ц	
	_	$\forall$	+	Н	$\dagger$	H	_		+		~				1		İ		1	İ		1						$\blacksquare$		1					7	П	-		-		-	4	4	$\dashv$	4	+	H	+	H	Н	$\dashv$
3	-	П	Ţ	П	4	П	_	Ц	1	H	+	Н	-	$\mathbb{H}$	+	H	+	$\mathbb{H}$	+	+	Н	+	Н	+	+	+	+	+	H	+	-	+	+	Н	+	$\forall$	+	$\dashv$	+	Н	T	H	†	$\forall$	T	+	T	+	H	Ħ	1
ي ا	8 -	$\mathbb{H}$	+	Н	+	H	+	H	+	Н	+	Н	H	$\mathbb{H}$	+	H	+	Н	+	+	H	+	Н	+	+	+	+	+	H	╁	$\vdash$	t	$\forall$	$\forall$	+	1661	=	T	+	T	Ť	H	†	$\forall$	T	Ť	П	T	П	П	1
ceremic	00 00 00										-					-		Ш			2	3				Ц		Ц	Ц	_	Ц			Ц	4	5	-	4	_	Н	+	Ц	+	+	Н	+	H	+	$\vdash$	Н	$\dashv$
mater/p	Tage -	П	1	П		П																													_	Ц	_	Ц			1	Ц	4	$\perp$	Ц	1	Ц	4	Ц.	Н	-
Š		П	†	П	7	П	T	П	1	П	1	П			1				7	=		8	4.4	Ī				2															_							Ш	
Delast	-	92	8 2	2 2	=	Н	+	H	-		+	Н	H	П	-	×	12		92	2	376	1487	2	5	1	П	Т	46	П	-		3			7	33	2 ≈			2	-			19		2	1				
ď	:				_	Щ	4	Щ	+		4	뮈	Ц	$\parallel$	븍	<u> </u>	=	믬	=	+	믄	=	-	=	=	=	╡	=	H	=	=	=	H	Ħ	╡	H	==	Ħ	7		e =	ī	Ŧ	T		1	Ī	ī	П	Ī	Ī
Supple	2		ã																			2				Ш		Ц	Ц	_					4	Ц	_	Ц	1	Ц	*	Ц	+	$\perp$	Ц	-	H	+	Н-	$\dashv$	4
å	-	-				-	-	~		E	I	-	1		ŀ		-	^			Ц	_	-	_	_		^	9		_	1	_	Ц	-	4	$\mathbb{H}$	-		-	Н	-	1	+	+	-	+	H	1	<u> </u>  -	H	$\dashv$
j			T	П														26537					_				1131				-																H				
1	Ē																	æ								Ц		<u> </u>	Ц	-	Ц	_	Ц	_	4	Щ	_	4	-	1	-	H	+	+	H	+	H	+	$\dashv$	H	-
	-	П	T				Ţ			≱.	Ţ	>	9		20			S					SE		SE		5																								
	2	2				E. W	ω ×			NE . SW		E. W	ME CO	NE .	NW.			N					NW . SE		2		N.S	×											İ				1								
	-	$\mathbb{H}$	+	H	+	+	+	H	+	$\dashv$	+	+	H	+	+	H	+	+	$\forall$	+	Н	+	+	-	+	$\forall$	+	Н	H	Ť	1	i	H	+	+	П	Ť	П	İ	П	Ī	П	T	T	П	Ī	П	T	П	П	
1	4	100				d.	in adual			skript		days		none	4		9000	theta					-		BCM		-	habas			days																				
1	The state of the s	Ma du				Ħ	H			2		Ħ		à	1		•	3																															Ш		
•	-	+	+	+	+	+	Н	Н	+	Н	+	ave	H	+	+	-	+	T	+	$^{+}$	Н	Ť	+	H	+	H	+	Н	H	†	Ħ	T	Ħ	T	1	T		П	1		1	П	1	T					П		
		COBCEVE				COBCAVE	CORCAVE			ĕ		Highly cocave		CODC			COBCRVE	J.C					-		CODERVE		-	ē			ě																				
	2 =		_	L		_	Ц	Ц	_	Ц	4	High.		_			4	_	4	-	_	4	<u> </u>	Ц	-	H	4-	4	H	4-	-	+	H	=	╬	┿	=	H	+	H	+	H	+	十	+	÷	Ħ	┿	Ħ	Ħ	Ħ
						passa	shallow, concave					3,4		IVEA			BCBVe	BCBVe					12		DCB14		3				etk al															İ					
		shallow 40				gular, st	llow, co			80.90		49, concave		steep, convex		1000	step coaceve	skep, contave					concavel		even concave		COBCAVE	200			Umost vertical	-																			
	_		Ц		Ц	ă	Ä						Ш	_			-	,		_	_		_	Ц	_	<u> </u>	<u> </u>	<u> </u>	Ц	==	4	-	Ц.	- -	Ц.	-	4-	4	-	-	==	4	4	+	H	=	+	=	+	╬	H
		2		T		a ovel				-		libert		riegilw liberi	-		Ovall	livo					ouving fire w		line		linen				circular								ulueani												
ě	4 .	megular				inegular oval	liber			levo		2		ale Enla			ò	5					Ourvie		=		- ا				Ė								.5				<u></u>	_	L	_		_	Ц.	_	
			-	T		1		,						1							1							П				İ											П								
	ACK BURNING TOOL SOON		100	8 8	2	8		WOR																li				П																					Ш		
	8 .	+	9	ğ g	b.	<u> </u>	H	+	.v	-	+	5	H	+	H		_	+	2	1	2 2	2	D.	H	Ť	H	†	П	Red			5	П	5		T						Ī	П	T							
	Constraint	800	mod comp	mod compact	d comp	nod plack		800	firm, pluvic	mod line	300	med compad	8	E	(i'm	e B		=	locae mod	30	0 0	mod compact	COB						witerlegged			cempret		compact			E E		9							Ein			Ē		N. S.
	-	_				-	Н	+	-	44	ш	+	H	+	H	4	4	-	H	+	B B			Н	+	Н	+	H	H	+	$\mathbb{H}$	+	$\dashv$	+	H	3	H	H	+	Н	$\dagger$	$\dagger$	H	+		-	$\dagger$	+	Ę	+	Н
	# A	Robes	ravel.	fred grit, occ gravel	lve	Bi Ive		No M	occ. gravel	200	mod frequent gravel	M Cots	Bavel	wwel	avel	3.4		v. occ smill grive	lave!	Byel	200	oct mall stones	NO STORE	oc gravel	1000		v. ccc gwel					oc givel	occ grave!	francia marel		frequent small stores	Rivel C. C.		rate flinds							occ flints	Fravel		moderate grave	ravel	dalk flects
	Солга совровен	oce mill stone	V. OCC. STRVE	chuce gir	200	C ABB		frequent grave	30	No King	d freque	occ and stones	moderate grave	V. Oce Brive	oc. gravel	occ grave		200 SB	OCC AISNE	v occ Bave	occ and a score	oce man	N. BE	8	leve me too is		٧. ۵					8	×	fred and		eguel s	2		1							8	-		Bode	-	6
		8	1	100	Н	8	Н	+	+	+-	ŝ	•	H	-	H	+	-	-	Н	+	+	-	-		- -	H	-	+	+	H	Н	-	17	+	Н	=	H :		<u>.</u>	Н	Ħ	$^{+}$	H	$\dagger$	+	λij	T	Ħ	Ē	†	Н
	Fine component	4		4	-	N.		sandy sifty clay	mixed clay	mily sendy city	day sik	14	ally sand	7	diyaik	clay sik		subdy cliy all	clay ait	2	and y cla	sundy clay silt	Clay Sh	andy silty clty	all a char		mely silty clay	sandy clay silt	n'hy clay		mer con	clay sik	ciny alt	clay	il.	nhy clry	clay subd	and land line	sandy silty clay							sandy silty clay	sandy clay		sandy silty clay	aky sand	cley
	8	dayaik	B	day all	ę.	cley		s abdy s	BK	# [L/ 3#	day	chy	nky	da	9	dı		, land	dı	1	E A	supply	SINA	sandy	1		nely	Appe	ā	1		9	5			E .	5		and							Pus	4 4		100		
	3	5	S	22	0	3		_	Н	-	S	$^{+}$	3	9	35	30	H	2						2	-		5Y 472	257 2/1	37.3/1	1	12.0	2	257 31	57.40	57.47	5	П	П	T			Ī		T			Τ	П			
	Color	10YR 3A	157.2	10YR 3/1	37.3	257		10YR 4K	257 43		10YR 3/3		257 44	IOVB	10YR 3/2	10YR 3/2		IOYR 30				257.22		257 31	17.000				_	Ш.	1	-		3,	2		Ц.	Н	4	+	Ц	-	H	+	+	H	+	-	+	+	H
	Wigh.	036	2			. 3	2	2-	2.75	- 3	913	200	9	9 5	1.62	S S	8	2 0	Ž	Š	20.00	>1.56	8	3	8	80	= }	士	g S	5	92	2 3	× ×	1.72	208	2	Ц					1	Ц	4	1	Ш	1	095	60	4-	H
	Depth Langth	×=====================================	2	200	6.0	27.0	17	_	×	× =	F	200	Š	ž ,	12	, <u>,</u>	-	- 3	=	-	200	>084	ă,	7	× ?	× ×	× 7	× ×	٠.			7 7	1										Ш					×1.5	2	-	Ц
]	Ę.	500	-	_	-	800	-		024		-	_	_	-	039	770	933	623				×0.22			024			20	- 05	-	5 5	043	0.38	03	043	0115												045	800	800	Ш
F	<b>1</b>	+	Н	+	Н	+	$\forall$	+	П	+	Н	+	+	+	++	+	Н	+	Н	$\neg$	_		7	_	9 3	↤	+	+	5 5	П	2 2	_			П	Т	2	2 3	2	2 2	2	3	П	1	2 3	2	E 2	9	E Pour	2 2	deposit
	Citegory	3 2	=	4		= 1	3	₹ 8	2	= 2	Ē	2 2	2 3	5 2		5 =	3	-	3 2	1	1	٢	-	-	Ĭ	1	-	7	+	H	-	-8	Ŧ	4	H	+	H	+	+	+	H	+	H	+	+	H	+	H	$\forall$	+	H
	equivalent to				П	+					$\ $																									100								П							
		+	H	$\pm$	H	+		-		+	H	9-		1		-		-	-		6	=	2	=	n i	9 2	201	2 2	= =	i s	x =	×	2 2	3139	3141	2143	1	2146	3147	2149	8	2 2	213	ž	25	121	2 5	3180	2162	910	3165
,	S.	1602	٤	Ž,	Š	506	800	210	210.	200	200	210	100		2 =	= =	Ē	=	32	7	2 2	Ä	22	Ē	313	1170	2128	7	200	Ш.	332	_	7	7	77	77		+	Ш		Н	_	11	1	7		7	H	+	4-	H
	175	in in	П	T	Π	T	ditch	dich		Pariel	П	44.4	arch	2			Rully	1	2					Idiki	dich	4rh		gkp	<b>Bich</b>	posthole	posthole							000 M		quiriy		QUELTY	du li	dan't	2			2	$\perp$	<b>6</b>	Ц
	_	+	3	272	2	2 :	+	+	+		Н	+	+	5100	8 8	2 2	↤	7117	3118	9	2	S C C	+	+	3133	+-	+	+	2 2	-			8	E C	12.0	131	2	3 2 2	2148	1211	1181	23	П		2 3	2160	3160	3160	2163	3163	
		308	R	R	Ŕ	8	Ŕ	_	++	200	Н	+	Н	+	+	+	-	7	1-	1	_	1		+	┥┥	+	H	+	+	+	+	+	+	╁	+-	+	+	-	H	-	$\vdash$	+	낸	$\dagger$	+	H	+	$\forall$		+	$\forall$
	Area	===	44	==	=	=	2	===	=	=	4=	==	= =	=	= =	= =	=	= :	=	=	= :	=	=	=	=	= =	=	리디	= =	12	= =	=	2 2	=	=	=	17	- =	1=1	- =	F	= =	17	17	-1-	1=				1	

Birthus Luz, Snewsy 1998 (Thechs 11 - 20) Codest lis

14 200 18 200 17 200 18 201 18 201 18 201 18 201 18 201 18 201 18 201 12 202 12 203 11 203 11 203 11 203 11 205 11 205 12 206 12 206 12 206 12 206 12 207 12 207 13 207 13 208 13 208 13 208 13 208 13 209 14 210 14 210 14 210 14 210 11 211 11 211 11 211 11 211 11 211 11 211 11 211 11 211 11 212 12 12 12 12 12 12 12 12 12 12 12 12 12 13 13 209 14 210 15 15 16 17 16 17 17 17 18 18 209 18 209 19 209 19 209 19 209 10	00   00   00   00   00   00   00   00	61 14 35 15 17 7 2 46 9 161 719 480 7 45 19 50 20 791 36 16	4 2 1 1 7 2 21 57 7 2 2 4 4 8 8	230	83 10 29 12 37	6		16		1				60	104 171 19 36 133 817 5 302	2 16	
18         200           17         200           16         200           18         201           18         201           18         201           12         202           12         203           12         203           11         203           11         203           12         203           11         203           12         203           13         204           11         205           12         205           12         205           12         206           12         206           12         206           12         206           12         207           13         208           13         208           13         208           13         209           13         209           13         209           13         209           13         209           13         209           14         210           14         210	00   00   00   00   00   00   00   00	14 35 15 17 7 2 46 9 161 719 480 7 45 19 50 20 791 36	2 1 1 7 2 2 21 57 7 2 6 4 8 8 3 21 3	230	29 12 37	6				/					19 36 133 817 5	16	
17         200           16         200           18         201           18         201           18         201           12         202           12         203           12         203           12         203           11         203           11         203           11         203           11         205           12         205           12         205           12         206           12         206           12         206           12         206           12         207           13         208           13         208           13         208           13         208           13         209           13         209           13         209           13         209           13         209           13         209           14         210           14         210           14         210           14         210	00   00   03   03   03   04   05   05   05   05   05   05   05	35 15 17 7 2 46 9 161 719 480 7 45 19 50 20 791 36	2 1 1 7 2 21 57 17 2 2 6 4 8 8 3 21 3	230	29 12 37			16							36 133 817 5		
16         200           18         201           18         201           18         201           18         201           12         203           12         203           12         203           11         203           11         203           11         203           11         203           11         203           11         205           12         205           12         206           12         206           12         206           12         206           12         207           13         208           13         208           13         208           13         208           13         209           13         209           13         209           13         209           13         209           13         209           14         210           14         210           14         210           14         210	3 1 1 2 2 5 5 6 6 7 7 8 8 8 0 0 1 1 2 2 4 4 5 5 1 1 9 9 0 0 1 1 2 2 6 6 6	15 17 7 2 46 9 161 719 480 7 45 19 50 20 791 36	1 1 1 7 2 21 57 17 2 6 4 8 8		29 12 37			16		1				60	133 817 5		
18         201           18         201           18         201           18         201           12         202           12         203           12         203           11         203           11         203           11         203           11         203           11         203           11         203           11         205           12         205           12         206           12         206           12         206           12         206           12         207           13         208           13         208           13         208           13         208           13         209           13         209           13         209           13         209           13         209           14         210           14         210           14         210           14         210           14         210	1 2 2 5 5 6 6 7 7 8 8 0 0 1 1 2 2 4 4 5 5 1 1 9 9 0 0 1 1 2 2 2 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	15 17 7 2 46 9 161 719 480 7 45 19 50 20 791 36	1 1 1 7 2 21 57 17 2 6 4 8 8		29 12 37			16		/				60	817 5		
18         201           18         201           18         201           12         202           12         203           12         203           12         203           11         203           11         203           11         203           13         204           13         204           11         205           12         205           12         206           12         206           12         206           12         206           12         207           13         208           13         208           13         208           13         208           13         209           13         209           13         209           13         209           13         209           14         210           14         210           14         210           14         210           14         210           14         210	2 55 66 77 7 88 8 00 11 1 22 2 4 4 5 5 11 1 9 9 00 11 1 22 2 6 6 6	15 17 7 2 46 9 161 719 480 7 45 19 50 20 791 36	2 1 1 7 2 21 57 17 2 2 4 8 8		29 12 37										5		
18         201           18         201           12         202           12         203           12         203           12         203           11         203           11         203           13         204           13         204           11         205           12         205           12         205           12         206           12         206           12         206           12         207           13         208           13         208           13         209           13         209           13         209           13         209           13         209           13         209           13         209           14         210           14         210           14         210           11         211           11         211           11         211           11         211           11         212	6 7 8 0 1 2 4 5 5 1 9 0 1 1 2 6 6	7 2 46 9 161 719 480 7 45 19 50 20 791 36	1 1 7 2 21 57 17 2 6 4 8 8 3 21		29 12 37					/					5		
18         201           12         202           12         203           12         203           11         203           11         203           13         204           11         205           11         205           12         205           12         206           12         206           12         207           13         208           13         208           13         209           13         209           13         209           13         209           13         209           13         209           14         210           14         210           14         210           14         210           14         210           14         210           11         211           11         211           11         211           11         211           11         212           11         212           12         212	7 8 0 1 2 4 5 5 1 9 0 0 1 1 2 6	7 2 46 9 161 719 480 7 45 19 50 20 791 36	1 1 7 2 21 57 17 2 6 4 8 8 3 21		12 37					/							
12 202 12 203 12 203 11 203 11 203 11 203 11 203 11 205 11 205 11 205 12 205 12 206 12 206 12 206 12 207 13 207 13 208 13 208 13 208 13 208 13 209 14 210 14 210 14 210 14 210 14 210 14 210 14 210 11 211 11 211 11 211 11 211 11 211 11 211 11 211 11 212 11 212 12 12 212 12 12 213 12 213 12 213 12 213 13 209 14 210 15 209 16 209 17 209 18 209 18 209 19 209 19 209 10	8 0 1 2 4 5 1 9 0 1 1 2 6	2 46 9 161 719 480 7 45 19 50 20 791 36	1 7 2 21 57 17 2 6 4 8 8 3 21		12 37					/					302		
12 203 12 203 12 203 11 203 11 203 11 203 13 204 11 205 11 205 11 205 12 205 12 206 12 206 12 206 12 206 12 207 13 208 13 208 13 208 13 208 13 209 13 209 14 210 14 210 14 210 14 210 14 210 14 210 11 211 11 211 11 211 11 211 11 211 11 211 11 212 11 212 12 12 12 12 12 12 12 12 12 12 12 12 12 13 12 11 11 212 11 212 11 212 12 12 12 12 12 12 12 12 12 13 11 212 11 212 11 212 11 212 11 212 11 212 11 212 11 212 11 212 11 212 11 212 11 212 11 212 11 213 11 212 11 212 11 212 11 212 11 212 11 212 11 212 11 212 11 212 12 2136 12 2136 12 2137 11 2143	0 1 2 4 5 1 1 9 0 1 1 2 6	46 9 161 719 480 7 45 19 50 20 791 36	7 2 21 57 17 2 6 4 8 8 3 21		12 37												
12 203 11 203 11 203 11 203 11 203 11 203 11 204 11 205 11 205 11 205 12 206 12 206 12 206 12 206 12 207 12 207 13 207 13 208 13 208 13 208 13 208 13 209 14 210 14 210 14 210 14 210 14 210 14 210 11 211 11 211 11 211 11 211 11 211 11 211 11 211 11 212 11 212 11 212 12 12 12 12 12 12 12 12 12 13 12 213 12 213 11 2143	1 2 4 5 1 9 0 1 1 2 6	9 161 719 480 7 45 19 50 20 791 36	2 21 57 17 2 6 4 8 3 21		12 37							1			10		
12 203 11 203 11 203 11 203 13 204 11 205 11 205 11 205 12 205 12 206 12 206 12 206 12 207 13 207 13 208 13 208 13 208 13 209 13 209 14 210 14 210 14 210 14 210 11 211 11 211 11 211 11 211 11 211 11 211 11 211 11 212 11 212 11 212 12 12 12 12 12 12 12 12 12 12 12 13 12 213 12 213 11 2143	2 4 5 1 9 0 1 2 6	719 480 7 45 19 50 20 791 36	57 17 2 6 4 8 3 21		12 37												
11         203           13         204           11         205           11         205           12         205           12         206           12         206           12         206           12         206           12         207           12         207           13         208           13         208           13         209           13         209           13         209           13         209           14         210           14         210           14         210           14         210           14         210           14         210           11         211           11         211           11         211           11         212           11         212           12         213           12         213           12         213           12         213           12         213           12         213	5 1 9 0 1 1 2 6	480 7 45 19 50 20 791 36	17 2 6 4 8 3 21 3		37										27		
13	1 9 0 1 2 6	7 45 19 50 20 791 36	2 6 4 8 3 21 3									143	4		11		
13 204 11 205 11 205 11 205 12 206 12 206 12 206 12 207 13 207 13 207 13 208 13 208 13 209 13 209 14 210 14 210 14 210 11 211 11 211 11 211 11 211 11 211 11 212 11 212 12 12 12 12 12 12 12 12 12 12 13 13 14 210 15 15 16 17 16 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	9 0 1 2 6	45 19 50 20 791 36	6 4 8 3 21 3		7												
11         205           11         205           12         205           12         206           12         206           12         206           12         207           12         207           13         207           13         208           13         208           13         209           13         209           13         209           13         209           13         209           14         210           14         210           14         210           11         211           11         211           11         211           11         211           11         212           11         212           12         212           12         213           12         213           12         213           12         213           12         213           12         213           12         213           12         213	0 1 2 6	19 50 20 791 36	3 21 3		7	<b>  </b>											
11         205           11         205           12         205           12         206           12         206           12         206           12         207           12         207           13         208           13         208           13         209           13         209           13         209           13         209           13         209           14         210           14         210           14         210           14         210           11         211           11         211           11         211           11         211           11         212           11         212           12         2124           12         213           12         213           12         213           12         213           12         213           12         213           12         213           12         213	1 2 6	50 20 791 36	3 21 3			<del>                                     </del>							3		3		
11 205 12 205 12 206 12 206 12 206 12 206 12 207 13 207 13 208 13 208 13 208 13 209 13 209 13 209 14 210 14 210 14 210 11 211 11 211 11 211 11 211 11 212 11 212 11 212 12 122 12 124 12 2136 12 2136 12 2137 11 2143	6	20 791 36	3 21 3		4			-					3		29		
12 205 12 206 12 206 12 206 12 207 12 207 13 207 13 208 13 208 13 208 13 209 13 209 14 210 14 210 14 210 11 211 11 211 11 211 11 212 11 212 11 212 12 122 12 213 12 213 12 213 11 214 11 213	6	791 36	21		10												
12 206 12 206 12 207 12 207 13 207 13 208 13 208 13 208 13 209 13 209 13 209 14 2100 14 2100 14 2101 11 2111 11 2112 11 2112 11 212 11 212 11 212 12 122 12 124 12 2136 12 2137 11 2143	8	36	3														
12 206 12 207 12 207 13 207 13 208 13 208 13 208 13 209 13 209 13 209 13 209 14 2100 14 2103 14 2103 11 2113 11 2113 11 2113 11 212 11 212 12 12 2124 12 2136 12 2137 11 2143	-				4										2	1	
12 2066 12 2073 13 2083 13 2084 13 2084 13 2099 13 2099 13 2099 13 2099 14 2100 14 2103 14 2103 11 2113 11 2113 11 2113 11 2122 11 2122 12 12 2128 12 2130 12 2134 12 2136	_	16															
12 207: 13 208: 13 208: 13 208: 13 208: 13 209: 13 209: 13 209: 13 209: 13 209: 14 2100: 14 210: 14 210: 11 211: 11 211: 11 211: 11 211: 11 212: 11 212: 12 2124: 12 2136: 12 2136: 12 2137: 11 2143			3												1		
12 207: 13 208: 13 208: 13 208: 13 208: 13 209: 13 209: 13 209: 13 209: 14 210: 14 210: 14 210: 11 211: 11 211: 11 211: 11 212: 12 212: 12 212: 12 213: 12 213: 11 213: 11 213: 11 212: 11 213: 11 214: 11 214:		62	4 8						-+						3	-	
13 2073 13 2084 13 2084 13 2086 13 2096 13 2097 13 2097 13 2099 14 2100 14 2100 14 2101 11 2111 11 2112 11 2112 11 2122 12 2124 12 2128 12 2130 12 2134 11 2143		43	4		6										58	4	
13 208: 13 2084 13 2086 13 2099 13 2099 13 2099 13 2099 14 2100 14 2100 14 2101 11 2111 11 2112 11 2112 11 2122 12 2124 12 2128 12 2130 12 2134 11 2143		9	1		30										9		1
13 2086 13 2092 13 2094 13 2095 13 2096 13 2096 14 2106 14 2106 14 2107 11 2111 11 2112 11 2112 11 2122 12 2128 12 2136 12 2136 12 2137 11 2143		1	1												2	117	1
13 2092 13 2094 13 2095 13 2096 13 2096 14 2100 14 2100 14 2101 11 2111 11 2112 11 2112 11 2122 11 2122 12 2128 12 2134 12 2134 12 2137 11 2143					4											74	
13 209: 13 2094 13 2095 13 2096 14 2100 14 2102 14 2102 11 2113 11 2113 11 2113 11 2114 11 2122 11 2122 12 2128 12 2134 12 2136 12 2137 11 2143		46	20		5	17									59	3	1
13 2094 13 2095 13 2096 14 2100 14 2101 14 2102 11 2111 11 2112 11 2112 11 2122 11 2122 12 2128 12 2136 12 2137 11 2143		78 190	6 41		96			+		21					37	11	
13 209: 13 2090 14 2100 14 2100 14 2101 11 2111 11 2112 11 2112 11 2122 11 2122 12 2124 12 2136 12 2137 11 2143		36	3		90				+	-21		183			115	-11	
13 2096 14 2100 14 2103 14 2103 14 2103 11 2111 11 2112 11 2112 11 2122 11 2122 12 2124 12 2136 12 2137 11 2143		26	1									103	-+		113		
14 2100 14 2103 14 2103 14 2103 11 2111 11 2113 11 2115 11 2112 11 2122 11 2122 12 2124 12 2136 12 2137 11 2143	_	63	2												28		
14 2105 11 2111 11 2112 11 2115 11 2117 11 2117 11 2119 11 2120 11 2121 11 2122 12 2124 12 2128 12 2130 12 2134 12 2136 12 2137 11 2143		2	1												3	1	
11 2111 11 2113 11 2115 11 2117 11 2119 11 2120 11 2121 11 2122 12 2124 12 2128 12 2130 12 2134 12 2137 11 2143	_	13	10												2	1	
11         2113           11         2114           11         2117           11         2119           11         2120           11         2121           12         2124           12         2128           12         2130           12         2134           12         2137           11         2143		- 10			9				2								
11 2115 11 2117 11 2119 11 2120 11 2121 11 2122 12 2124 12 2128 12 2130 12 2134 12 2136 12 2137 11 2143		12	2		-				-						19 27		
11 2117 11 2119 11 2120 11 2121 11 2122 12 2124 12 2128 12 2130 12 2134 12 2137 11 2143	_	35 24	1		4			$\dashv$	-				-+	-+	21		
11         2119           11         2120           11         2121           11         2122           12         2124           12         2128           12         2130           12         2134           12         2137           12         2137           11         2143		106	8		3				-+	-+					1		
11         2120           11         2121           11         2122           12         2124           12         2128           12         2130           12         2134           12         2137           12         2137           11         2143		124	3		12										71		
11         2122           12         2124           12         2128           12         2130           12         2134           12         2136           12         2137           11         2143	)	278	9				76								310		
12 2124 12 2128 12 2130 12 2134 12 2136 12 2137 11 2143	1	1487	111	83			5001			107					212		
12 2128 12 2130 12 2134 12 2136 12 2137 11 2143		30	1										3		8		
12 2130 12 2134 12 2136 12 2137 11 2143	2	65	1						$\rightarrow$	-+					165	13	
12 2134 12 2136 12 2137 11 2143	1	46	2	25				-	-	-			-+		112	73	
12 2136 12 2137 11 2143	1	70	1	2.5				-+	-+	-+			-+		112	-,5	
12 2137 11 2143	2 1 3	307	20												89		
	2		4														
	2	64	26				1994	$\perp$									
11 2144	2	64 309	23				433								194		
11 2145	2	64 309 682	4								70				28		
11 2149 11 2150	2	64 309 682 37	~								72 119		8		3	-+	
11 2155	2	64 309 682 37 35	2		+			+		-+	119	+	0		3		
11 2157	2	64 309 682 37 35 71	11					+	-+	715	103				236	_	
11 2161	2	64 309 682 37 35				+											

© Archaeological Field Unit Cambridgeshire County Council Fulbourn Community Centre Haggis Gap, Fulbourn Cambridgeshire CB1 5HD Tel (01223) 881614 Fax (01223) 880946