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Archaeological Excavations at Low Fen,  
Fen Drayton, Cambridgeshire.

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### Abstract

Excavations in a pasture field to the north of Fen Drayton village have revealed evidence of settlement from the Neolithic through to the post-Medieval period. Short-term episodes of Neolithic occupation and part of a Bronze Age field system gave way to phases of middle/late Iron Age farmstead enclosures. The earliest enclosure contained two annular house ditches. The focus of settlement subsequently shifted south with the original enclosure being turned over to agricultural use. Overlying the whole an intricate Romano-British system of ditches or trenches was laid out in parallel and interlocking groups. The system relates to a 'villa' site to the west and may be horticultural in origin, possibly for the cultivation of vines or fruit trees.

## Introduction

The excavation was required by the local planning authority as a condition of planning permission for the extraction of sands and gravel, and was funded by ARC Central. The fieldwork was undertaken between August 21st and September 4th 1995. The area under investigation, a field of c. 2.87ha centred on TL3375/6903, lies immediately north-west of Fen Drayton village, on the edge of the alluvial terraces of the River Great Ouse just west of the point where the river empties into the Fen (Figure 1). The area is low-lying (as a part of the Medieval Low Fen) and given over to scrub pasture, the topography, while appearing flat, shows a gentle slope (at the level of the underlying natural subsoil) down to the river at the east-northeast. Within the area of the excavation the level falls from 4.60m to 4.00m OD over a distance of 240m.

### *Archaeological background*

A desk-top study carried out by the CAU had indicated the considerable potential for the area to contain archaeological sites ranging from Neolithic to Romano-British in date (Boast 1992). The SMR sites in the immediate vicinity include tracks, droveways, rectilinear enclosures and paddocks, ring ditches and a Roman or Bronze Age round barrow. Two areas excavated by the CAU during the 1993 assessment suggested the proximity of a 'moderately large and well-founded establishment of the fourth century AD', possibly a villa site.

The density of sites to the east and west of the application area suggested the likelihood that it would also contain considerable archaeological remains. No previous archaeological fieldwork had occurred within the application area prior to assessment by the CAU in 1992, leading to further excavations the following year.

### *The 1992 Assessment*

Four areas were assessed in evaluation trenches during 1992, the western, southern, central and eastern fields. The eastern field is that dealt with in this report. The western field contained 27 features sample excavated during the assessment, and a further 22 not examined. The features included a number of ditches and small irregular pits and postholes. The ditches were considered suggestive of field-systems, whilst the pits and postholes were more typical of a settlement site. Artefacts were very rare, but those present were diagnostic early Neolithic flints.

The central field contained only a small number of undated ditches - the paucity of artefacts suggesting that these were field ditches at some distance from contemporary settlement. In the southern field excavations revealed that the cropmark (SMR 9667) site was a Roman settlement, with occupation beginning c. 350-360 AD. Subsequently, a magnetic susceptibility and magnetometer survey was conducted by Oxford Archaeotechnics and clarified the sites' morphology in considerable detail.

Trial trench 13 was placed east-west down the middle of the eastern field to determine whether the cropmark complexes to the east and northeast continued into the application area. Twelve archaeological features were recorded, all small ditches or gullies. These features were oriented either east-northeast/west-southwest, or north-west/south-east, in a regular rectilinear fashion. A lower soil horizon was overlain by alluvium, thin to the west but up to 0.30-0.40m towards the east. The fill of some of the features and the overlying alluvium were sufficiently similar to suggest that they were loosely contemporary with the onset of alluviation.

Two phases of activity were evident. The first and earlier represented by ditches and gullies containing Iron Age pottery, animal bones, and flints. The presence of pottery and bone being indicative of a settlement site in the vicinity. The second phase was represented by clay-filled ditches. The features, undated by finds, were tentatively placed in the late Roman or later period.

The occurrence of struck flints of early Neolithic types in the fill of ditches with Iron Age pottery, although residual, suggested that an earlier prehistoric phase of occupation may well be located in the area.

For further discussion of both the previous excavations and the SMR information see Wait 1992 & 1993.

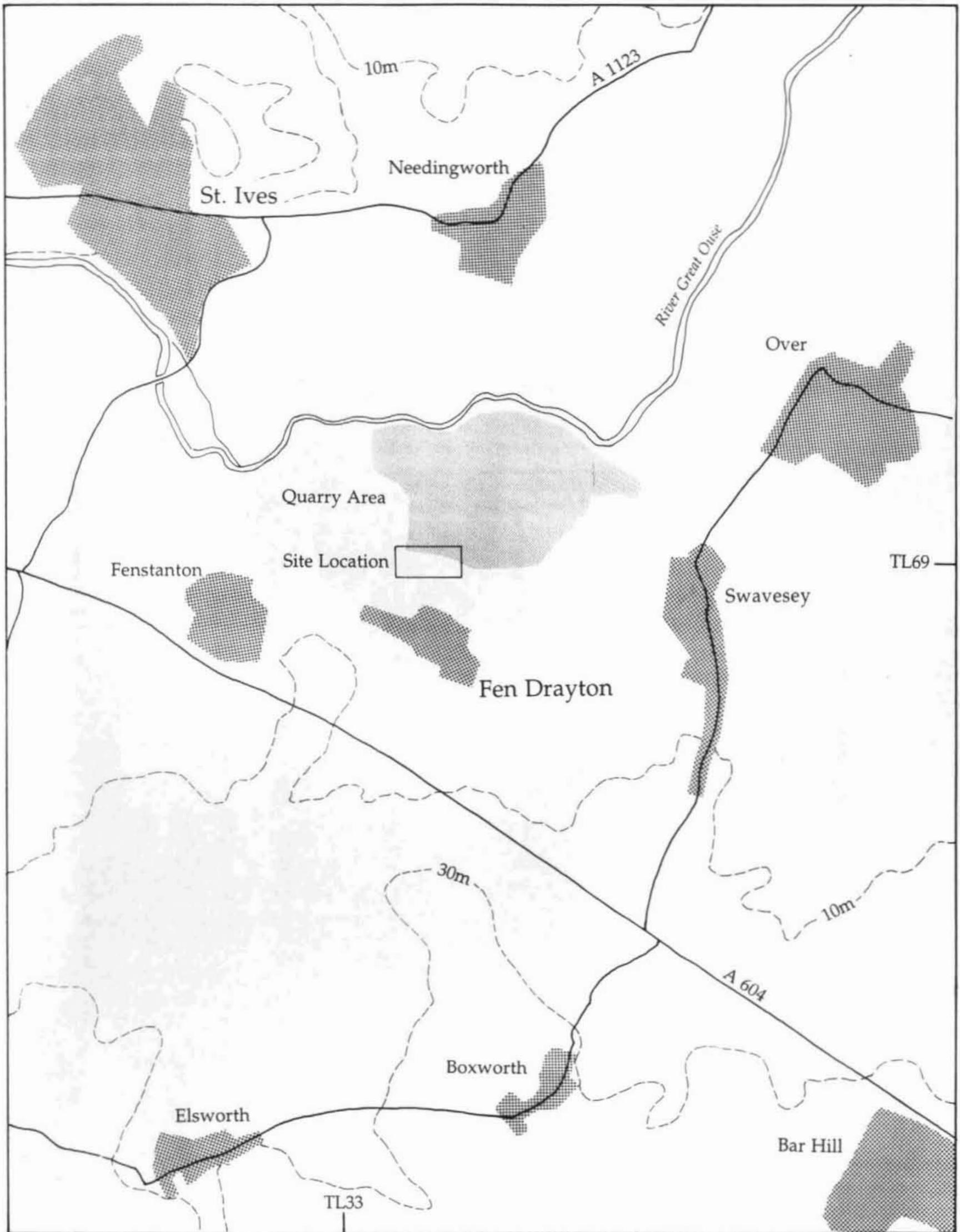


Figure 1: Site Location.

## *Methods of investigation*

### *Aerial photographic reconnaissance*

The area has in the past shown cropmarks, although the alluvium and low wet nature (as well as consistent use as pasture) has limited the visibility of archaeological features. However, an analysis of aerial photographic coverage by Air Photo Services allowed two sets of archaeological features within the area to be accurately mapped, and also plotted areas of deeper soil and areas where consistent waterlogging is most likely. A number of apparent former watercourses were also mapped.

The four fields covered by the survey centred on TL3350/6895, 3340/6920, 3305/6920 and 3375/6903, with the latter, the eastern field, being that currently under investigation. The land to the north has been extensively quarried, but once contained extensive archaeological features. Arable land to the west and east of the application area showed detailed crop marks revealing enclosures, ring ditches, trackways and pits indicative of an extensive archaeological landscape containing farming and settlement evidence. Fragments of boundaries, pits and enclosures can also be discerned between the buildings and greenhouses of Fen Drayton to the south. Two parallel ditches c. 70m apart were recorded as crossing the eastern field from north-east to south-west.

### *Geophysical Survey*

A magnetic susceptibility survey was commissioned from Geophysics of Bradford (Appendix 2) in an attempt to identify the densest archaeology prior to excavation in order that these areas could be prioritised and a relatively small area opened for excavation. The results, however, were inconclusive, despite the survey being undertaken at the level of the palaeosol, or 'buried soil', the ploughsoil and alluvial cover having been mechanically removed. The poor results were due, perhaps, to the unusually dry condition of the soil at the end of a hot dry summer. With the benefit of hindsight the few archaeological features revealed by the survey, perhaps unsurprisingly, correspond to the larger and deeper features revealed by excavation: A post-Medieval field ditch at the west of the site, part of the deeper secondary Iron Age enclosure at the centre (see below), and a palaeochannel at the far west.

### *Trench Excavation and Open Area Excavation*

The field was stripped of ploughsoil and alluvial cover by ARC contractors prior to trenching, leaving the buried soils, where extant, to depths up to 0.20m. The alluvium was noted to thin out up-slope to the west and the buried soils were here removed along with the ploughsoil.

Following the poor results of the geophysical survey it was decided to excavate trenches c. 10m to the north and south (Trenches I and II) of the line of the 1992 assessment trench and to open an area for excavation around the greatest density of archaeological features revealed (Figure 2). Two further trenches were excavated, Trench IV at the east of the field was sited to investigate the geophysical survey's strongest reading, a putative palaeochannel. Trench III to the south-west of Trenches I and II was placed to examine the continuation of the supposedly main north-east/south-west alignment of the ditches identified in the assessment trench. All trenches were aligned east-west parallel to the field boundaries.

An area c. 40m by 30m was opened toward the western end of Trenches I and II, along with smaller areas to the east and west to investigate individual features outside the main area. At the end of the excavation period a further one days' machining enabled six north-south trenches to be cut to the west to identify any outlying features (Figure 2), and further machining of the main area to 'follow' certain features and determine the depths and relationships of others.

#### *Excavation and recording*

Features not demonstrably modern were sample excavated and recorded using the Unit-modified Museum of London system (Spence 1990). Linear features were sample excavated primarily to determine their stratigraphic relationships, discrete features were half-sectioned or fully excavated. All features were recorded on base plans at a scale of 1:50 (the western trenches at 1:100), individual features at 1:20, sections were drawn at 1:10. Soil samples were taken from appropriate contexts (e.g. charcoal-rich or waterlogged) and have been analysed to determine the potential for providing environmental evidence (Appendix 4).

It should be stated from the outset that the evaluation of 1992 did not identify the majority of the features, principally those containing leached 'natural'-looking silt fills which, in the limited width of the test trench were difficult if not impossible to recognise. As a consequence the main phase of excavation was embarked upon with a restricted perception of the archaeological potential of the site which limited any systematic approach to sampling and concentrated excavation. The organic pattern of trenching which resulted was, therefore, a response to unexpected discovery.

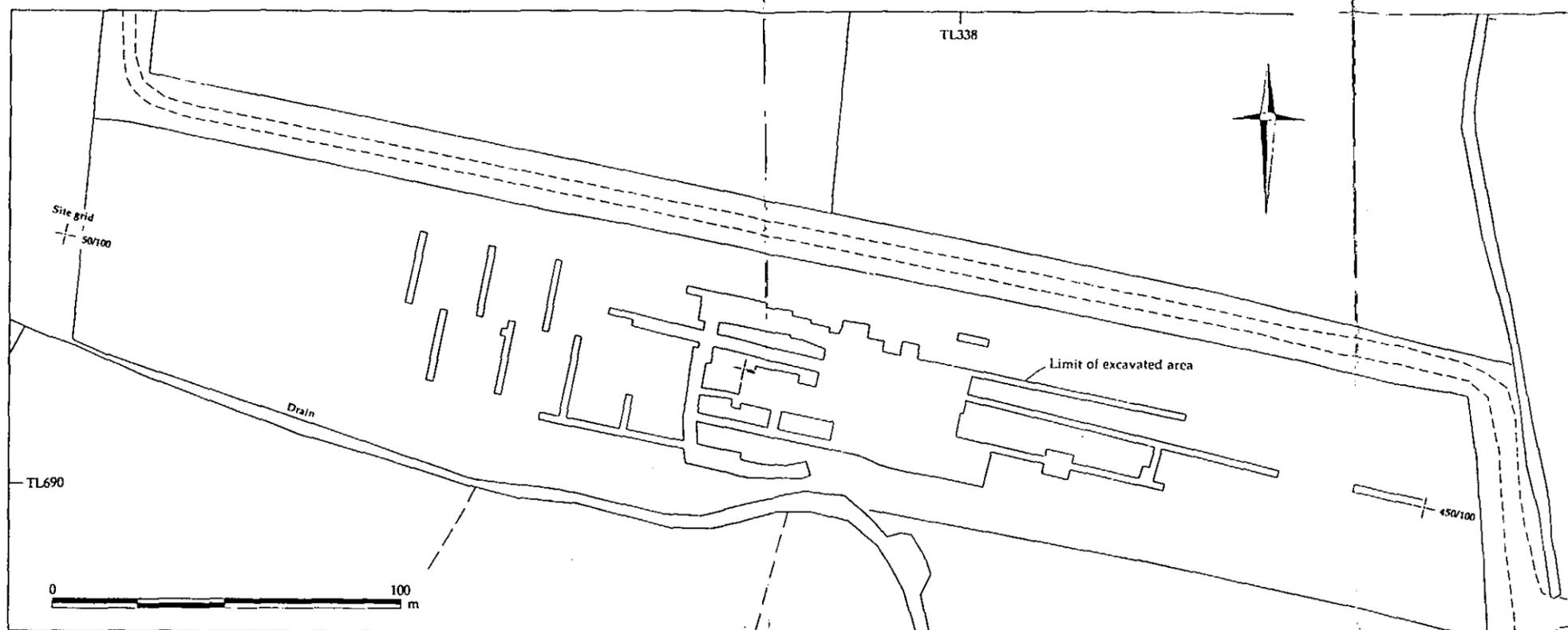


Figure 2a

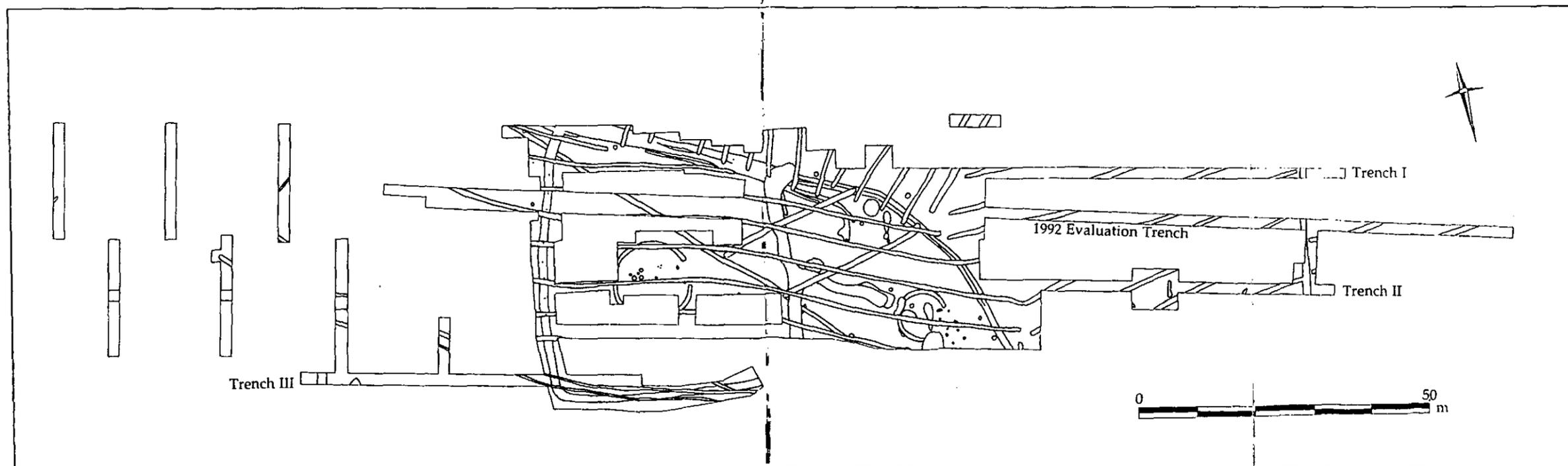


Figure 2b

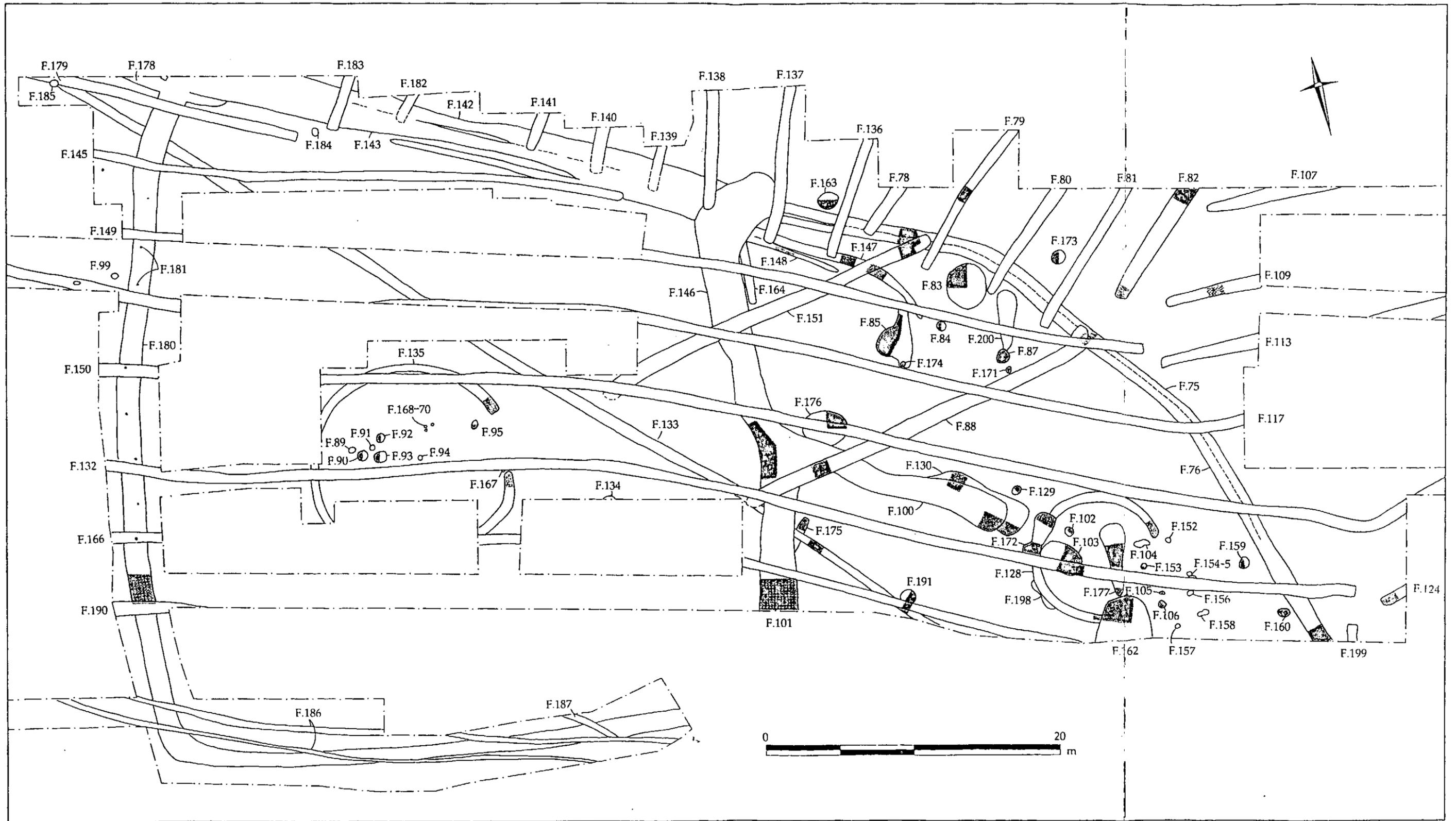


Figure 3

## Excavation Results

Throughout the following discussion archaeological features (e.g. a ditch or a pit) are referred to with an 'F' prefix and are highlighted upon introduction (e.g. F.100), feature and context descriptions are recorded in full in Appendix I and listed in their order of appearance in the text. The activity on the site is separated into five more or less distinct periods from the Neolithic to the post-Medieval. The most complex if not the most physically extensive period, the middle/late Iron Age, has been further subdivided into three phases.

### *Neolithic*

Figures 3 & 4

Remnants of Neolithic activity on the site were restricted to a cluster of six small circular pits, features F.89 - 94, varying in diameter between 0.40-0.90m and c. 0.30m deep. Their fills were very compact pale sandy silts. The three larger pits were excavated (Figure 8a) producing later Neolithic pottery (notably Peterborough wares), worked flint, including a fine knife or large scraper, and heavily degraded bone fragments (the only identifiable pieces being those of cattle). All three contained variable amounts of charcoal. The survival, or the initial deposition, of environmental remains within the pits was fairly low, only hazel shells, glume bases of emmer wheat and one grain of oats were recovered.

### Discussion

A total of 52 sherds of pottery were recovered from the excavated pits, from a minimum of nine individual vessels. In addition to the Peterborough Ware, at least one earlier Neolithic plain bowl was represented, and a further sherd decorated with an incised lattice pattern may derive from a decorated bowl, possibly of Mildenhall ware. Significantly, the condition of both of these sherds is no different to that of the Peterborough bowls, implying that they are not residual and form part of a single contemporaneous assemblage.

Although generally of small size, most of the sherds were quite fresh, with original surfaces surviving well. There is no indication that any of the Neolithic pottery is residual in its context, although given the fragmentary nature of the vessels the sherds are unlikely to represent primary refuse, and they may possibly have been curated from a midden, or collected from hut or other surfaces, for re-deposition in the pits. The homogenous nature of the pottery assemblage, along with the similarity in the form and fill of the pits, suggests that the material relates to either a single episode or consecutive episodes of transient occupation.

The flint assemblage from the pits, and from the site as a whole, was fairly small (168 pieces of struck flint of which 56 were recovered from the Neolithic pits) and can be broadly dated to the later Neolithic and early Bronze Age. There were, however, recognisable earlier Neolithic elements within it. Of particular interest was the relatively frequent occurrence of flakes struck from polished implements of both flint and fine-grained stone. Nine flakes, originating from at least six different polished implements were recovered. Two flakes, apparently from the same tool, were recovered from each of the Neolithic pits F.90 and F.93, with flakes from two different implements as residual finds within Iron Age features in the immediate vicinity of the pits. That flakes from the same, re-utilised, tool were recovered from within the two pits (unless material had been dug out of one for disposal or placement within the other) would also indicate a distinct and short-lived period of occupation on the site. The lithic assemblage (primarily composed of flakes and implements), with its lack of cortical flakes and knapping debris, indicates the absence of primary flint working within the area of the site, or at least within the immediate vicinity of the pits.

The quantities of pottery, flint and bone within the Neolithic pits, along with the presence of charcoal, and the grouping of the pits within a confined area, points to the deliberate disposal of either primary or secondary domestic waste material from a relatively short-lived episode, or episodes, of occupation. The far more extensive (earlier) Neolithic occupation recovered to the west (Wait 1993) also appeared to have been temporary, perhaps a single phase settlement situated to exploit the low-lying riverside meadows that would have lined the valley floor.

#### *Late Bronze Age/early Iron Age*

##### Figures 3 & 4

The area contained scattered and seemingly unstructured remains of probable late Bronze Age occupation (the paucity of finds leaving open the precise dating of certain features which could be pushed into the early Iron Age). The primary landscape-related feature, ditch F.133, crossed the site from north-west to south-east and bore no spatial relationship to any subsequent ditched features. Its recorded length was 72m, extending beyond both limits of excavation, its width variable up to 0.90m and its depth, in the one excavated section, was 0.25m. Two possible (unexcavated) ditches, F.193 - 4, recorded in the western trenches contained similarly pale compact silt fills and ran south-west at right-angles to F.133. F.193 appeared to butt-end within the trench but is likely to have been truncated. The fills of all three were very pale and compact yellow-grey clay silt.

Ditch F.148 to the north of F.133, although with a similar fill type and profile, did not lie on the same alignment (if the ditch lengths were continued they would converge at a point to the west). It would be possible to assign the ditch to this early phase of activity by its form and fill, however, while the excavated section produced small amounts of worked flint and degraded bone, surface collection provided pottery sherds of the middle/late Iron Age and it is perhaps more likely that it represents an early cutting of the later Iron Age enclosure ditch (see below: The middle/late Iron Age; Phase 1).

Discrete features clustered in two main groups to the northern side of F.133. At the south of the site a shallow linear feature, F.175; a circular fire pit 1.10m in diameter, F.191; an irregular pit F.198, and a larger 'balloon-shaped' pit F.177. F.177, aligned north-south, was 5.00m in length, its bulbous northern end 1.40m wide, the elongated southern end narrower with a depth of 0.50m. The very pale, leached 'natural' looking fills of the features, similar to those of the ditches, prevented their recognition until rain-soaked on the final day of excavation. All but F.198 were partially excavated.

At the north the second cluster contained two small shallow pits F.84 and F.171; a shallow fire pit F.87, and a large irregular pit F.85, up to 1.80m across at its widest point and 4.00m in length although truncated at the north. The pit contained c. 24% of the total bone assemblage recovered from the site, both cattle and sheep were present but the majority of the fragments were unidentifiable. To its east a second, unexcavated, 'balloon' pit F.200 was very similar in form to F.177, 4.20m long and 1.30m wide at its northern end.

To the south of F.133 two small unconnected and unexcavated pits F.134 and F.99 are assigned to the phase by their fill types and surface finds of worked flint.

A large straight-sided pit, F.83, possibly a well (Figure 8a), lay within the northern cluster of features. It could not be accurately dated from finds evidence. For discussion it has been placed in a later period (see below: middle/late Iron Age; Phase I), however, it remains possible that it formed a part of this earlier phase of occupation.

## Discussion

The long, straight ditch F.133 appears too shallow, even allowing for truncation, to have proven much use as a barrier in the sense of an enclosure ditch, and running perpendicular to the slope of the land the ditch could not have served as drainage. If, however, it is seen as contemporary with the two ditches at the west, F.193 and F.194, the three could perhaps be seen as part of a formal ditched field system, an initial

large-scale division of the land with ditches marking out the boundaries of extensive individual plots.

The on-site settlement evidence for the Bronze Age, like that of the Neolithic, again suggests a relatively short-lived episode, or episodes, of occupation. Scattered groupings of pits and fire pits but no structural remains. Interpretation of the two 'balloon-shaped' pits is difficult and their function unknown, the excavated pit at the south, F.177, was large deep and steep-sided but with a paucity of finds relative to its size and with a very distinctive form, a bulbous northern end and straight, narrow channel at the south. The unexcavated pit at the north, F.200, was identical in shape and in its surface fill. The pit to the west, F.85, was broader and shallower and contained large quantities of bone as well as pottery sherds and fragments of burnt clay and can be seen to have had waste material dumped within it as either a primary or secondary function. The remainder of the features, where excavated, were predominantly shallow fire pits, again indicative of transient occupation.

From surface collection and limited excavation of the features a very small assemblage of 45 struck flints was recovered, making detailed interpretation and dating difficult. The overall impression is of the later Neolithic/early Bronze Age with one flake, from pit F.177, struck from a polished implement of probably early Neolithic origin. While possible that the piece was simply residual, the wide occurrence of these polished flakes (such as within the Neolithic pits and later features surrounding them) suggests the deliberate re-utilisation of far earlier tools, certainly into the later Neolithic and possibly into the Bronze Age period.

A number of the features produced flint or shell tempered pottery sherds similar to Bronze Age and early Iron Age material elsewhere in the region. Pit F.85 produced 2 large sherds of a distinctive white shell tempered pottery with a finger-tip impressed rim, apparently from a large barrel shaped vessel. The form and the distinct fabric suggest a middle/late Bronze Age date. Other probable Bronze Age/early Iron Age material was in the form of small sherds only distinguishable by their fabrics and while it is possible that they were residual the absence of any later material would seem to make it unlikely. F.133 produced abraded sherds of a similar fabric to those found in F.85 while those in Features 84, 175, 177 and 191 were flint tempered.

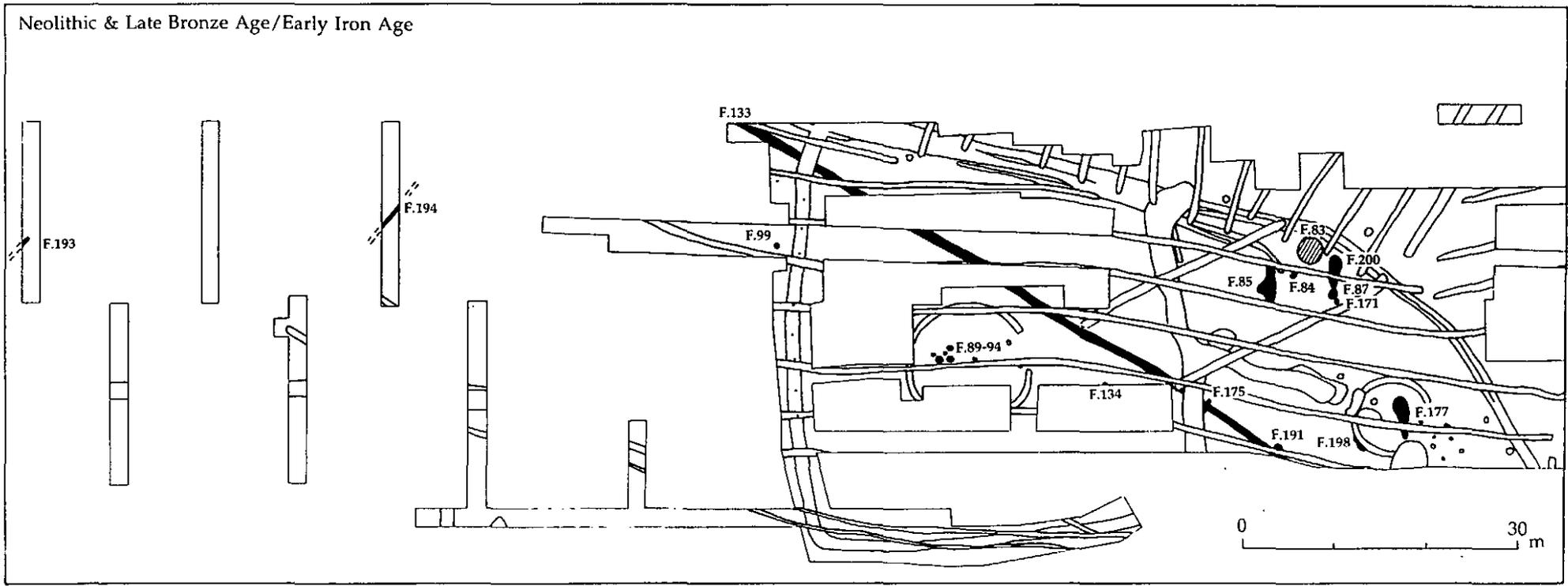


Figure 4

## *Middle/late Iron Age*

The three phases of the Iron Age occupation are separated by stratigraphic evidence alone. All contained pottery dateable only to a very broad middle/late Iron Age period. The separation does not necessarily imply any great difference in time-scale between the phases, despite the obvious organisational changes within the settlement.

### Phase I: Primary Enclosure.

#### Figures 3 & 5

The enclosure formed a lopsided rectangle, or D-shape, with its long axis west to east. The total area of the enclosure exposed by excavation was 2500m<sup>2</sup>, a quarter of a hectare, though it extended beyond the limit of excavation at the south-east. The enclosure was formed by ditches F.75 and F.76 at the north and east and by F.180 at the west and south. The total length of F.75/76 was 94m, extending beyond the southern limit of excavation. Their widths were up to 1.20m and depths to 0.40m, their profiles generally a broad U-shape. Ditch F.75 was a recutting of F.76 on its outer, north and eastern edge, thus probably placing its associated bank on the inner, western edge of the ditch. This was possibly corroborated by redeposited or slumped natural sands and gravels recorded as entering the western side of the re-cut F.75 at the southern limit of excavation where the lines of the two ditches converge (Figure 8b). While not particularly deep this southern part of the ditch was one of the few archaeological features to be detected by the geophysical survey.

Ditches F.142 and F.143 at the north-western part of the enclosure were the continuations of F.75 and F.76 respectively, their surface fills similar to that of F.75. F.180 at the west and south of the enclosure was 82m in length, extending beyond the limit of excavation, its width c. 1.50m and its depth, in the one section excavated, was 0.40m, its profile a shallow 'U'-shape.

Ditches F.164, F.147 and F.148 (with F.144 to the west probably representing the continuation of F.147) converge at a point inside the northern enclosure ditch and are cut out by the later, larger enclosure ditch F.146 (see below: Phase II). F.164, a short, narrow truncated ditch length with a fill similar to that of F.76 may possibly mark the original line of an eastern boundary ditch to the western half of the enclosure. The feature remained unexcavated but was recorded as butt-ending to the south. F.147 and F.148 also butt-ended at their eastern ends while F.147 curved down southwards. Their widths were 0.75m and 0.60m respectively, depths 0.45m and 0.16m, their fills pale compact silts. The fill of F.148 was very similar to the earlier, possibly Bronze Age ditch, F.133.

## The Ring ditches

The enclosure surrounded two ring-ditch house gullies, of which F.135, fourteen metres in diameter, sat central to the western part of the enclosure, its 4.00m wide entrance facing east. Its northern butt end was square in plan with steep sides to a flattish base, the southern rounded, shallower and with gentler sloping sides (Figure 8b). Two internal postholes at either side of the entrance, F.95 and F.167, may have represented the vestiges of the structures' support, F.95 though shallow was 0.60m x 0.45m with vertical sides and a flat base, F.167 circular, 0.40m diameter and with a 'V'-shaped profile. Three smaller, shallower postholes, F.168 - 70, lay slightly to the west of F.95. While producing no finds evidence their fills and situation suggested they may have been contemporary to the house gully, representing some small internal feature.

A second circular house gully, F.128, lay close to the boundary ditch at the east of the enclosure. Nine metres in diameter it had a broader entranceway, even though truncated at the south, again it faced east. The northern butt end was rounded in plan, 0.60m wide and 0.45m deep with near-vertical sides to a narrow rounded base (Figure 8b). The base and the outer, eastern, edge were well weathered. Its fill, a dark grey sandy silt, contained large amounts of pottery (about a sixth of the pottery recovered from the site), charcoal and bone. None of the features within the interior appeared to have had any structural significance or to have been contemporary to the life-span of the gully.

The environmental remains recovered from the two gullies' differed in that, along with the common plant species (fat hen, vetch, clover etc.) the larger house gully F.135, also contained seeds of bullrush and several species of plants found predominantly on wet grassland areas. These species were not present in samples taken from the rest of the Iron Age features on the site.

## Pits and postholes

Ten small postholes, F.104 - 6 and F.152 - 8, at and beyond the entrance to the smaller ring ditch, form two irregular parallel lines on a north-west to south-east alignment. Their diameters varied from 0.30-0.70m and their fills all showed signs of burning, from charcoal fragments to burnt clay, bone and fire-cracked stones. Of those excavated none produced any dating material. Their configuration suggests one square (F.106, F.156-8) and one trapezoidal (F.105, F.152-4) structure, their sizes respectively 2.00m x 2.00m and approximately 2.40m x 3.00m.

Two larger pits, F.159 and F.160, by the contents of their fills interpreted as small rubbish pits, lay further to the east, just within the enclosure ditch, both were shallow ovoids, c. 0.65m x 0.95m. To the north a small posthole,

F.174, cut the fill of an earlier pit, F.85, which lay to the south of the butt end of ditch F.147. F.159, along with hand made and shell tempered pottery produced a single slightly abraded grog tempered sherd, probably dating to the later first century BC or the early Roman period.

A large sub-square pit, F.83, deep and vertical sided, was possibly a well. Its fills were water-affected and naturally accumulated with no evidence of either dumping or deliberate infilling. Its edges were heavily weathered and its basal fill was a waterlogged black organic silt (Figure 8a). It appeared circular at the surface, its diameter 2.75m and depth 0.85m. The pit bears an obvious relationship to the enclosure ditch F.75/76, which either avoids or includes it, or if pre-existing, accepts it into the crook as the ditch bends to the west.

The feature was undateable by finds evidence, having produced only a single sherd of possibly early Romano-British pottery from its surface and a small number of worked flints from its lower fills. The flints, 14 pieces recovered from the quarter of the feature excavated, appear predominantly later Neolithic/Bronze Age in origin. The quantity of bone recovered was particularly high in comparison to most of the features, c. 15% of the total assemblage, the identifiable fragments were exclusively of cattle. The environmental remains identified from within its lower fill were almost exclusively the seeds of soft fruits such as blackberry, raspberry, dewberry and elderberry, along with thorns and the seeds of wild plants such as henbane, fat hen, sedge and nettle. Only one carbonised seed of (emmer) wheat was recovered.

## Discussion

It is possible that the larger of the two ring-ditch house gullies, at the west, was originally set within its own sub-square enclosure and that the enclosure was subsequently extended eastwards to take in the area around the eastern house. If viewed as initially a single square enclosure then ditches F.147 and F.148 may represent earlier cuttings of its northern boundary and/or less dramatic enlargements of the enclosure eastwards prior to the cutting of the main extension F.75/76. Both ditches F.164 and F.147 curved down to the south and cannot be seen simply as earlier cuttings of the line of F.75/76. Any corresponding southern arms to this initial enclosure would lie beyond the limit of excavation. However, ditch F.180 curved up to the north at its eastern end as though to return to form a square enclosure rather than curving to the south to conjoin with the line of F.75/76 to the east.

The relationship that the well F.83 bears to the enclosure ditch F.75/76 is uncertain. The well could be seen as existing prior to the enclosure which swings round either to avoid it or to include it or, conversely, it may have been dug within the enclosure, tucked into the corner where the ditch turns. If, as discussed above, the eastern arms of F.75/76 were an extension

to an original square enclosure then they could be seen as having deliberately enclosed the previously external well. The distinct lack of dating evidence and the fact that the feature has not been deliberately infilled at abandonment but left to fill over time (unlike other larger Iron Age features), may add weight to the possibility of its having been an earlier feature with the enclosure ditch swinging round to avoid rather than enclose it. More pointedly its proximity to the inner edge of the ditch would have prevented the construction of the inner bank at this point. If it had been included within the enclosure the ditch could have been dug further to the north. Conversely, if it were an addition to the enclosure the well would have been dug further south, thus avoiding the necessity of removing a part of the bank. This may indicate that the feature pre-dates the enclosure and was already infilled at the time of its cutting, with the ditch being dug around it to avoid cutting through what would have been a broad wet hollow. The environmental remains recovered from its lower waterlogged fill were overwhelmingly the seeds of soft fruits such as blackberry, and of the more common wild plants such as henbane and sedge. Just one wheat seed was identified. The seeds would either have come from plants growing in and immediately around the pit, or from food remains. The scarcity of the remains of cultivated crops may add weight to the argument that the pit/well formed part of the earlier, possibly Bronze Age, cluster of features which do not appear to be directly agriculture-related, representing a more transient occupation.

Neither of the two house gullies contained any evidence of how the structures within them would have been constructed or supported. No central or peripheral postholes or stakeholes remain. The seeming lack of major truncation of either the natural surface or the overlying buried soil would appear to rule out the removal of deep structurally supporting postholes by erosion or subsequent ploughing. The mechanical excavation of the site would have removed the buried soil layer and the surface of the natural gravel at its interface, but this would account for little more than a few centimetres of truncation and if structurally supporting timbers were dug in they would have had to have been cut to a greater depth than that of the natural ground surface.

The ditches were not post trenches dug to take a ring of supporting timbers, their fills were the dumped refuse of abandonment rather than the backfilling of a construction trench. The weathering of their sides also indicates that they would have remained open for a considerable length of time. Even taking into account the possibility of a far drier climate and lower water table during the period of use a gully to drain rainwater into the underlying gravels would seem a practical suggestion. If the not unreasonable assumption is made that structures *did* stand within the gullies then the question is raised as to how they would have been supported. Ring-ditch gullies with no evidence of below-ground structural foundations are not uncommon (Evans pers comm.), if supported on upright timbers they must perforce have been free-standing, within very shallow foundation cuts or sat upon horizontal timber beams

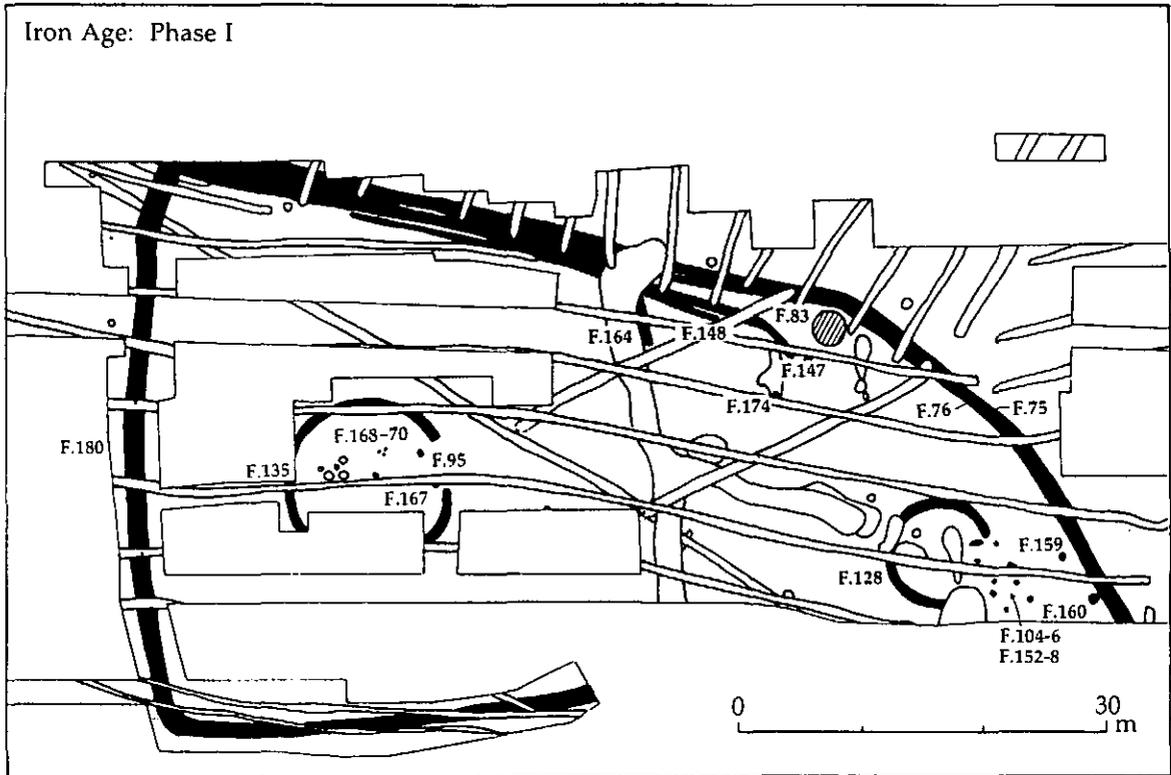


Figure 5

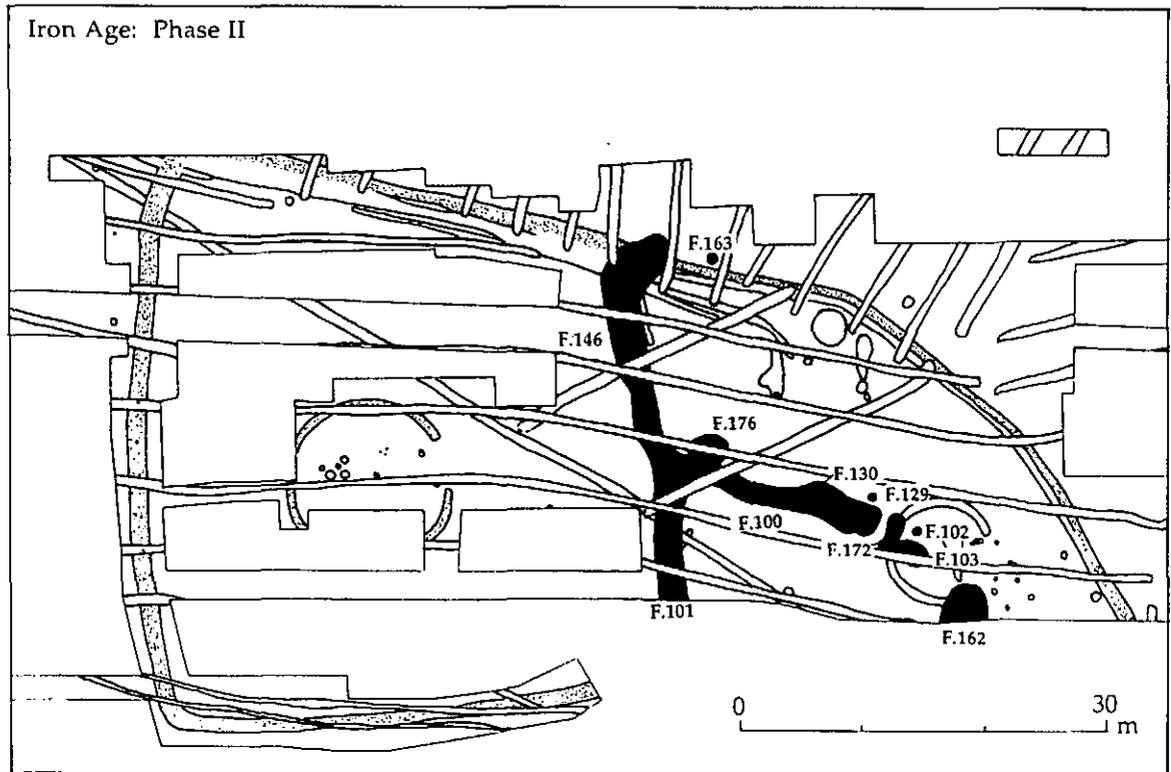


Figure 6

or base plates. If not constructed with upright timbers then perhaps on low supporting walls of clay, turf, wicker or cob, strong enough to take the weight of a timber frame roof.

The postholes to the east of the ring ditch F.128 may have formed one long rectangular or more probably two small rectangular/trapezoidal post-built structures. None provided any dateable material; however, two were truncated by a Roman ditch and as their fill types did not correspond to those of the earlier LBA/EIA phase, they can be placed within the Iron Age period but with no certainty as to whether they pre- or post-date the ring ditch (obstructing the gully's entrance they cannot perforce have co-existed with it). The posthole fills showed signs of *in situ* burning as opposed to containing dumped burnt material, including fire-cracked stones which may have served as packing stones, suggesting that the structures within them may have burnt down. The postholes may either represent the positions of cornerposts supporting a framework of sill-beams to hold a timber framed superstructure, or the upright timbers of a less substantial structure, perhaps a drying rack. Similar structures, in size and form, are not uncommon within Iron Age Settlements (cf. Weekley Hall Wood, Northants; Jackson 1976) though their functions are open to interpretation. On low-lying riverside sites such as Fen Drayton the use of subterranean storage pits for grain or other agricultural produce would be impractical due to the relatively high water table and the possibility of flooding. The postholes may outline the bases of raised storage platforms for grain or other agricultural produce.

#### Phase II Secondary Enclosure.

Figure 3 and 6

The secondary enclosure was set within far broader and deeper ditches with the focus of occupation, at least in the eastern part of the area, shifting to the south. Only a small part of the enclosure extended into the excavated area and no house gullies were present, presumably lying further to the south beyond the limit of excavation.

The main north-south ditch cut, the western boundary of the enclosure, F.146/F.101, respected both the line of the original enclosure at its north, turning to the east and butt ending just beyond it, and the putative division of the enclosure's western and eastern halves. Only the broad butt end of its eastern boundary, F.162, extended into the area of excavation but its alignment also appeared to be north-south.

The northern boundary of the enclosure, F.100, or at least of the part of it contained by the deeper ditches, was seen to cut into the primary fill of F.146 as it swung around to the south into F.101. The southern end of F.146, just to the north of where F.100 enters, had been backfilled with clean natural gravel, giving the impression at the surface that it butt

ended, leaving a gap of 1.20m at its narrowest point. All the ditches were wide and deep (c. 2.50m x 1.00m) with broad U-shaped profiles, F.101 had a narrow rectangular cleaning slot at its base (Figure 9a). Their upper fills were dense pale grey-brown sandy silts with gravel inclusions becoming more frequent lower down, their basal fills were waterlogged black organic silts.

Approximately a third of the pottery recovered from the site came from the ditches of the secondary enclosure, with over 1800 gms, a quarter of the total, from the butt end of ditch F.162. The assemblage is very varied in nature and origins and the pottery is well preserved, not apparently having suffered major post-depositional changes.

A series of large pits lay on the alignment of the east-west ditch F.100. From the west, F.176, a deep ovoid pit, 3.00m x 2.50m, with a gullied base to 0.75m deep, was truncated at its south by the cutting of F.100, its fills were as those of the enclosures' ditches. At its eastern butt end the ditch also cut a large sub-rectangular pit F.130, 7.50m long and 2.50m wide, its upper fill a brown-grey clay silt with frequent gravel inclusions. A smaller pit, F.172, was oriented north-east/south-west, perpendicular to the alignment of the other three. It cut down the line of the earlier house ditch F.128, its size 3.00m x 1.50m with near-vertical sides, its upper fill a compact mottled silty clay with frequent gravel inclusions. F.103, near identical in form and fills to F.176 was aligned centrally between the butt ends of ditches F.100 and F.162, it was 3.00m in length, 0.80m deep and lay 3.00m from the butt end of both ditches. The pits, along with the butt end of ditch F.162, because of their depth and possibly their charcoal-rich fills, were the only archaeological features within the area to have been detected with any certainty by the magnetometry survey.

A pair of large postholes, F.102 and F.129, lay external to the opening between ditch F.100 and pit F.103, their forms and fills were identical, measuring 0.70m x 0.50m, with vertical sides to flat bases 0.25m deep. To the north F.163, a small ovoid rubbish pit, lay outside the earlier enclosure ditches to the east of the butt end of ditch F.146.

## Discussion

There is nothing in the finds evidence to place the filling/abandonment of the features in Phase II at a significantly later period than that of those in Phase I. The remodelling of the enclosure has affected only its eastern part with the western part, and the large structure within it, seemingly untouched. The north-south ditch F.146 cuts in at a point on the enclosure ditch F.75/76 which may have originally divided it into its two component parts. There is no evidence to point to the abandonment of the western half of the enclosure at this time and it may well have co-existed with the revamped eastern half. The eastern house has evidently been abandoned, its southern butt end having been cut away by ditch F.162,

and it is perhaps this unit which has been relocated to the south, to within the deeper cut ditches. It can be seen by the cutting of the two ditches in the later Phase III (see below) that the line of F.75/76 must still have been extant at the time the secondary enclosure was laid out, its ditch perhaps infilled but its associated hedgebank probably still forming an obvious landscape feature. The eastern part of the original enclosure, F.75/76, would then have formed an outer ring to the inner deeper version.

The southern part of ditch F.146 with its clean gravel fill, so unlike that of the northern part or that of F.101 to the south, suggests a deliberate infilling of this part of the ditch. If the filling is seen as intentional, and within the life-span of the ditch rather than at abandonment (possibly by depositing the bank material within it), it could be seen as creating an entranceway to either the western or eastern parts of the enclosure, or as an access between the two. If the latter it would suggest that it was replacing an existing access which had been removed, perhaps by the recutting of the line of ditch F.101 at the south by a continuation of ditch F.100.

The line of large pits beneath and to the east of ditch F.100 can, on finds and stratigraphic evidence, be seen as contemporary, possibly forming an alignment pre-dating the ditch and marking the boundary line. This, however, seems unlikely, the boundary was neither lengthy nor, as far as can be seen, marking a line between two properties but simply closing the northern side of the enclosure.

Two of the pits may be interpreted as forming a part of the original secondary enclosure, the northern side of F.130, beneath the ditch echoes its line, as does its butt end at the east. Its western end does not stop abruptly but converges gradually with the line of F.100, it is possible that it represents, rather than a pit, the original line of the re-cut ditch. F.103 to the east, with its gullied base aligned between the two ditch butts, divides the entranceway narrowing it from nine metres wide to two gaps of three metres each. Its fills were similar to those of ditch F.162 to the south and it should perhaps be seen as contemporary to the cutting of ditches F.100 (or its earlier version represented by F.130) and F.162, forming a double entranceway to the enclosure.

Pit F.172, to the west of F.103, cut down the line of the ring gully at the point where it lay within the western entrance to the enclosure. The pit resembled a robber trench in that it followed the gully and was slightly broader. Situated in the enclosure's entrance it is possible that the softer fill of the gully, silted up and backfilled with waste material, has been deliberately removed and replaced by the firmer fill of F.172, a compact silty clay with some gravel and little in the way of dumped refuse within it. Alternatively, and perhaps more likely, the pit may represent one or more phases of posthole cutting at the enclosure entrance, little was excavated and its depth is unknown. The fourth pit, F.176, was similar in form and fill to F.103 but no interpretation of its possible function can be

offered unless it originally served a similar function to F.103, forming a second double entrance-way between ditch F.146/101 and the short ditch-length of F.130, prior to the cutting of ditch F.100.

Postholes F.102 and F.129 straddled the ring ditch F.128 and neither can be seen as contemporary to it. Their relative positions to the western half of the entrance to the secondary enclosure make it possible that they relate to this phase, although neither produced any dating material. F.129 lay at a similar distance from F.130 (possibly the original line of ditch F.100) as F.102 did from the central pit F.103.

A wide range of plant species were identified from environmental samples taken from the pits and ditches, predominantly the more common wild plants such as fat hen, henbane, sedge, sorrel and blackberry. The remains of water-plants such as pondweed and bullrush, and the egg cases of water fleas, were recovered from the bases of the deeper features, indicating that they were open and contained standing water during the formation of their lower fills. The pits and ditches, along with the larger house gully F.135, also contained several species of plants normally found growing in wet grassland areas, species which were not identified within any earlier or later features on the site.

### Phase III

Figures 3 & 7

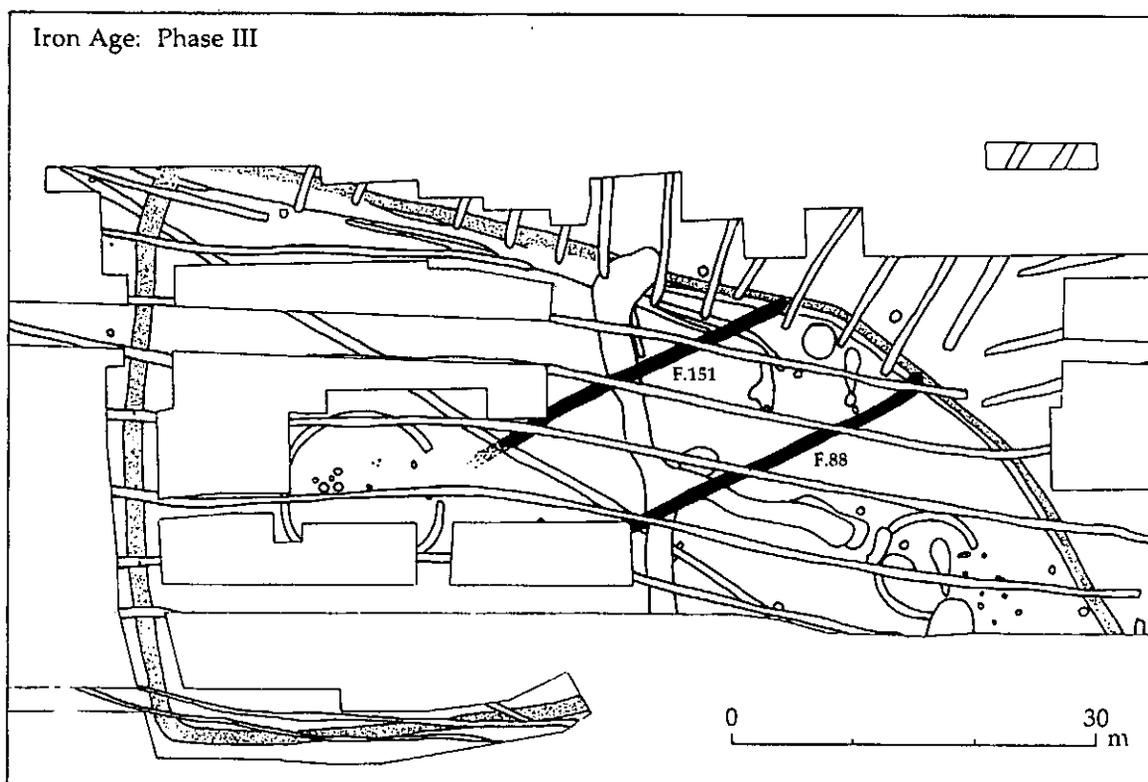


Figure 7

A relatively minor phase of activity at first glance, two ditches on an east-northeast/west-southwest alignment, F.88 and F.151, cut diagonally across the centre of the site. The ditches were parallel and 10m apart, their lengths c. 26m though probably truncated at the west, their widths to 1.00m and depths to 0.40m. At their east they butt-end on the line of the earlier enclosure ditches F.75/76, cutting through the fills of both, and must therefore be seen as respecting this line. To the west both cut across the filled ditches of the far more substantial secondary enclosure (F.100, 101, 146) and petered out on gently rising ground at a point on the far earlier, possibly Bronze Age, ditch F.133.

#### Discussion

It can be conjectured that the presumably large banks that stood above the ditches of the secondary enclosure have, at or before this period, been completely removed while the bank and hedgeline of the earlier enclosure was still extant and still performing some boundary/enclosure function. If the western and southern boundary hedgebank of F.180 was also still in place the ditches could be seen to be retaining the earlier enclosure as an enclosed field system while dividing it into three unequal parts. If the truncated line of the northernmost of the ditches, F.151, was continued by six metres it would bisect the ring ditch at the west of the enclosure making it unlikely that the structure could still have been in use. Thus the primary enclosure and at least the northern part of the secondary, have at this point both ceased to function as enclosures for occupation. The primary has, however, been returned to some kind of use while the secondary has been seemingly disregarded. That both ditches apparently stop exactly on the line of the Bronze Age ditch F.133 has to be seen as purely coincidental.

The subsequent Romano-British ditch system (see below) can also be seen as respecting the earlier enclosure boundary while ignoring the more substantial later one (Figure 9).

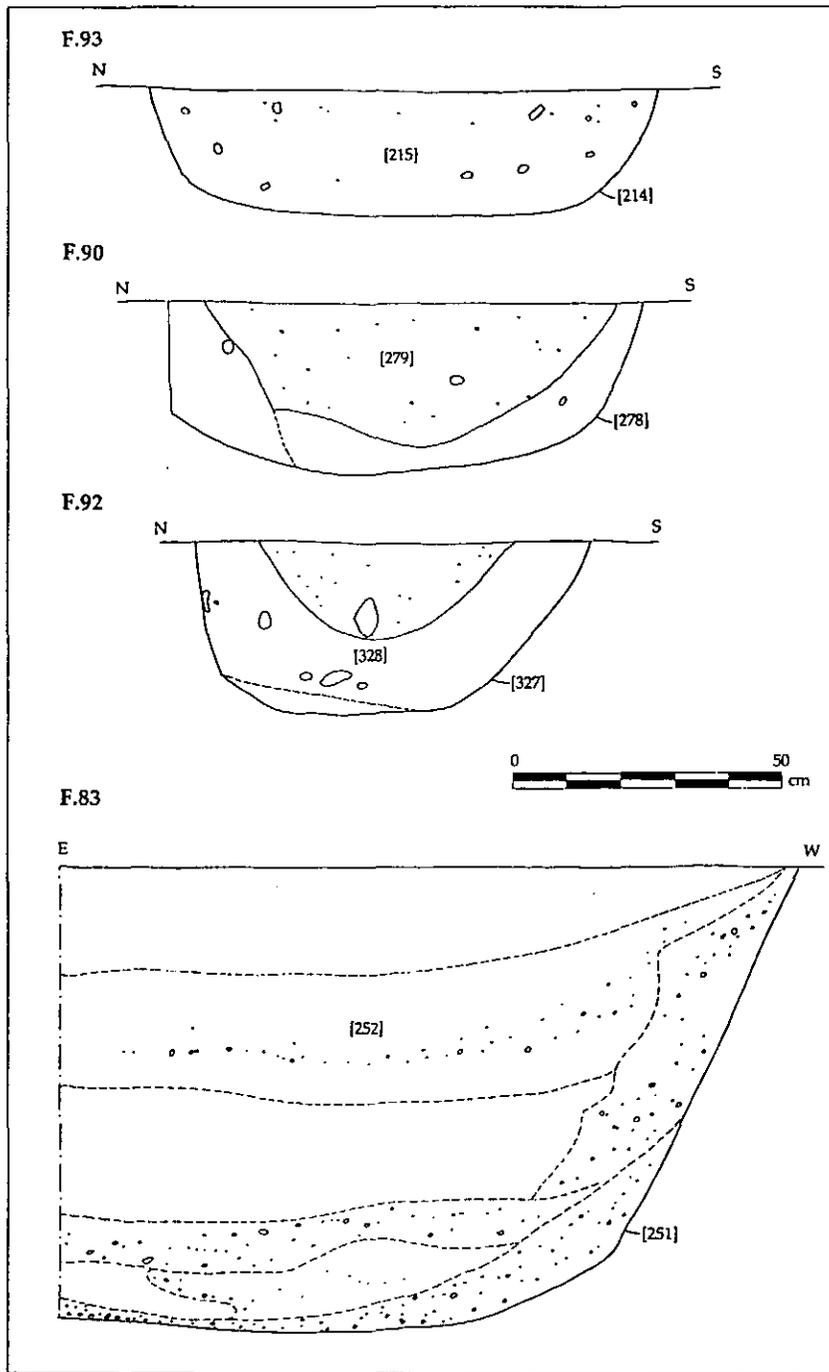


Figure 8a

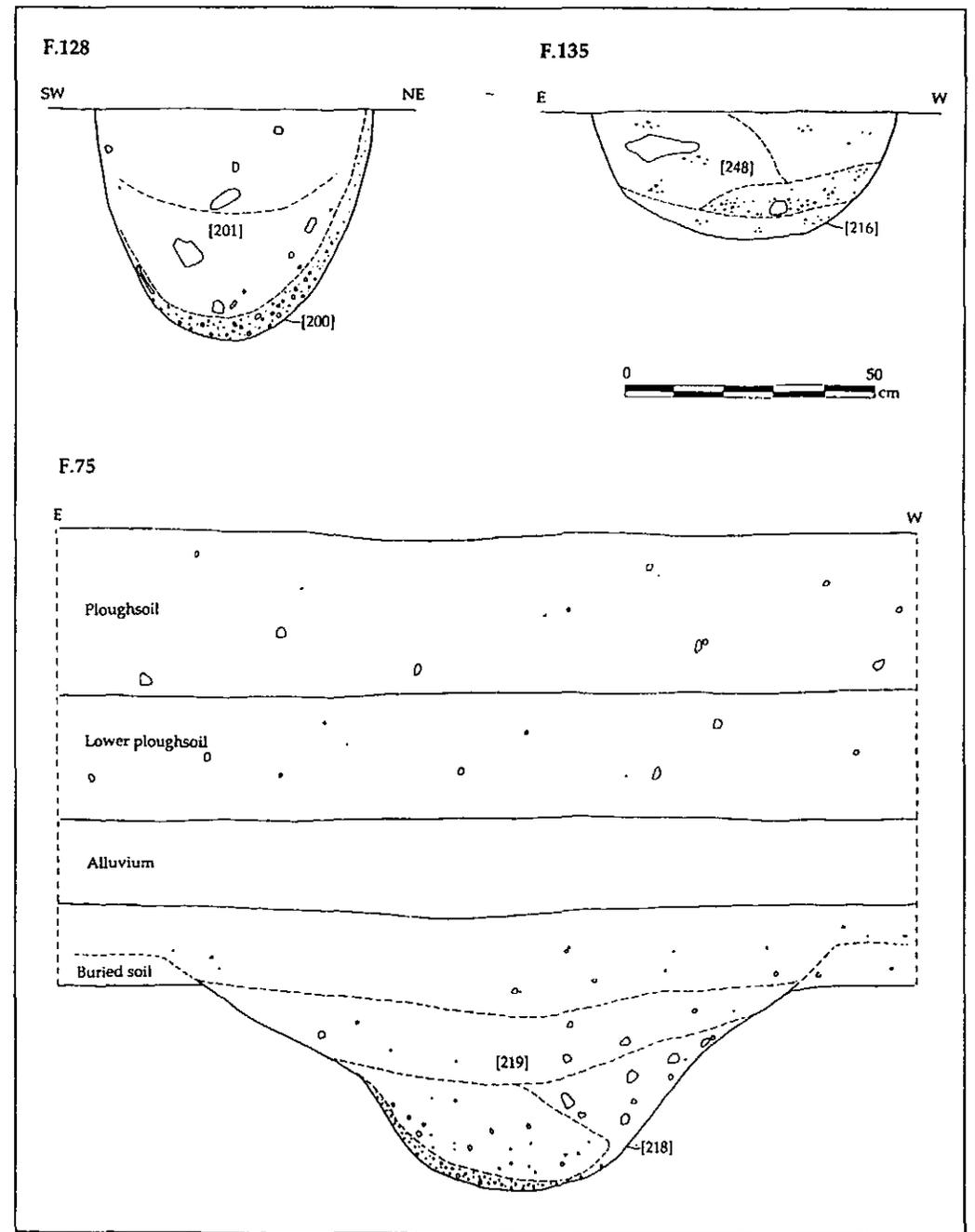


Figure 8b

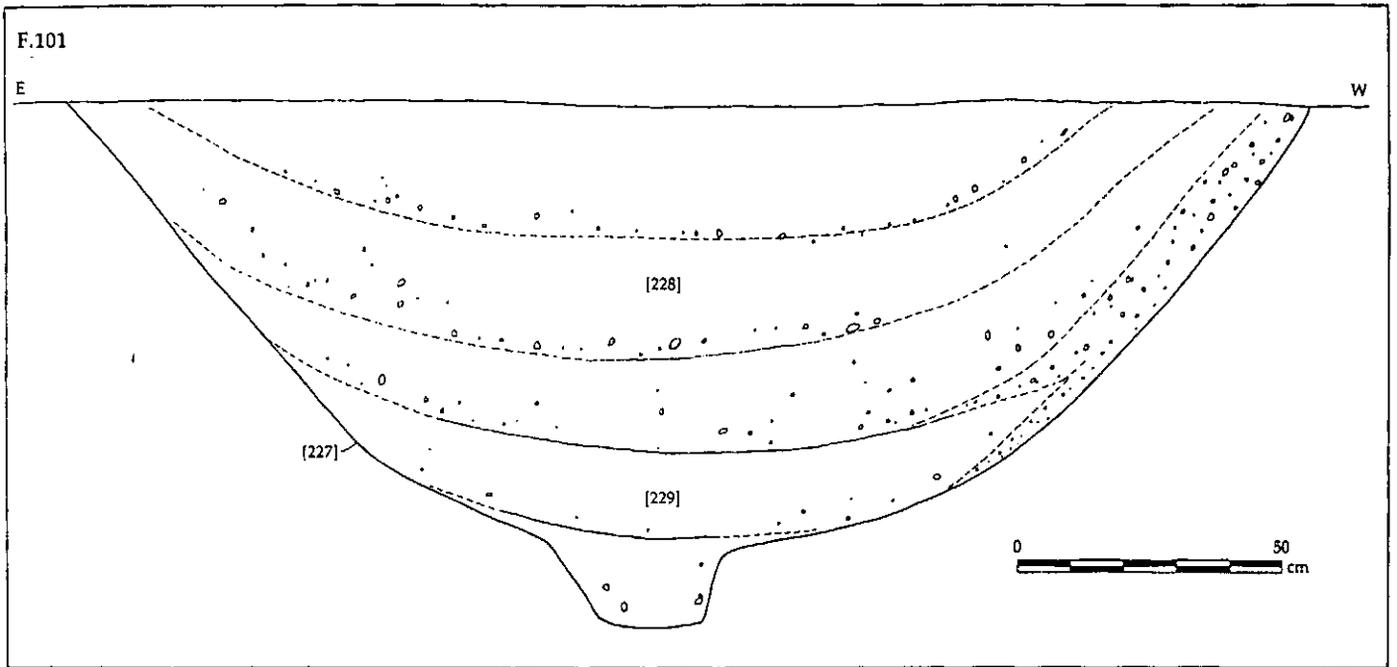


Figure 9a

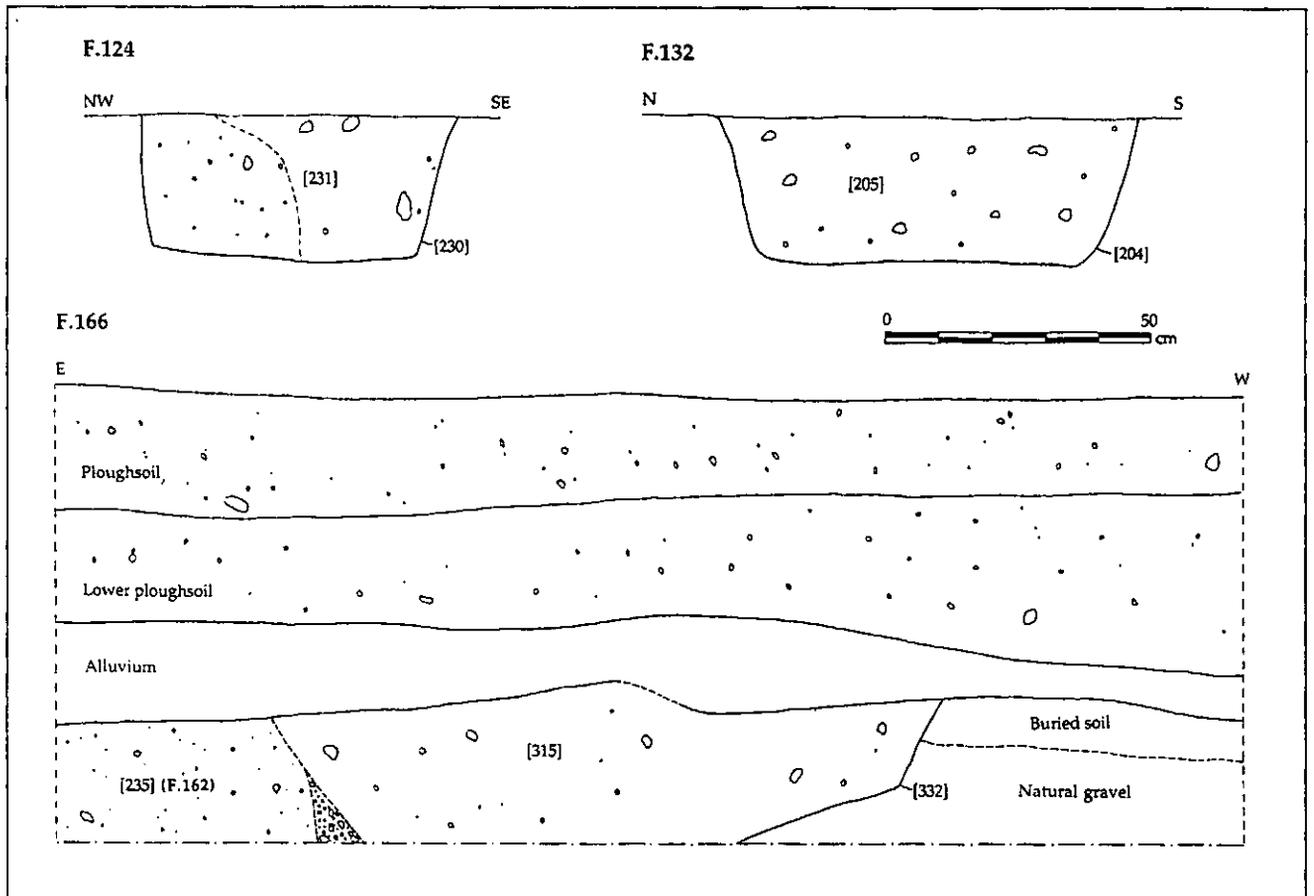


Figure 9b

## *Romano-British*

### Figures 3 & 10

A densely packed and extensive Romano-British field system consisting of 30 separate recorded ditched features covered the entire area of the site (by the systems configuration at least a further eight ditches can be postulated as lying within the area under investigation). The ditches lay on five principal alignments and were parallel within these alignments and spaced c. 4.00m apart (with some variation from 3.50-5.00m). Their lengths varied from 10m to 92m though none lay fully within the area of excavation.

The groups of ditches were organised as follows, clockwise from the north-west of the site:

1. Five ditches on a north-northeast/south-southwest alignment, F.183, 182, 141, 140, 139.
2. Three ditches on a north-south alignment, F.138, 137, 136.
3. Five ditches on a north-east/south-west alignment, F.78 - 82.
4. Eight ditches on a west-southwest/east-northeast alignment, F.107, 109, 113, 117, 150, 124, 122, 120.
5. Eight ditches on a west-northwest/east-southeast alignment, F.190, 166, 132, 150, 117, 149, 145, 179.

At the eastern ends of group 4 (F.107 etc.) a broader, deeper ditch, F.118, cut north-south and beyond it a further group of ditches, represented within the trenches by F.96 and F.97, approximately continued the former alignment. Of the ditches which were recorded as bearing a relationship with F.118 three butt ended before reaching it and one, F.120, entered it at its western side with the possibility of F.118 having been recut through its fill (relationship recorded in plan but not excavated).

At the far west of the excavated area (in the north-south trenches) two ditches, F.195 and F.196, were the continuation of alignment 5, F.195 butt-ended and was probably the continuation of F.160, F.196 probably that of F.166. F.199 an unexcavated ditch butt at the southern limit of excavation and equidistant from the butt ends of ditches F.132 and F.124, by its form (0.70m wide and square ended) and fill type is possibly representative of a further alignment of north-south ditches. If the alignments of the ditches to the west and east (groups 5 and 4) were continued it would require group 5 to butt against its western side and group 4 to meet it ditch butt to ditch butt.

The three groups of ditches on roughly north-south alignments, groups 1 - 3, all butt ended along the line of the northern boundary of the larger, earlier, Iron Age enclosure. Those on west-east alignments, groups 4 and 5, butt end just to the east of the enclosures eastern boundary, two

however, F.117 and F.150, turned to form continuous ditches on both alignments.

Six of the ditches were sample excavated, five of their profiles were square and shallow, widths c. 0.70m and depths c. 0.30m with near-vertical sides and flat bases (Figure 9b). The sixth, F.82, was broader with a shallow U-shape. The ditch fills were predominantly pale silty clays with gravel inclusions, that of the north-south ditch F.118 a sticky grey/brown clay with organic content towards its base.

## Discussion

The ditch systems' function remains open to interpretation. It was not aligned with the contours of the field and does not appear to have served a drainage function. Only the northern and far eastern ditches (groups 1 - 3 and F.96 - 7) could be seen as draining down towards the river. Those at the east (group 4) butt end before they reach the deeper north-south ditch F.118, and those at the west (group 5), if drainage, would be draining uphill. Except for F.118 and F.82 their profiles, where excavated, were square and vertical sided, not suggestive of ditches exposed to water action or open to the elements - open drainage ditches would soon erode to a more bowl-like profile. Their profiles were more reminiscent of 'construction' trenches, being backfilled shortly after digging. Arguments against their use as drainage can also be used against the systems' use as irrigation. The one section excavated against the limit of excavation where the buried soil and alluvium had not been removed, showed the alluvium to seal the ditch fill, not to infill the ditch itself (Figure 9b:- the section was cut at an oblique angle to the ditch thus its width appears greater and its sides, near-vertical in reality, appear splayed).

That the system could somehow be the result of early ridge and furrow, lazy-bedding or strip field agriculture is refuted. The ditches, or trenches, are demonstrably not the truncated remains of furrows, neither was there any evidence of ridges between them preserved beneath the alluvium. If they represent some form of strip fields, be they arable or pastoral, the 'field' between the ditches at only 4.00m is hardly a practical width for either plough or livestock, the ditches taking up a fifth of the available land surface. There was no evidence either for the spread of midden-related finds by manuring or for the trampling of the ditch edges which would have occurred in water-meadow type pastures.

If, as the evidence suggests, the ditches are seen rather as trenches, being dug and backfilled within a limited time, then perhaps it is the trenches themselves which perform an agricultural or horticultural function rather than the strips in between which are then simply viewed as the spacers and as the access to the crop. Further environmental work may add fresh evidence as to their precise function but at present it would seem possible to attribute the area to horticultural cultivation, perhaps of fruit trees, dug

into the trench beds or, though perhaps less likely, of vineyards. The little slope that existed was down to the east and north, towards the river. Even in a drier, warmer climate the land at this height (c. 4 - 5.00m OD) would perhaps have been too damp for the cultivation of vines, and to set them on a north and east facing slope would seem a little impractical when level ground or south-facing slopes were available. The 1993 assessment (Wait 1993) has shown the cropmark site some 300m to the west (SMR 9667) to form part of a 'large and well-founded settlement site', something akin to a villa, and whatever the systems' purpose it is to this establishment that it probably relates.

A similar system, excavated over a far larger area, has recently been uncovered at Wollaston in Northamptonshire (I. Meadows pers. comm.). This system, covering some 3.5ha, consisted of east-west aligned trenches at distances of 5 - 7.00m apart with north-south aligned spacing trenches, or ditches, at 30-40m intervals. The trench cuts were c. 0.80m wide, 0.30m deep, vertical-sided and flat bottomed, with postholes at short intervals along their length. The system lies some 400m from a known villa complex and is set primarily on the floor of a river valley. They have been interpreted as vineyards and pollen analysis has confirmed this interpretation. The similarities to the system recorded here at Low Fen are perhaps more striking than the differences, their form, size and layout are almost identical. Unfortunately time did not allow extensive excavation and any postholes which may have existed were not recorded.

Like the later phase of Iron Age features the Roman system again respected the underlying primary enclosure (Figure 11). The groups of north-south ditches all butt-ended on or just inside its northern boundary, the east-west ditches either ended or turned just to the outside of the boundary at the east and swung slightly north beyond it to the west. Again, like the later Iron Age phase, they disregarded the larger ditches of the secondary enclosure. It has been suggested above that what bank existed with the primary enclosure would probably have stood on its inner edge. The east-west ditches frequently cut across this presumed hedgeline while the north-south ditches would have butted against it. It is therefore possible that the former were merely respecting the 'echo' of the enclosure by angling around the latter and that only this northern ditch line, as a landscape feature, has been utilised as a boundary to this part of the Roman system.

Romano-British

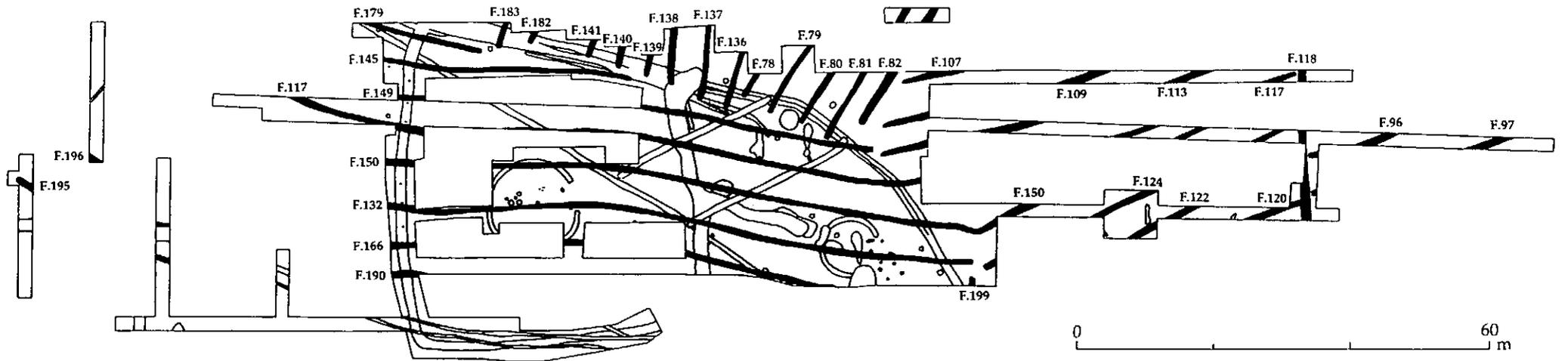


Figure 10

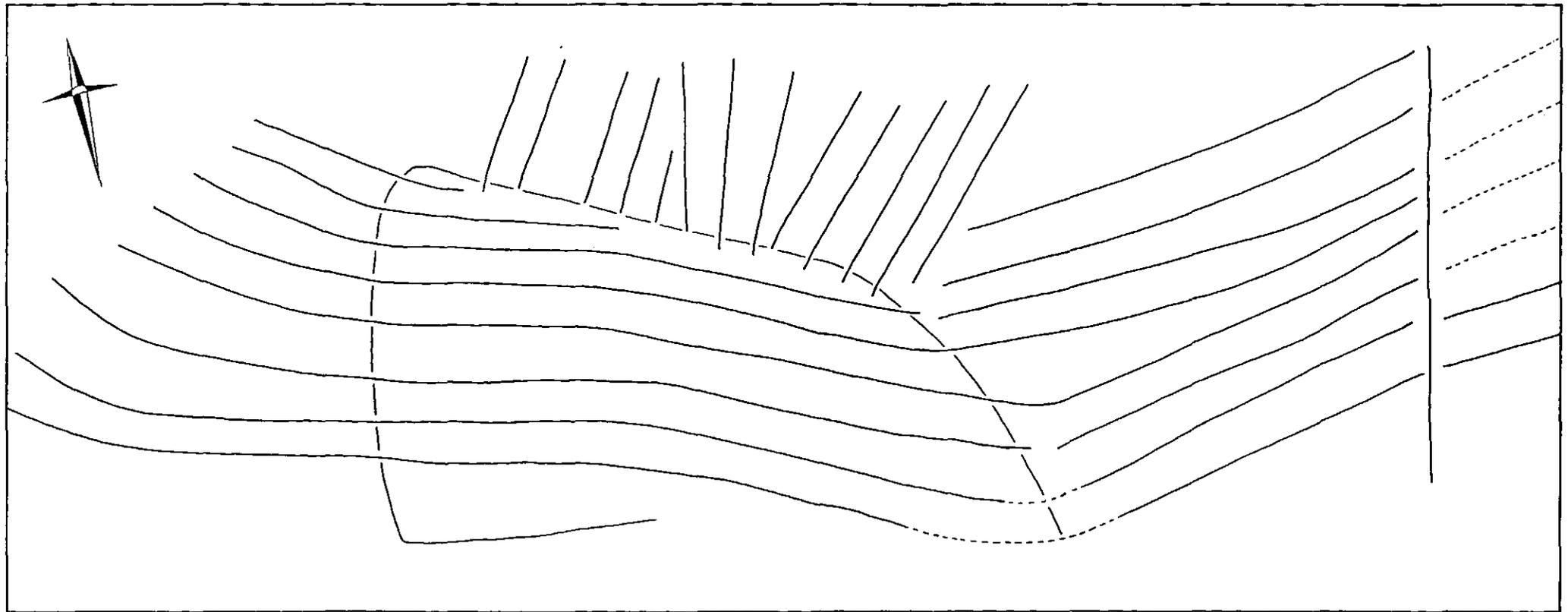


Figure 11: Romano-British trench system in relation to the primary Iron Age enclosure

## *Medieval and Post-Medieval*

Figure 12

Throughout the Medieval and post-Medieval period the area was given over to open pasture, its low-lying and damp situation, along with heavy alluvial clay soils, making it unsuitable for arable farming. The few archaeological features of this period reflect this, being for the most part large-scale land divisions.

Aligned north-east/south-west across the central area of the site were a number of irregular patches of disturbed natural gravel, recorded as F.86 and F.131. They contained a loamy grey soil with frequent coal and slag-like inclusions. These areas were avoided during the limited excavation time as being late intrusive disturbance.

Two large ditches at the west of the site remained unexcavated after inspection of their fills suggested that they were probably post-Medieval in origin, both contained very dark chocolate-brown loamy clay fills. F.192 ran west-northwest/east-southeast parallel to the current field boundaries. Its length, across three trenches, was 42m, its width 2.00m. The ditch shows up as a faint trace on the geophysical survey and can be seen to continue for the length of the field. F.189 ran at 90° to the south of F.192 across Trench III and was 1.90m wide. F.192 truncated the southern side of the Romano-British ditch F.166.

A roughly north-south alignment of eight small postholes, F.181, ran down the centre of the western boundary ditch of the earlier Iron Age enclosure. The posts were set 3.00m apart over a distance of 24m. The postholes were evidently late, containing the decayed stumps of their original posts and a soft brown loamy fill. At the south-west of the site running from east to west before veering to the north-west was a rutted trackway in the natural gravel, F.186, roughly two metres wide and, within the area of excavation, 57m in length. A small pit or large posthole, F.185, cut through a Romano-British ditch at the far north-west of the site, the feature was not excavated.

## Discussion

The patches of disturbed ground, F.86/131, approximately correspond to the line of a Medieval boundary/drainage ditch, the Oxholme ditch, still extant to the north-east of the site, which crossed the field until the 19th century (Appendix 3). It is possible that they represent the filled remnant of this ditch, no other late features correspond to its line. It may represent one of the faint north-east/south-west cropmarks plotted by the earlier aerial photographic assessment. The north-south post alignment was demonstrably late in origin, and echoes the alignment of the post-Medieval ditches to the west, F.189 and F.192, but not that of the Medieval

field system which ran at 45° to it. Sadly no attempt can be made to claim any form of prehistoric to post Medieval/Modern continuity, its relationship with the Iron Age enclosure ditch being put down to coincidence.

Beyond the limit of excavation at the south-east of the site is a hollow-way which presumably once opened out, or extended, into the field. The trackway F.186 was presumably a grubbed out continuation of this route and led to the junction of ditches F.189 and F.192.

#### *Indeterminate and unexcavated features*

Several features cannot by their location, their fill type or by finds evidence on excavation be placed within a particular period.

At the far north-west of the site, at the corner of the primary enclosure where F.75/76 turned south into F.180, a ditch F.178 appears to be cut at its northern side by F.76, this relationship was not excavated and remains uncertain, as does its relationship with F.180. The ditch was probably Iron Age in origin and could possibly be seen as forming an extension of the enclosure to the north-west though no other ditches existed to corroborate this. A small circular pit, F.184 lay to the east between the butt ends of two Roman ditches.

A small circular pit F.173 just beyond the enclosure ditch F.75/76 at its north-eastern corner contained quantities of degraded bone but no dateable material, its fill type and the state of preservation would place it in the Iron Age or earlier. A narrow truncated ditch F.187 cut across enclosure ditch F.180 at the south, it was itself truncated by the trackway F.186 and was possibly later Iron Age or Romano-British in origin. F.188 a large pit or ditch butt at the western end of Trench III by its fill type may have been Iron Age or earlier, or alternatively a natural feature. It remained unexcavated.

#### *Natural Features*

Two small river or stream channels F.108 and F.197, were recorded running approximately south to north toward the course of the River Ouse. F.197 lay at the western end of Trench IV and represented part of the large channel recorded by the strongest response of the magnetometry survey. The broader and shallower F.108 lay to the east of Trench I. Both occupied slight depressions in the level of the natural subsoil. Towards the east of Trench II were three irregular pits or natural depressions/features, F.121, F.125 and F.127. In Trench I, to the east of the stream channel F.108 were a series of red-stained irregular pits or disturbances, probably the result of tree action: F.110 - 12, F.114 - 15, F.116 and F.119.

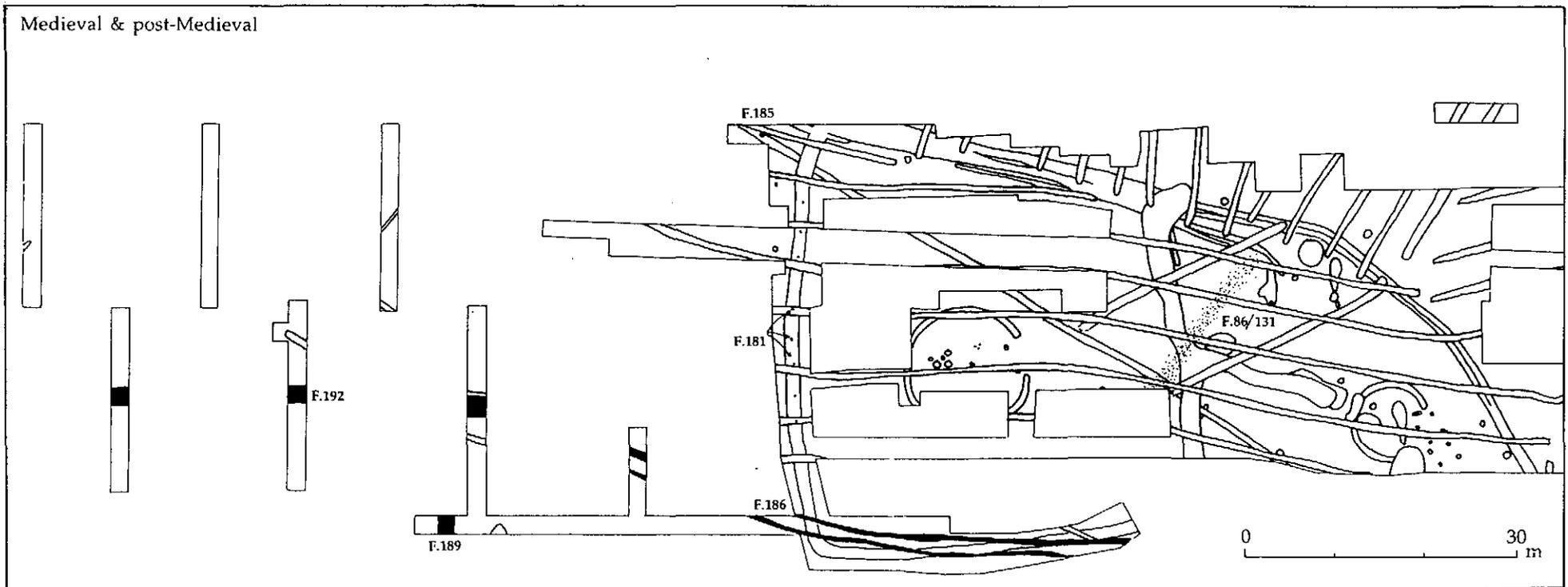


Figure 12

## *Concluding discussion*

### *Neolithic*

Evidence for the Neolithic occupation of the site, limited to a handful of small pits, is thought to represent small-scale and short-lived settlement. The recovered pottery assemblage includes pieces from at least nine separate vessels, predominantly Peterborough Wares. However, at least one earlier Neolithic plain bowl was represented, along with a decorated sherd of, possibly, Mildenhall ware. These earlier sherds could either be contemporary or curated. Their condition was no different to that of the Peterborough bowls and, if curated, they must perforce have come from within a sealed context for deposition within the pits. The assemblage as a whole may not represent primary refuse dumping, perhaps having been removed from a midden source for re-deposition.

Other finds of Peterborough Ware are known from the immediate area of the Ouse Valley to the north, at Fenstanton and Meadow Lane, (Green 1961), at Barleycroft Farm (Evans & Pollard 1995), and at Haddenham (Evans & Hodder forthcoming). Alongside these, the Fen Drayton pottery forms one of the largest closed assemblage of Peterborough Ware from the Cambridgeshire Great Ouse Valley.

While the overall impression gained from the lithics within the pits was of a later Neolithic assemblage, struck flint flakes from earlier Neolithic polished implements were also recovered (further flakes were recovered within Iron Age features surrounding the pits). The re-use of the polished tools would probably have occurred later than the earlier Neolithic. The question is raised as to whether the activity represents simply a by-product of the use of an easily accessible raw material - the chance finds from an earlier era - or a deliberate act of destruction of the 'symbols' of that time.

The results of the previous excavations a few hundred metres to the west (Wait 1992 & 1993) concluded that the Neolithic settlement was short-lived - phases of settlement situated to exploit the low-lying river-side locale. The initial occupation, with dating based on the lithics recovered, was put in the earlier Neolithic period, c. 4000 - 3000 BC. While it is most likely that the early pottery forms and flakes of polished tools within the pits at Low Fen represent curated items, perhaps collected from this wider area of earlier occupation.

### *Late Bronze Age/early Iron Age*

The later Bronze Age (or possibly the early Iron Age) saw the initial discernible spatial organisation imposed upon the landscape in the form of ditched boundaries. The principal feature within the site was the long straight ditch F.133. In the limited area exposed it cannot be known exactly what purpose it may have served. It ran perpendicular to the slope of the

land, approximately on the 4.50m OD contour, possibly marking the boundary between the higher land to the south-west and the low-lying land along the borders of the river. It may have marked the boundary of a settlements' agricultural holdings, on similar lines to a reave system. However, taken in conjunction with the two ditches at right-angles to it at the west the ditch is probably best viewed as forming part of an extensive field system. Excavations on a far broader scale would be necessary in order to place the ditch in its wider context.

Later prehistoric ditches similar in form to F.133, ephemeral and rather ineffectual, were recorded at Meadow Lane to the north-west on the opposite side of the river, following the line of both earlier pit alignments and later Roman ditches they are thought to have existed as boundary markers rather than serving a strictly functional purpose (Pollard 1995). Nearby, at Barleycroft Farm, with a later Bronze Age date, long parallel ditches define a field system extending over more than 5ha (Evans & Pollard 1995).

The features associated with the ditch within its broad phasing may not necessarily have coexisted with it, neither dating evidence nor spatial distribution can locate them in time with any precision. That the features, particularly in the northern group, are clustered together may suggest that they are broadly contemporary within themselves. Even if the possible well, F.83, is taken to form a part of this group they again would appear to represent relatively short-lived occupations.

Although much of the material was degraded and of a small size there is no evidence to suggest that it was residual. Apart from a broad assignation to the LBA/EIA, no fixed dating can be put on the activity and the limited quantity of finds material would not suggest a particularly extended period of occupation.

### *Iron Age*

The bulk of the pottery recovered from the excavation (and therefore the primary means of closely dating the features) belongs broadly to the middle/late Iron Age period. Providing a closer dating within this period is difficult, and largely depends on the presence of certain wheel-made pottery forms or on the recovery of datable metalwork. Neither were recovered from the site.

It is extremely difficult to date closely either the beginning or the end of the main phase of occupation. A significant proportion of the pottery can be classed as 'scored wares', with deep irregular scored lines running across the body. Scored and plain ware pottery of the types recovered were in use throughout the later Iron Age. In the East Midlands the proportion of scored ware on sites increases through the period, but it is not known if the same can be said within Cambridgeshire. Several of the features may be late in the later Iron Age. A small pit to the north of the enclosure, and

a surface find above one of the later Iron Age ditches *might* be of early first century AD or conquest period date. A pit beyond the eastern house gully produced a single, slightly abraded, grog tempered sherd, probably later first century BC or early Roman in date. As such, the main phase of occupation at the site can be said to have started somewhere in the later Iron Age and could have lasted into the first century AD.

The settlement shows a sequence of occupation apparently beginning with a single-dwelling farmstead within a square enclosure subsequently expanding eastwards to take in a second, smaller, house unit. This eastern unit has then shifted to the south to within a deeper-cut secondary enclosure, possibly coexisting with the original dwelling still within its square enclosure. Both primary and secondary enclosures have later been abandoned as areas of habitation with the focus of the settlement possibly shifting still further to the south (this assumed by the absence of any evidence of it having moved to the west, north or south). The primary enclosure, however, would appear to have been re-utilised, possibly as enclosed pasture-land, suggesting that the settlement had not moved away from the area altogether.

The ditches of the primary enclosure were narrow and shallow, those of the secondary broad and deep. The larger dwelling at the west of the initial enclosure stands on a slight plateau, the smaller eastern one on lower-lying ground surrounded by a deeper-cut drainage gully. A possible explanation for the shifts of the focus of occupation may have been a gradual rise in the level of ground-water. The lower-lying eastern house was the first to be replaced, relocated within a far deeper-cut enclosure and to the south on slightly higher ground. Subsequently both that enclosure and the dwelling within the primary enclosure were abandoned, the area being given over to agriculture, possibly pasture, with the settlement perhaps moved still further up-slope to the south.

The evidence gained from environmental sampling may add some weight to this thesis. The recovery of the remains of water-plants such as pondweed and bullrush (and the egg cases of water fleas) from the bases of the features of the secondary enclosure is unsurprising as they were deep and demonstrably waterlogged. However, these features, along with the larger western house gully, also contained several species of plants found growing predominantly on wet grasslands which were not present in samples taken from the rest of the site, indicating perhaps that at this period the area, once dry enough for occupation, has become wetland pasture.

The faunal assemblage, though relatively small, provided evidence solely for the presence of domesticated animals. The majority were of cattle, with sheep/goat represented to a higher degree in the earlier, possibly Bronze Age, features. Only one specimen of horse and three of pig were recovered (in the eastern house gully and the later ditches and pits around it). There were no identifiable remains of any wild animals nor of dogs,

though cattle bones gnawed by dogs were present in the secondary enclosure ditches. Although a relatively small sample, it would seem to indicate a clear reliance upon domesticated animals as a food source over wild creatures throughout the period.

### *Romano-British*

It is not known at what stage during the Romano-British period the ditch/trench system was laid out over the Iron Age enclosures. It appears to have been a single act rather than a cumulative process, the trenches neither intercut nor overlay each other and were of similar form and fill type throughout. The little pottery that was recovered was of the Iron Age, unsurprising residuality considering the underlying archaeology. The only information concerning the 'villa' that the system may relate to comes from the earlier excavations in its outlying fields and points to a very late date, in the latter part of the fourth century. If the villa and the trench system were contemporary, which seems likely, and established toward the end of the Roman period, two particular problems arise.

It is thought that the main phases of alluviation began towards the end of the fourth century, leading to progressive abandonment of the low-lying flood-plains, a pattern noted elsewhere in the Ouse valley which has been linked to increased colluvial sediment deposition in river systems resulting from intensified clearance and cultivation (French et al. 1992; Robinson 1992). That the trench system was directly sealed by alluvial clay and the broader north-south dividing ditch was filled with deposits similar to the alluvium is consistent with this. Why lay out such a complex establishment so late and on such low-lying and flood-prone ground? Secondly, if this was the case, to what use was the land put in the intervening period between the later middle Iron Age and the later Roman? - a period of some 400 years with neither features nor finds to account for it. The area must either have lain waste, which is unlikely, or have been under open pasture, much as it was in the later medieval period.

The systems' origin and function remain obscure and are currently open to interpretation. It is thought that during the first and second centuries AD. the climate was warmer and drier, more conducive to the cultivation of crops such as vines or fruit trees, vines in particular would not have prospered in damp conditions. One suggested interpretation is that the trenches could have been cut to introduce the clay and gravel natural subsoils into the early ploughsoil, a process known as 'claying'.

Water management, be it either irrigation or drainage, is rejected on the grounds of the trenches' clean-cut squared form and the systems' configuration, neither sufficiently interlinked nor aligned with the contours of the field. Managed water meadows are rejected on similar grounds, in particular the clean vertical edges showing no trace of

disturbance from the hooves of livestock and the general degradation to be expected from the weathering of an open ditch. The low-lying and possibly damp situation, on an, albeit very shallow, north-east facing slope, would seem to make it unlikely that the trenches were the bedding trenches of vineyards. The root systems of cultivated trees should have left their mark on the trench bases and sides, no evidence of this was seen in the, admittedly limited, number of sections excavated. It is possible that further work, particularly pollen analysis of the trench fills, may shed light on the systems' usage.

### *Medieval & post-Medieval*

At the onset of alluviation in the later or immediate post-Roman period the area would have become increasingly wet and marginal. With any form of arable farming impossible the only use the land could be put to would be as open pasture land, and that possibly only seasonal. The Medieval land division, the Oxholme ditch, could well have originated in the Saxon period. The ditch spanned the division between Marsh Common and Low Fen with both areas given over to common pasture. If held in intermixed ownership like the arable land (for the harvesting of the hay crop) the strips could have been marked out by posts or stones, no ditched divisions were recorded either in excavation or by documentary research (Appendix 3). At Enclosure the land was still pasture, divided into a series of large fields, with the arable land on the higher ground to the south. This arrangement has continued until the present day.

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## APPENDICES

### 1) Feature descriptions

The Unit-modified version of the Museum of London recording system was used to describe the excavated features (Spence 1990). Discrete layers, fills and cuts were assigned individual context numbers, indicated in the text in square brackets (e.g. [001]). Feature numbers were also assigned (e.g. F.1) as a descriptive aid defining a pit, a ditch etc., and its component contexts.

#### *Neolithic*

##### F.89 Cut [300] Fill [301]

Unexcavated circular pit, diameter c. 0.45m. Fill at surface as F. 90.

##### F.90 Cut [278] Fill [279]

Circular pit, diameter 0.85m, depth 0.32m, near-vertical sides to slightly rounded base; fill, a mid-light grey mottled orange, compact fine sandy silt, very frequent charcoal inclusions towards the base. Finds: Neolithic pottery sherds, degraded bone, burnt clay, burnt stone and worked flint, particularly at the sides of the pit.

##### F.91 Cut [302] Fill [303]

Unexcavated circular pit, diameter c. 0.45m, fill at surface as for F. 92.

##### F.92 Cut [327] Fill [328]

Sub-circular pit, diameter 0.70-0.90m, depth 0.32m, very steep sides to flat base; fill, a light cream grey sandy clay silt, very compact, moderate small gravel inclusions, charcoal flecks/fragments and burnt bone fragments concentrated at the base of the context where abundant. Finds: Neolithic pottery sherds, worked flint, burnt flint, burnt stone and bone.

##### F.93 Cut [214] Fill [215]

Circular pit, diameter 0.95m, depth 0.24m, very steep sided to a flat base; fill, an homogenous pale grey fine sandy silt mottled orange-brown with frequent manganese flecks, common charcoal and occasional small flint pebbles. Finds: Neolithic pottery sherds, bone fragments and worked flint.

##### F.94

Unexcavated circular pit, diameter c. 0.40m, fill at surface as for F. 92.

#### *Late Bronze Age/early Iron Age*

##### F.133 Cut [255] Fills [256, 321]

Ditch cut aligned north-east to south-west, length >72m (extends beyond northern and southern limits of excavation), width 0.50-0.90m, depth 0.25m where excavated; fill, a light creamy grey sandy clay silt, compact, occasional charcoal flecks and small flint pebbles. Finds: Possibly later Bronze Age pottery sherds, worked and burnt flint.

##### F.193

Unexcavated ditch aligned north-east to south-west, length >2.50m (extends beyond western limit of excavation), width 0.60m; fill, a very pale grey-white silt with charcoal flecks.

F.194

Unexcavated ditch aligned north-east to south-west, length >3.50m (extends beyond western and southern limits of excavation), width 0.65m; fill, a very pale grey-white silt

F.148 Cut [257] Fill [258]

Ditch cut aligned north-west to south-east, length >6.50m (truncated at west, truncated or butt ending at east), width to 0.60m, depth to 0.16m, shallow bowl shape; fill, a compact mid grey-brown slightly sandy clay silt with moderate small gravel and occasional charcoal fragments. Finds: Middle/late Iron Age pottery sherds at surface, bone fragments and worked flint.

F.175 Cut [317] Fill [318]

Shallow ditch or elongated pit, aligned north-east to south-west, length >2.40m (truncated at south), width 0.60m; fill, a very pale yellow-grey compact fine sandy silt with occasional small gravel and charcoal flecks. Finds: Late Bronze Age/early Iron Age pottery sherds.

F.191 Cut [329] Fill [316]

Shallow circular pit, diameter 1.10m, depth maximum 0.10m, uncertain edges to rough flat base; fill, a chestnut brown fine sandy silt with frequent small-medium gravel and charcoal fragments. Finds: Late Bronze Age/early Iron Age pottery sherds.

F.198

Unexcavated narrow pit or pits, 2.50m north-west to south-east, width >0.35m (truncated at east); fill at surface as for F.177.

F.177 Cut [322] Fills [323, 324]

Elongated pit aligned north-south, length 5.00m, width at north 1.40m, at south c. 0.65m, depth to 0.50m, steep sided to a flattish base. Its lower fill, at south and centre of pit a mid-dark grey compact clay silt with very frequent charcoal fragments in lenses. Its upper fill and fill at north, a moderately compact very light grey silt with occasional very small gravel and frequent Fe/manganese staining. Finds: Late Bronze Age/early Iron Age pottery sherds, burnt clay and worked flint.

F.84 Cut [304] Fill [305]

Circular pit diameter 0.80m, depth 0.25m, near-vertical sides to a flat base; fill, a very compact light creamy grey sandy silt clay. Finds: Late Bronze Age/early Iron Age pottery sherds, burnt stone and worked flint.

F.171 Cut [268] Fill [267]

Shallow sub-circular pit, diameter 0.55-0.65m, depth to 0.08m, bowl-shaped base; fill, a pale brownish-grey sand silt with common charcoal flecks and fragments.

F.87 Cut [311] Fill [273]

Shallow sub-circular pit, diameter 0.75-0.95m, depth 0.17m; fill, a mid-dark grey silt with occasional gravel inclusions. Centre of fill contained frequent charcoal fragments concentrated at the base of the context and burnt clay towards its surface. Finds: Bone fragments and burnt flint.

F.85 Cut [289] Fills [250, 290]

Shallow oval pit cut elongated at north and south (possibly pit cutting ditch feature), pit 2.60m x 1.80m, ?ditch 4.00m x 0.80m, both features steep sided to a flat base; fill, a light creamy grey sandy clay silt with moderate small gravel and occasional charcoal fragments. Finds: Middle/late Bronze Age pottery sherds, bone fragments, burnt stone, fired clay and worked flint.

**F.200**

Unexcavated elongated pit aligned north-south, length 4.20m, width 1.30m, fill at surface as for F.177.

**F.134**

Unexcavated possible circular pit at limit of excavation; fill at surface as for F.87 with frequent charcoal fragments. Finds: Late Bronze Age/early Iron Age pottery sherds.

**F.99**

Unexcavated circular pit, diameter 0.50m; fill at surface as for F.87.

*Middle/late Iron Age*Phase 1**F.75 Cuts [218, 238] Fills [219, 239]**

Ditch cut, recutting of ditch F.76 on its outer, eastern and northern edge. Aligned west-northwest to east-southeast, turning to south-southeast, length >94m, width to 1.20m, depth to 0.40m. Its upper fill, a light-mid grey clay sand, with some Fe and Mg staining, occasional pebbles and charcoal fragments. Its lower fill, a mid-dark grey fine sandy clay with small gravel, charcoal fragments and Fe and Mg staining. The western side of the lower fill consisted of redeposited natural sandy stony clay. Basal fill, a compact washed pea-grit gravel. Finds: Middle/late Iron Age and possibly early Roman pottery sherds, worked flint, fired clay and bone.

**F.76 Cuts [236, 280] Fills [237, 281]**

Ditch cut aligned west-northwest to east-southeast, turning to south-southeast, length >94m, width to 0.75m (truncated to east and north), depth to 0.40m; fill, a grey-orange silty sandy gravel.

**F.180 Cut [330] Fill [331]**

Ditch cut aligned north-south, length 47m, turning west-east, length >35m (extends eastwards beyond limit of excavation), width c. 1.50m, depth 0.40m; fill, an homogenous pale grey-brown clay silt with frequent gravel inclusions increasing eastwards.

**F.142 and F.143**

Unexcavated north-western arms of F.75 and F.76, lengths included in above descriptions; fills at surface were both as for F.75.

**F.164**

Unexcavated ditch aligned north-south, length >4.30m (truncated at north), width 0.55m; fill at surface, an orange-brown silty gravel.

**F.147 Cut [326] Fill [275]**

Ditch cut aligned north-west to south-east, length >13m (eastern end curves to south and butt ends, truncated at west), width 0.75m, depth to 0.45m, steep sided to a flattish base; fill, a grey-brown sandy clay silt with moderate small gravel inclusions. Finds: Bone and fired clay fragments.

**F.144**

Unexcavated ditch cut aligned north-west to south-east, length >14m (truncated at east, truncated or butt ending at west), width to 0.60m; fill at surface as for F.147.

**F.135 Cut [216] Fills [217, 248]**

Circular ditch cut, butt ending at east to form gap, or entrance, 4.00m wide. External diameter of ditch 14m, width 0.60m, depth 0.30m. Northern butt end square in plan, near-vertical sides to flat base; fill, a light-mid grey silt mottled orange-brown with few gravel

inclusions and common charcoal flecks and fragments. Southern butt end rounded in plan, shallower with gentler sides; fill, a dark orange-brown silty clay with moderate gravel and charcoal inclusions. Finds: Middle/late Iron Age pottery sherds, worked flint, burnt stone, burnt and unburnt bone.

**F.95 Cut [246] Fill [247]**

Sub-rectangular posthole base, 0.60m north-south, 0.45m east-west, depth 0.15m, very steep sides to flattish base; fill, a pale orange-brown slightly sand silt with occasional gravel and charcoal inclusions. Finds: Middle/late Iron Age pottery, burnt flint, burnt clay and bone.

**F.167 Cut [259] Fill [260]**

Small sub-circular posthole base, diameter 0.40m, depth 0.14m, V-shape profile; fill, a light-mid orange-grey silty clay. Finds: Middle/late Iron Age pottery, bone and worked flint.

**F.168 Cut [261] Fill [262]**

Small circular posthole cut, diameter 0.18m, depth 0.08m, shallow U-shaped profile; fill, a mid-dark brown clay silt mottled orange/black with common charcoal flecks and fragments.

**F.169 Cut [263] Fill [264]**

Shallow circular cut, diameter 0.20m, depth 0.07m; fill, a light grey mottled orange silt.

**F.170 Cut [265] Fill [266]**

Circular posthole cut, diameter 0.30m, depth 0.18m, rounded V-shaped profile; fill, as for F.169.

**F.128 Cut [200, 232] Fills [201, 233]**

Circular ditch cut, butt ending at east to form gap, or entrance, at least 4.20m wide (southern butt end truncated). External diameter of ditch 9.00m, width 0.60m. Northern butt end rounded in plan, depth 0.45m, near-vertical sides to narrow rounded base; fill, a grey-very dark grey dense sandy silt with frequent inclusions, pottery, flint pebbles, bone and charcoal fragments. Band of weathered pea-grit gravel at base and outer edge has no inclusions. Finds: Middle/late Iron Age pottery, burnt clay, bone and worked flint.

**F.104**

Unexcavated. Three possible intercutting postholes, overall size 1.10m x 0.40m; fill at surface a pale grey-brown sandy silt with occasional charcoal flecks.

**F.105 Cut [210] Fill [211]**

Shallow ovoid pit or posthole cut, 0.34m x 0.46m, depth 0.10m, steep sided to uneven flat base showing signs of burning; fill, a compact light-mid grey silty clay with charcoal flecks and fragments throughout. Finds: Burnt bone and burnt stone.

**F.106 Cut [202] Fill [203]**

Shallow circular pit or posthole cut, diameter 0.60m, depth 0.12m, steep sided to a flat base; fill, a mid-light grey clay silt with signs of burning (burnt clay and stones) but no charcoal. Finds: Middle/late Iron Age pottery sherds, burnt stone, burnt clay and bone.

**F.152**

Unexcavated sub-circular pit or posthole, diameter 0.40m. Fill at surface as for F.104.

**F.153**

Unexcavated circular pit or posthole, diameter 0.40m; fill, 90% fire cracked stones.

**F.154**

Unexcavated circular (? truncated at south) pit or posthole, diameter 0.30m; fill, a dark grey-brown silt with flint pebbles and occasional charcoal flecks.

**F.155**

Unexcavated circular (? truncated at south) pit or posthole, diameter c. 0.70m; fill, at surface as for F.154.

**F.156**

Unexcavated circular pit or posthole, diameter 0.40m; fill, a mid-light grey-brown silty clay with occasional small burnt stones.

**F.157**

Unexcavated pit or posthole, diameter 0.30m; fill, at surface as for F.156.

**F.158**

Unexcavated. Two intercutting postholes, overall size 0.80m x 0.30m; fill, at surface as for F.156.

**F.159 Cut [296] Fill [297]**

Shallow ovoid pit, 0.80m x 0.60m, depth 0.15m, flat uneven base; fill, a mid-light grey-brown silty clay. Finds: Late Iron Age pottery sherds and bone.

**F.160 Cut [208] Fill [209]**

Pit base, 1.10m x 0.70m, possibly two intercutting pits, uneven flat base; fill, a mid-light grey-brown silty clay. Finds: Middle/late Iron Age pottery sherds, bone, burnt clay and burnt flint.

**F.174 Cut [313] Fill [314]**

Sub-circular posthole cut, diameter 0.23m, depth 0.10m, very steep sided to a flat base; fill, a dark grey sandy silt with frequent charcoal fragments. Finds: Middle/late Iron Age pottery sherds and burnt stone.

**F.83 Cut [251] Fill [252]**

Large sub-square pit (circular on surface), diameter 2.75m, depth 0.85m, very steep - vertical sided, flat base. Its upper fills, fine yellow-grey silt/dense orange-grey sandy silt/light grey-brown gravelly silt-sand with some organic content. Its basal fill, black organic clay silt with very frequent charcoal fragments, twigs etc. and fine washed sand/gravel. Weathering at sides and some at base, very compact gravelly silt to 0.15m in depth. Finds: A single late Iron Age/early Roman pottery sherd at the surface of the upper fill, worked flint and bone fragments lower down.

Phase 2

Measurements for the lengths of ditches F.100, 101 and 146 taken from the central point of their three-way junction.

**F.146 Cut [325] Fills [253, 288]**

Ditch cut aligned north-south, northern butt end turning to north-east, length 21m, width variable 2-3.75m, depth to 0.90m. Its upper fill at the northern butt end (unexcavated) a grey-brown gravelly sandy silt, at southern end redeposited natural sand/gravel in bands entering from the south and east. Its lower fill a grey-dark grey fine sandy silt with some organic preservation and small gravel content. Finds: Middle/late Iron Age pottery sherds, burnt stone, burnt clay and bone.

**F.101 Cut [227] Fills [228-29]**

Ditch cut aligned north-south, length >11m (extends beyond southern limit of excavation), width 2.50, depth 1.00m. A broad U-shape with rectangular cleaning slot at base 0.35m wide, 0.10m deep. Its upper fill a dense pale grey-brown sandy silt with occasional small flint pebbles and charcoal flecks, becoming more frequent towards the base of the context.

Its lower fill a dark grey fine sandy silt with high organic content and frequent charcoal. Basal fill within cleaning slot a black and very organic fine clay silt. Finds: Middle/late Iron Age pottery sherds.

**F.162 Cut [234] Fills [235, 254]**

Northern butt end of north-south ditch (possibly of very large pit), length >3.00m (extends beyond southern limit of excavation), width 4.00m, depth 0.95m, broad U-shape, sides very steep at upper level shallowing to gullied base. Its upper fill a mid grey clay silt with orange mottling and frequent gravel, occasional charcoal inclusions, above a green mottled silty clay with frequent charcoal fragments. Its primary fill a very dark grey-black sticky clay with common charcoal and preserved organic material. Finds: Middle/late Iron Age pottery sherds, burnt clay, burnt and unburnt flint and bone, 2 sherds of late Iron Age/early Romano-British pottery from the very top of the feature.

**F.100 Cuts [223, 310] Fills [224, 295, 308]**

Ditch cut aligned approximately north-west to south-east, length 16.50m, width to 2.25m, depth to 0.90m. Its upper fill a pale grey-dark grey-brown sandy clay silt with few-common small gravel inclusions. Its lower fill at the junction with F.101 as that of F.101. Finds: Middle/late Iron Age pottery sherds, bone and worked stone.

**F.176 Cut [319] Fill [320]**

Large ovoid pit on approximately west-east alignment, length 3m, width 2.50m, sides very steep at top shallowing to flat gullied base, depth 0.75m. Its upper fills, orange/grey sandy gravels over grey-black clay silt with frequent charcoal and gravel inclusions. Its lower fills, very black silty clay with frequent charcoal fragments over orange-grey silty washed sands. Finds: Middle/late Iron Age pottery sherds plus one sherd late Iron Age/early Roman and bone fragments.

**F.130 Cut [277] Fills [276, 291, 294, 309]**

Large ovoid pit on north-west to south-east alignment, length c. 7.50m, width 2.50m, upper 0.40m excavated, sides very steep; fill, a brown-grey clay silt with common small-medium gravel inclusions, towards eastern butt end shows distinct band of redeposited natural sandy clay/gravel entering from east. Finds: Middle/late Iron Age pottery sherds and bone fragments.

**F.172 Cut [292] Fill [293]**

Irregular elongated pit on north-east to south-west alignment, length c. 3.00m (truncated at south), width to 1.50m, upper 0.60m excavated, sides near-vertical; fill, a moderately and occasional charcoal fragments. Finds: Middle/late Iron Age pottery sherds and bone.

**F.103 Cut [206] Fills [207, 220-22]**

Large ovoid pit, 3.00m x 2.00m on a north-west to south-east axis, depth 0.80m, very steep sides to a narrow gullied base. Its upper fill a light grey, mottled orange, very silty clay with sand patches, contains, entering from the northern side, a thick lens of weathered natural sand and gravel. Its lower fills a mid grey silty clay with frequent charcoal fragments above a mottled olive green gritty clay silt. Base fill, a sticky dark grey to black silty clay with very frequent charcoal fragments. Finds: Middle/late Iron Age pottery sherds, burnt clay and bone.

**F.102 Cut [269] Fill [270]**

Sub-circular pit or posthole cut, 0.70m x 0.50m, depth 0.25m, vertical sides to flat base; fill, a mid grey, mottled orange, silty clay with occasional small gravel and charcoal fragments.

**F.129 Cut [271] Fill [272]**

Sub-circular pit or posthole cut, 0.75m x 0.50m, depth 0.22m, vertical sides to flat base; fill, a mid grey, mottled orange, silty clay with occasional small gravel and charcoal fragments.

**F.163 Cut [244] Fill [245]**

Sub-circular pit, 1.15m x 0.90m, depth 0.30m, steep sided to flattish base. Upper fill a grey, mottled orange, fine clay silt with occasional charcoal fragments. Its lower fill an orange-grey sandy clay silt. Finds: Possibly later Iron Age pottery sherds and worked flint.

Phase 3

**F.88 Cuts [225, 284] Fills [226, 285]**

Ditch cut aligned west-northwest to east-northeast, length 26m, butt ends at east, peters out (truncated ?) at west, width 1.00m, depth to 0.40m at butt end; fill, a grey-brown sandy clay silt with gravel inclusions increasing towards base, darker and siltier over intersection with F.100/101. Finds: Middle/late Iron Age pottery sherds.

**F.151 Cut [240] Fills [241, 274]**

Ditch cut aligned west-northwest to east-northeast, length 24.50m, butt ends at east, peters out (truncated ?) at west, width 1.00m, depth to 0.30m at butt end; fill, a grey sandy silty gravel. Finds: Middle/late Iron Age pottery sherds, one burnt and one worked flint.

*Romano-British*

**F.182-3, F.139-141**

Five unexcavated parallel ditches aligned approximately north-northeast to south-southwest, lengths from >3->4.00m (extend beyond northern limit of excavation, butt end to south), widths 0.60-70m. Their fills at the surface a beige-grey sandy silt with gravel.

**F.136-8**

Three unexcavated parallel ditches aligned approximately north-south, lengths from >8->11m (extend beyond northern limit of excavation, butt end to south), widths 0.60-70m. Their fills at the surface a beige-grey sandy silt with gravel.

**F.78-82**

Five (three unexcavated) parallel ditches aligned approximately north-east to south-west, lengths >4->22m (extend beyond northern limit of excavation, butt end to south), widths 0.60-1.00m. Their fills at the surface a mid grey-brown silty clay with moderate gravel inclusions.

**[F.79] Cut [242] Fill [243]**

Cut profile, near-vertical sided (slightly shallower in parts), flat bottomed, depth 0.30m; fill, a grey silty clay with sandy clay mottling, moderate gravel throughout, very occasional pot sherds and bone fragments, eastern side shows possibly slumped sandy orange clay. Finds: Middle/late Iron Age pottery sherds, burnt clay and bone.

**[F.82] Cut [286] Fill [287]**

Cut profile, shallow, depth 0.20-0.30m, rounded base and gently sloping sides; fill, a light brown sandy clay silt with gravel inclusions. Finds: Middle/late Iron Age pottery sherds.

**F.107, F.109, F.113, F.117, F.120, F.122, F.124, F.150**

Eight (seven unexcavated) parallel ditches aligned approximately west-southwest to east-northeast, lengths >10->60m (butt end or turn to west-northwest at west, butt end or extend beyond limit of excavation at east), widths 0.60-1.00m. Their fills at the surface, in west and centre of the site, a mid grey-brown to rusty brown silty clay mottled with marl flecks and with some gravel inclusions, at the east, a mid grey-brown silty clay with occasional-moderate gravel inclusions.

[F.124] Cut [230] Fill [231]

Cut profile, very square in plan at butt end, near-vertical sided and flat bottomed; fill, a mid-dark grey silty clay with occasional gravel and charcoal flecks throughout, northern side shows possibly slumped sandy orange clay. Finds: Later Iron Age/early Roman pottery sherds.

F.132, F.145, F.149, F.166, F.179, F.190 (F.117, F.150)

Eight (six unexcavated) parallel ditches aligned approximately west-northwest to east-southeast, lengths >18->92m (butt end or turn to east-northeast at east, butt end or extend beyond limit of excavation at west), widths 0.60-0.90m. Their fills at the surface, a beige-grey sandy silt with gravel.

[F.132] Cut [204] Fill [205]

Cut profile, near-vertical sided, flat bottomed, depth 0.30m; fill, a light-mid grey, mottled brown/orange, very silty clay with very occasional small gravel and charcoal inclusions. Finds: Middle/late Iron Age pottery sherds.

[F.166] Cut [332] Fill [315]

Cut profile, square, shallow, depth 0.30m, very steep sides to flattish base, eastern edge shallower where cuts through ditch F.162; fill, a light-mid grey mottled silty clay with occasional small gravel and charcoal inclusions. Alluvial layer [333] lies above fill [315], merging at interface. Finds: One sherd of probably Iron Age pottery.

F.118 Cut [306] Fill [307]

Ditch cut aligned north-south, length >23m (extends beyond northern and southern limits of excavation), width 1.10m, depth approximately 0.40m (not fully excavated), a broad U-shape. Its upper fill, a pale grey-beige sandy silty clay, lower fill dense, dark grey, slightly organic, more clay with common gravel inclusions.

F.96-7

Two unexcavated parallel ditches aligned approximately west-east, lengths >13m and >31m, widths 0.70m. Their fills at the surface, a pale orange-brown sandy clay silt with common gravel inclusions.

F.195-6

Two unexcavated parallel ditches aligned west-northwest to east-southeast, lengths >2.00m (F.195 butt ends at west and extends beyond eastern limit of excavation, F.196 extends beyond western and southern limits of excavation), widths 0.50-0.65m. Their fills at the surface, a light-mid grey clay silt. F.195 = ?F.166 or F.190, F.196 = ?F.166.

F.199

Unexcavated ditch aligned north-south, length >1.00m (extends beyond southern limit of excavation), width 0.70m; fill at surface, a light grey-brown silty clay.

*Medieval and Post-Medieval*

F.86, F.131

Irregular patches of late disturbance of the natural gravel and of the features within it, width 1-2.50m, roughly linear in a broken line from west of F.85 (F.86) to the junction of F.132 and 133 (F.131). No visible cut. A dirty grey-brown sandy clay loam with frequent gravel and common ?coal, charcoal and slag fragments.

F.192

Unexcavated ditch cut aligned east-west, length >42m (extends beyond eastern and western limits of excavation), width 2.00m; fill, a very dark chocolate brown loamy clay with occasional charcoal fragments, small gravel and very occasional wood fragments.

**F.189**

Unexcavated ditch cut aligned north-south, length >2.00m (extends beyond northern and southern limits of excavation), width 1.90m; fill, a very dark chocolate brown loamy clay.

**F.181**

Unexcavated. A north-south alignment of eight small postholes (with a ninth to the north-west of the northernmost), spaced c. 3.00m apart, diameters 0.10-15m. Their fills a loose chocolate brown loam with decayed timber.

**F.186**

Unexcavated. A trackway >57m in length (extends beyond eastern and western limits of excavation) consisting of two 'ruts' (0.30-40m wide) in the natural gravel surface, overall width 2-2.25m. Alignment from east to west and a gentle curve to north-west; fill, a dirty grey-brown sandy silt with frequent pea-grit gravel and sand patches.

**F.185**

Unexcavated sub-circular pit or posthole, diameter 0.50m.

*Non-phased and unexcavated features*

**F.178**

Unexcavated ditch cut aligned west-northwest to east-southeast, butt ends or turns at east, extends beyond northern limit of excavation. Length >7.00m, width 0.90m.

**F.184**

Unexcavated sub-circular pit or posthole, diameter 0.50m.

**F.173 Cut [298] Fill [299]**

Circular pit, diameter 0.90m, depth c. 0.45m, steeply curved sides to narrow base; fill, a pale orange-brown compact clay silt with very occasional charcoal and common bone fragments. Finds: Bone fragments.

**F.187**

Unexcavated ditch aligned north-west to south-east, length >4.00m, width 0.50m, (butt ends or truncated at south, extends beyond limit of excavation at north). A pale grey-brown fill.

**F.188**

Unexcavated ditch cut, aligned north-south (or large pit), length >1.40m (extends beyond southern limit of excavation, butt ends at north), width 1.80m; fill, a light yellow-grey silty sandy clay.

*Natural Features*

**F.108**

Machine excavated feature, a broad shallow channel aligned north-south across trench. Shallow sides to gently rounded base, 6.00m wide, 0.15m deep. Its upper fill a pale grey with orange-brown Fe staining, very fine clay silt with common pea-grit gravel, lower fill more orange, more clay, more frequent pea-grit.

**F.197**

Machine excavated feature, a broad U-shaped channel aligned north-west to south-east across trench. Width 3.00m, shallow sides to gently rounded base; fill, a compact mid grey silty clay stained orange-brown with common small water-worn flints and pea-grit gravel towards the base. At the sides were loose water-affected sandy gravels.

**F.121**

Unexcavated irregular pit or natural feature on a north-south axis, 1.20m x 0.70m; fill, a mottled grey-brown clay silt with frequent gravel inclusions.

**F.125**

Unexcavated irregular pit or natural feature on a north-south axis, 3.00m x 0.70m; fill, a mid grey silty clay with moderate gravel inclusions.

**F.127**

Unexcavated small pit or natural feature, 0.90m x 0.30m (extends beyond western limit of excavation); fill, a mid-dark grey clay with frequent charcoal and occasional gravel inclusions.

**F.110-12**

Unexcavated irregular patches/pits over an area of c. 6.00m along the trench. Their fills, mid grey-brown mottled sandy silt with very frequent small flint fragments mostly red in colour, darker in patches, charcoal fragments at east of F.112.

**F.114-15**

Unexcavated irregular patches/pits over an area of c. 8.00m along the trench, vaguely linear; fills as for F.110 but paler and with more clay

**F.116**

Unexcavated irregular circular patch/pit, c. 2.60m diameter; fills as for F.110 but paler and with more clay

**F.119**

Unexcavated irregular linear feature runs 7.00m along southern edge of trench, width >0.30m; fill, a mid grey-brown sandy silt with common small flint fragments.

## 2) Geophysical Survey C. Stephens.

### *Survey Area*

An area approximately 1.72ha in size was surveyed using a fluxgate gradiometer. The survey grid was set out by Geophysical surveys of Bradford using a site baseline established by the CAU.

### *General considerations - Complicating factors*

The site presented no physical hindrances to survey, being mainly flat and free from obstruction. The soils of the site tend to display poor magnetic enhancement, resulting in weak magnetic anomalies. Often such weak responses, originating from contexts buried beneath a depth of alluvial overburden, can remain undetected by the gradiometer. In this case, to improve the chances of detection, the top 50cm of alluvium was removed. However, the magnetic responses from potential archaeological anomalies have remained weak and poorly defined.

### *Results of Survey*

Few anomalies of archaeological interest have been detected by the gradiometer. The majority of these, comprising truncated ditch and pit type responses are concentrated in the central part of the survey, along the southern edge of the grid. To the west of this group two ephemeral trends have been noted which may reflect archaeological ditches. In all cases, the poor definition of the responses and the lack of any observable pattern, has made it difficult to formulate a precise interpretation.

A broad irregular anomaly in the north-eastern corner of the grid is thought to reflect the course of a palaeochannel, although an archaeological origin is possible. A faint triangular anomaly in the eastern half of the survey reflects the edge of a raised platform of soil which had not been removed at the time of survey

The remainder of the anomalies detected by the survey are all of ferrous type. Such responses are characteristic of small pieces of ferrous debris buried beneath the surface. In this case the modern ground surface has been removed to reveal the calcareous gravels. It is therefore possible that at least some of the ferrous responses are the product of small pockets of magnetic gravels.

### *Conclusions*

The gradiometer survey has identified only a few anomalies of archaeological interest and these tend to be ephemeral in nature. Subsequent excavation undertaken by the CAU revealed a wealth of archaeological features, particularly concentrated in the centre of the evaluation area, most of which remained undetected by the gradiometer. The poor magnetic enhancement, characteristic of the soils of the site is partially responsible. In addition, the process of waterlogging, which has the effect of leaching out the magnetic iron oxides from the soil, may also be a contributory factor.

The full survey report, with plots of the magnetic responses and technical information, is held in the CAU archive.

### 3) Soil sequence C A I French

Throughout the excavated area there was a well-preserved buried soil profile sealed beneath alluvial deposits.

A generalised description of the whole profile is as follows:

- 1) 0 - 35 cm alluvial Ah and turf; dark brown clay loam with large sub-angular blocky ped structure. Merging over 2 cm with:-
- 2) 35 - 55 cm gleyed alluvium or Bg; grey clay loam with yellow/orange mottling and occasional gravel pebbles and similar ped structure for Ah. A distinct boundary with:-
- 3) 55 - 65 cm upper horizon of buried soil, probably a lower A horizon; silty clay loam with occasional gravel pebbles, mottled light yellowish-brown to yellowish-brown, with moderately to poorly developed medium, sub-angular blocky ped structure. Merging over 1 cm with:-
- 4) 65 - 85 cm lower horizon of buried soil, probably a former B horizon, silty clay loam with no ped structure evident, yellowish-brown with rare grey mottling
- 5) +85 cm silty clay and gravel subsoil, light yellowish-brown.

From field observation and comparison with similar soils observed at other terrace gravel sites in the county, the buried soil appears to have been well developed prior to burial. Nonetheless, it was probably subject to repeated seasonal flooding with freshwater for a considerable period prior to burial by the subsequent alluvial deposits. This stage in the soil's history probably represented a seasonal natural flood-meadow environment.

Although it is impossible to be certain, the absence of post-Roman features in the excavations suggests that the main periods of alluvial deposition was post-Roman. Again, similar observations have been made in the Lower Welland and Nene valleys to the north (French 1990, 1992, French et al 1992), and it is suggested that the bulk of the alluvium was deposited during the medieval period over a very broad floodplain.

#### 4) Environmental remains C. Stevens.

A total of twenty-two samples were taken during the excavation and of these ten were chosen for the extraction of plant macros.

##### *Methodology*

Four of the samples were taken from waterlogged contexts. These were sieved through a stack of sieves comprising 2.00 mm, 1.00 mm and 0.50 mm mesh sizes, after having been soaked over twenty-four hours in sodium hexametaphosphate solution. The remaining samples were floated using a 100 mm mesh to collect the residue and a 0.50 mm mesh size to collect the flot.

The flots were then dried and sorted using a stereo-binocular microscope at x 10 magnification. A fraction of the waterlogged samples after sieving were taken and scanned through for identifiable plant macros. Due to the amount of material present in the waterlogged samples, the identified material is only given in terms of relative abundance:

- +++ Abundant
- ++ Relatively abundant
- + Present in low quantities (c. 1 to 5 seeds)

The carbonised remains were identified where possible and are shown, together with the waterlogged samples in table 1.

#### The Results

##### *The Neolithic*

Few remains were recovered from the Neolithic samples. Both samples came from the basal fill of shallow pits. The first F.93 [328] contained only two fragments of the hazel nut shells, *Corylus avellana* and one fragment of parenchyma, the soft-tissues, roots/tubers. The other sample contained glume bases, some of which were identified as emmer wheat, *Triticum diccocum*, as well as one grain and one possible grain of oats, *Avena sp.*. A further piece of unidentified parenchyma was also recovered from this sample.

##### *Bronze Age/early Iron Age*

The waterlogged fill from the bottom of a round pit F.83 [252], to the north of the site, contained mainly seeds of *Rubus sp.* (bramble, raspberry, blackberry, dewberry, blackberry etc.). Several seeds of elderberry, *Sambucus nigra* were also present, but in lower numbers. The remaining composition of the sample consisted of Rosaceae thorns and the seeds of several plant species of nitrogenous soils, such as small nettle, *Urtica urens*, oranche, *Atriplex sp.*, chickweed, *Stellaria media*, henbane, *Hyocyamus niger*, sedge, *Carex sp.* and fat-hen *Chenopodium album*. In addition one carbonised seed of emmer/spelt wheat was also recovered.

##### *The Middle Iron Age*

The three waterlogged samples F.103 [222], F.162 [254], F.101 [229] were highly similar, although some differences were present. All three contained small nettle, *Urtica urens*, fat

hen, *Chenopodium album*, chickweed, *Stellaria sp.*, knotgrass, *Polygonum aviculare*, bramble, blackberry, raspberry etc., *Rubus sp.*, and seeds of sedges, *Carex spp.* The samples also contained the egg cases of water fleas, showing that the pits were open and contained standing water during the deposition of the plant remains.

The sample from the bottom of pit 103, [222], contained also seeds of arable and grassland species; sheeps sorrel, *Rumex acetosella*, poppy, *Papaver argemone*, field pansy, *Viola arvensis*, parsley piert, *Aphanes arvensis*, corn marigold, *Chrysanthemum segetum*, buttercup, *Ranunculus sp.*, clover, *Trifolium sp.*, hedge parsley, *Torilis arvensis*, henbane, *Hyocyamus niger*, red bartisia, *Odontites verna*, small scabious, *Scabosia columbaria*, thistle, *Cirsium/Carduus sp.*, ox-tongue, *Picris echioides*, hawkbit, *Leontodon sp.*, meadow grass, *Poa sp.*, timothy, *Phleum sp.* and oats, *Avena sp.* Seeds of wetland species were also present; bullrush, *Schoenoplectrus lacustris*, club-rush, *Isolepis setaria*, sedges, *Carex sp.*, and blinks, *Montia fontanum subsp. chondrospermum*.

The fill from the ditch to the west also contained seeds of henbane, *Hyocyamus niger*, but in much greater quantities and seeds of fat hen, *Chenopodium album* in lesser quantity. The sample also contained seeds of thistle, *Cirsium/Carduus sp.*, sow-thistle, *Sonchus asper*, meadow grass, *Poa sp.*, as well as seeds of curled dock, *Rumex crispus*.

The sample from the butt end of the ditch F.162, [254], adjacent to pit F.103 [222], also contained seeds of poppy, *Papaver sp.*, buttercup, *Ranunculus sp.*, blinks, *Montia fontanum subsp. chondrosperma*, sheeps sorrel, *Rumex acetosella*, parsley piert, *Aphanes arvensis*, as well as seeds of campion, *Silene sp.*, and wetland species; rushes, *Schoenoplectrus maritimus*, pondweed, *Potamogeton sp.*, spikerush, *Eleocharis sp.*, and sedge, *Carex sp.* The sample contained no seeds of grasses or thistles, and only a few seeds of henbane. The sample had less in common with the sample from ditch F.101 [229], and more with pit fill F.103 [222].

Of the carbonised samples, three contained a varied selection of plant remains. The third sample take from a posthole F.106 [203], adjacent to house gully F128, [201], contained only one grain of wheat and one unidentified seed.

Of the three samples with carbonised remains, all contained seeds of fat hen, *Chenopodium album* and all three also contained cereal remains, mainly in the form of glume bases, although neither emmer nor spelt could be differentiated.

The sample from the large pit F.103 [220], taken just above the waterlogged sample [222] described above, showed little similarity to this sample, containing in addition to seeds of *Chenopodium album*, oranche, *Atriplex sp.*, sheeps sorrel, *R. acetosella*, seeds of clover, *Trifolium sp.*, *Chenopodium rubrum*, deadly nightshade, *Solanum nigrum*, spikerush, *Eleocharis sp.* and one possible seed of timothy, *Phleum sp.* Several glume bases, a barley rachis and a single cereal grain were also present.

The remaining two samples from house gullies were highly similar to this sample, containing seeds of fat hen, *Chenopodium album*, oranche, *Atriplex sp.*, and clover, *Trifolium sp.* The sample from the larger house gully F.135 [217] to the west of house gully F.128 [201], showed a greater similarity to the waterlogged samples from the ditched enclosure and pit F.103 [222], containing seeds of *Montia fontanum subsp. chondrosperma*, *Polygonum aviculare*, *Rumex acetosella*, *Viola sp.*, *Solanum nigrum*, *Chrysanthemum segetum*, *Schoenoplectrus lacustris* and seeds of several small grasses including, timothy, *Phleum sp.* The remaining sample from house gully F.128 [201] is high in seeds of both *Trifolium sp.* and *Chenopodium album*, and also seeds of oats, *Avena sp.*, red bartisia, *Odontites verna*, and vetch, *Vicia sp.*

### *Interpretation*

Little conclusion could be drawn from either the Neolithic samples or the early Iron Age/ Bronze Age pit. The middle Iron Age sample remains are high in small weed seeds and contained more glume bases, than grain suggesting processing waste from both the fine sieving and sievings after pounding, probably carried out on a daily basis. On this evidence there is little to suggest that the site was not self supporting in terms of cereals crops.

The samples from the waterlogged pit fill are fairly high in weeds of pasture and grassland species, most noticeably *Leotondon*, *Penchis sp.* *S. columbaria*, *Phleum sp.*, *Ranunculus sp.* as well as containing arable weeds. The former three are all more common upon calcareous, often drier soils. The mix of sandy acidic and calcareous species, as well as those of dry and wet soils, shows an exploitation of a fairly wide range of soil types, with only species of clay soils being poorly represented.

Table 1. Showing both carbonised and waterlogged plant remains recovered from the samples. Samples 9, 14, 17, 20 were waterlogged, the rest were carbonised except where noted (c-carbonised, w-waterlogged)

Soil sample	1	4	6	8	9	14	15	17	19	20
Context	203	201	217	220	222	254	279	229	328	252
Feature	106	128	135	103	103	162	90	101	93	83
Volume	15	15	15	15	15	15	15	15	15	15
Species										
Ranunculus sp.						+				
Ranunculus (a,r,b)					+					
Papaver sp.						+				
Papaver cf. argemone					+					
Urtica dioica					++					
Urtica urens		1				+		++		+
Corylus avellana (fragments)							3		2	
Chenopodiaceae (undiff.)			1							
Chenopodium sp. undiff.			1							
Chenopodium rubrum				1						
Chenopodium ficifolium		2								
Chenopodium album		18	13	11	+++	+		+		+
Atriplex sp.					++	+				+
Atriplex patula/prostrata		1	6	2						
Montia fontana ssp. chondro			1		++	+				
Stellaria media			1		++	+		++		+
Cerastium sp.					+					
Silene sp.			1			+				
Polygonum aviculare			2		++	+		+		
Polygonum/Fallopia undiff.			3							
Fallopia convolvulus			1			+		+		
Rumex undiff.		1								
Rumex acetosella group			3	1	+	+				
Rumex cf. crispus			1					+		
Rumex cf. cong/obtus/sang		1								
Viola arvensis/tricolor			2		+					
Rosaceae thorns, species undiff.										+
Rubus sp.						+		+		++
Potentilla sp.					+					+
Aphanes arvensis					+	+				
Vicia sp.		1								
Medicago/Trifolium sp.				2						
Trifolium sp. (>1.5 mm)		1			+					
Trifolium (small <1.5 mm)		10	1	15						
Torilis arvensis/ japonica					+			+		
Hyoscyomus niger					+			++		+

Soil sample	1	4	6	8	9	14	15	17	19	20
Context	203	201	217	220	222	254	279	229	328	252
Feature	106	128	135	103	103	162	90	101	93	83
Species										
<i>Solanum nigrum</i>			1	1						
<i>Euphrasia</i> sp./ <i>Odontites verna</i>		2								
<i>Odontites verna</i>		1		2	1c					
<i>Sambucus nigra</i>					+					++
<i>Scabiosa columbaria</i>					+					
<i>Cirsium/Carduus</i> sp.					++			++		
<i>Centaurea</i> sp.					+					
<i>Chrysanthemum segetum</i>			1		+					
<i>Leontodon</i> sp.					+					
<i>Picris echioides</i>					+					
<i>Potamogeton</i> sp.					++	+				
Cyperaceae (undiff.)			1							
<i>Eleocharis palustris</i>				1		+				
<i>Schoenoplectrus lacustris</i>			2		+	+				
<i>Isolepis setacea</i>					+					
<i>Carex flata</i>			1		+	+				
<i>Carex trig</i>					+	+		+		+
Poaceae small (<2mm) (undiff.)			1							
<i>Poa</i> sp.								+		
<i>Poa</i> sp./ <i>Alopecurus</i> sp.			1							
<i>Poa</i> sp./ <i>Phleum</i> sp.				1	+					
<i>Avena</i> sp. (grains)					1c		1			
<i>Avena</i> sp./ <i>Bromus</i> sp.		1		3			1			
<i>Phleum</i> sp.			1	3	1c					
Seed indet	1	1	4				2			
Cereals										
<i>Hordeum</i> sp. (grains undiff.)		3								
<i>Hordeum</i> sp. (grains, hulled)			1							
<i>Hordeum</i> sp. (rachis fragments)				1						
<i>Triticum</i> undiff. (grains)	1	1								
<i>T. diccocus</i> (glume bases)							2 cf.			
<i>T. diccocus</i> (spiklet forks)		1								
<i>T. diccocus</i> /spelta (grains)			4							1c
<i>T. diccocus</i> /spelta (glume bases)		15	7	9	1c/1w					
<i>T. diccocus</i> /spelta (glume grots)				2			2			
<i>T. diccocus</i> /spelta (rachis)			1							
Cereals undiff. (grains)		6	3	1						
Cereals undiff. (rachis)			1							
Cereals undiff. (culm nodes)		1	2		1					
Cereal/Poaceae culm node					1					
Parenchyma					1				1	

## 5) Faunal remains E. Yannouli.

The excavation at Fen Drayton was a small scale rescue operation which contributed a limited amount of finds (pottery, flint and animal bones). Faunal material was retrieved in modest quantities (<5 kg) from thirty-one features, mostly ditches and pits, whose chronological placement ranges from the Neolithic through to Roman times (see below).

Neolithic	F.90 and 93
Bronze Age	F.133 (?LBA)
Bronze/Iron Age	F.83, 85 (LBA/EIA); F.87 (LBA/?EIA); F.173 (BA/IA)
Iron Age	F.75, 76, 95, 100, 101, 103, 105, 106, 130, 146, 151, 159, 160, 162, 167, 172, 176 (MIA); F.128, 135 (M/LIA); F.147, 148 (MIA/?EIA)
Roman (late 3rd-4th c. AD)	F.79, 124, 132

In general, the IA (especially the MIA) is better represented than any earlier or subsequent phase, both in terms of contextual units and find numbers, contributing 70% of the total diagnostic bone fragment counts. The features associated with each period of occupation are sporadic loci showing no clear spatial patterning within the limits of the investigated area, and were often devoid of datable finds. In such cases, structural and stratigraphic details had to be relied upon for chronological estimations which, although crude, could be usefully integrated into the existing chronological horizon. Examination of the faunal material from these imprecisely dated features shows that they contained either very little material in their fill (F.87 and F.133 yielded nondiagnostic specimens only) or almost exclusively the remains of cattle (F.83, 147, 148, and 173). Cattle are represented anatomically only by jaws and hindlimbs in F.147, 148 and 173 indicating the presence of >4-year-old beasts. Younger animals (<1-2 years) have been identified from F.83 which exhibits a more variable skeletal distribution. Preliminary comparison of body part and age group representation between different features suggests that dumping was done periodically and concerned not individual but articulated elements of a processed carcass; in other words, slaughtered and consumed animals were disposed of in chunks of anatomically associated bone (e.g. distal tibia and calcaneum, radius-ulna and humerus, etc.), presumably from the same individual.

The excavated bones were generally degraded but preservation varies from context to context and is particularly bad in Features 90, 93, 147 and 162. Unfavourable conditions of preservation have severely affected the degree of identifiability of the retrieved specimens and resulted in a high degree of fragmentation. Not only the size of the nonidentifiable (NONID) sample is significantly large but also diagnostic bones were often broken into as many as 40 or 50 pieces each.

	Cattle		Sheep/Goat		Pig		Horse		Total		NONID
	NISP	MNI	NISP	MNI	NISP	MNI	NISP	MNI	NISP	MNI	
Neolithic	2	1	-	-	-	-	-	-	2	1	9+
BA/IA	35	5	1	1	-	-	-	-	36	6	402
MIA	34	5	52	7	2	2	-	-	88	14	203
M/LIA	2	2	12	3	1	1	2	1	17	7	97
MIA (?EIA)	3	1	1	1	-	-	-	-	4	2	25
Roman	7	2	2	1	-	-	-	-	9	3	5
Total	83	16	68	13	3	3	2	1	156	33	741

Table 1 Species distribution at Fen Drayton by NISP (Number of Identifiable Specimens) and MNI (Minimum Number of Individuals), and NONID (Nonidentifiable Specimens) samples.

In terms of species representation, cattle and ovicaprids are the predominant species throughout contributing ca. 97% of the total recovery (Table 1). The presence of sheep has been osteologically documented from IA contexts (F.103, 128, 146) but no positive evidence exists for the goat. The horse and pig are the only other species whose remains have been identified in the examined sample. The horse appears with two proximal metacarpals, one of which bears knife cuts near the proximal end, from F.128 (M/LIA), and the pig with one metapodial from a foetal individual from the same context and two more specimens: a calcaneum of a <30-34-month-old animal from F.162 (MIA) and the mandible of a piglet from F.172 (MIA). Neither wild animals nor dogs are represented in the sample although it is possible that some of the nondiagnostic or nonidentifiable specimens were the remains of these animals. The presence of dogs, however, is indirectly attested in F.162 (especially in the 40-60cm stratum, <067>) where the occurrence of bones chewed upon by dogs has been well documented. A single specimen with marks of dog teeth has been recovered from an adjacent and contemporary pit (F.103). A variety of cattle, ovicaprid and suid bones seem to have been heavily gnawed upon, and canid activities may be an additional reason for the consistent absence of the epiphyses of fused or unfused long bones or of smaller bone parts from the examined sample. Finally, a pathological specimen was recorded, the mandible of a 6-8-year-old sheep/goat from F.146 which had the 2nd permanent premolar missing (failed to develop).

#### *The Neolithic*

Evidence for occupation in the Neolithic is provided by two closely spaced circular pits which contained one cattle specimen each: a radial carpal (F.90) and a maxillary 2nd molar (F.93). Tooth wear suggests that the animal concerned was probably >11/2-2 years old. Both pits contained a small number of badly weathered NONID fragments (<1mm).

#### *Late Bronze Age/early Iron Age*

One ditch (F.133) and four pits (F.83, 85, 87, and 173) are associated with this period. The ditch contained one nonidentifiable specimen, possibly from a small size animal. Of the pits, F.87 and 173 contained the rib and long bone fragments of a medium size mammal (?ovicaprid), and the two half-maxillae of a 40-50-month-old bovine respectively.

F.85, a shallow pit possibly cutting a ditch, yielded a total of 16 specimens all but one of which, the upper molar of a sheep/goat, are the remains of cattle. Body part distribution for cattle indicates that the preserved elements are bones of the forelimbs and skull (loose teeth, jaw and skull bone fragments). Tooth wear suggests the presence of at least two beasts one of which was  $\approx$ 4 years old and the other considerably older (both the incisor and 1st molar showed advanced crown wear); the ?unfused distal part of a cattle humerus found in the same pit further suggests the possible presence of a <1-11/2 year-old individual. Fragmentation is particularly high in this context which has yielded an additional 350 nonidentifiable specimens, together with 17 long bone fragments.

F.83 is a larger pit to the northeast of F.85 which contained bone and flint only and probably served as a well. A total of 8 cattle specimens were embedded in its fill, probably the remains of a single individual aged <7-10 months. Bone recovery from F.85 and F.83 corresponds to 24% and 14.5% of the whole assemblage respectively in terms of weight, but only to 10% and 5% in terms of fragment counts. Fragmentation is higher in F.85 where the 16 diagnostic specimens were broken into 110 fragments ( $\approx$ 6.9 fragments to a specimen) as opposed to F.83 where the 8 specimens were broken into 25 fragments ( $\approx$ 3.1 fragments to a specimen). Bone density/ $m^3$  too seems to be higher in F.85 with an estimated figure of 437.5 NONID specimens/ $m^3$  as opposed to just 40.8 in F.83 (Table 2).

Period	Neolithic	LBA/EIA	M/LIA
Features	90, 93	83, 85	128, 135
Excavated portions (m <sup>3</sup> )	0.10	(1.25, 0.80) = 2.05	(0.25, 0.40) = 0.65
NISP/m <sup>3</sup>	20	(6.4, 20) = ≈12.9	(40, 20) = ≈92.3
NONID/m <sup>3</sup>	90	(40.8, 437.5) = ≈195.6	(200, 117.5) = ≈488.5
NISP/NONID	1/4.5	(1/6.4, 1/21.9) = ≈1/16.7	(1/5, 1/5.9) = ≈1/5.4

Table 2 Aspects of bone density per m<sup>3</sup> in selected features of Fen Drayton.

### *The Iron Age occupation*

The IA is attested in a total of 21 features of which 17 are dated to the MIA. IA features contain predominantly the remains of cattle and sheep/goats (>95%) and a few pig and horse specimens (see Table 1).

### *Early/middle Iron Age?*

Material from F.147 and F.148, two ditches in the north part of the excavated area, dates to this period. The first ditch contained the tibia of a sheep and two cattle specimens, the distal femur of a >42-48-month-old animal and the mandible of a >50-month-old individual. The second ditch contained the calcaneum of a *Bos*. An additional 35 NONID fragments were counted from both features. The state of preservation of all the bones was extremely bad.

### *Later middle Iron Age*

Precisely dated MIA features contributed 56% of the total IA bone recovery. Both cattle and ovicaprids are represented by a variety of skeletal parts but foot bones are relatively scarce. This is probably due to reasons relating to taphonomy rather than human behaviour and seems to be a pervasive feature of the examined assemblage.

The small ruminants are noticeably more numerous than their larger relatives in terms of fragment counts and in some features the ratio of cattle to ovicaprids is 1/3. This ratio is probably inflated as sheep bones tend to break more easily and into more fragments than cattle bones resulting in increased NISP values for sheep. MNI estimates assign a leading role to sheep but in reality cattle would still have made the greatest contribution in terms of meat. The pig makes a sporadic appearance with two specimens, the calcaneum of a <30-34-month-old animal (F.162, [235] <056>) and the right mandible (F.172) of a piglet (7-11 months old).

Anatomical and ageing information on cattle indicates the presence of at least 5 individuals. Four of these were 3 1/2 years old or younger and one was assessed to be mature on the basis of size. Apart from the 5 cattle individuals, the carcasses of an additional 7 sheep/goats were dumped into MIA features. Age assessment for sheep indicates that four animals were younger than the age of 2, one was placed in the 1-3-year-old category, and the remaining two were older than 4 years. MNI calculations were carried out on the basis of maximal segregation, i.e. treating each feature as an independent context. In reality, however, a dismembered carcass may have been disposed of in more than one pit/ditch and MNI figures may be lower than the ones suggested here.

### *Middle/late Iron Age*

The M/LIA is represented by two ditches (F.128 and 135), butt ends of house gully, which contained a total of 2 cattle, 2 horse, 1 suid and 12 sheep bones. F.128 (NISP=9) contained the whole range of the above species. The horse (non ageable), cattle (non ageable) and pig (foetal) are represented by one individual each. The sheep are represented by 2 individuals, >11/2-2 years and 8-10 years of age.

The sample from F.135 (NISP=8) contained only one cattle specimen, possibly from an immature individual, as well as the remains of a 4-6-year-old sheep. Burned bones appear in both contexts and are particularly numerous in F.135.

### *Romano-British*

Roman material is derived from three features. F.79 contained only one bone, the fragment of a vertebra of a small size mammal. F.124 contained four cattle specimens: an upper molar (worn), skull fragment, scapula and long bone fragment from a mature beast. F.132 contained three cattle fragments (upper D4, rib and long bone fragment) and two long bone fragments of a sheep/goat. The deciduous cattle premolar indicates an age of <2 years.

### *Discussion*

Neither the excavated features themselves (both individually and in aggregate) nor the size of the bone assemblage offer an adequate basis for analysis beyond the descriptive level. Bone find numbers are well below the lowest limit of statistical validity and any observable patterns have to be treated with caution. However, if the information we have is anything to go by, then the following patterns may be suggested.

Firstly, the overwhelming predominance of cattle and ovicaprids suggests that the Fen Drayton community relied primarily on domestic animals for subsistence throughout the various occupation periods predicted for the settlement. The complete absence of wild animals and fowl, and the sporadic appearance of the pig and horse, which are usually encountered on habitation sites of one period or another, further emphasise the domestic component of the economy at Fen Drayton.

Secondly, the ratio of small to large ruminants seems to have changed through time. More specifically, BA/IA features tend to comprise almost exclusively the remains of cattle; in MIA and M/LIA contexts, however, ovicaprids assume a dominant role and some features are littered exclusively with the remains of either cattle (F.83 and 173) or sheep (F.133) and this may indicate, if not primarily preservation biases, the selective and organised disposal of processed carcasses. Body part distribution in individual features suggests that bone disposed of during each dumping episode concerned skeletally associated joints but it is not possible to determine either the frequency of these incidents or the degree of bone interdependence between different features.

Thirdly, the ageable cattle and ovicaprid samples indicate the presence of both very young and very old individuals with perhaps fewer killings taking place at the optimal meat age. This is not to say that the meat of the domestic animals was not eaten at Fen Drayton but that possibly other products were important in addition to meat. It is possible that milk was a regularly exploited product. Such a strategy tends to be reflected osteologically by the predominance of very young and old individuals; the young ones would be lambs, kids and calves competing with humans for the milk of ewes and cows, and the old individuals would represent the female segment and a few breeding males. Comparison of slaughtering practices between different periods is not possible as there is insufficient ageing information.

## 6) Lithics A. Dickens.

The excavation produced 168 pieces of struck and 33 pieces of burnt flint. The small size of the assemblage necessarily places constraints on the level of analysis and interpretation that are possible. It is nonetheless expedient to examine the general character of the material recovered and to draw inferences from it.

Earlier work around the site suggested a blade based technology, the material being assigned to the earlier phase of the Neolithic (Edmonds, 1993). Most of this material lay to the west. Only assessment Trench 13 crossed the area of the current investigation. A scraper from a feature within this was identified as Neolithic, although the attribution was seen as problematical. Initial observation of the recently recovered material reflects the interpretation of the earlier work to a degree in that there is certainly an early Neolithic element present. The overall impression, however, is of a predominantly later Neolithic assemblage that has earlier Neolithic and bronze age elements within it.

Several flakes and blades retain evidence of careful core preparation and maintenance, 5 unretouched flakes appear to have been struck from cores deliberately worked to create a specific shape. Only 8 pieces (4.76%), however, are true blades, with parallel edges, some with parallel flake scars on the dorsal face. The main group recovered was the flake, (121 pieces, 72.02%). Of these 42.86% can be classified as squat (a breadth:length ratio of 5:5 or greater) and 27.38% as narrow (a breadth:length ratio of 2:5 or less). This suggests a mixed assemblage - the percentage of squat flakes is too great for the assemblage to be only early bronze age, that of narrow flakes too great for it to be only early Neolithic. There is also evidence of different flaking techniques. Some flakes show clear indication of controlled working with a soft hammer or by indirect percussion. Negligible platforms, diffuse bulbs and waves of percussion indicate skilful manipulation of the raw material. Other flakes, however, have wide platforms, prominent bulbs and exaggerated waves of percussion indicating a hard hammer reduction technique and a markedly lesser degree of skill. The former tends to suggest earlier Neolithic activity, the latter bronze age.

Sixteen pieces (9.5% of the total) were retouched. This again suggests a mixed assemblage, with perhaps a weighting to the later bronze age. Ford et al (1984) suggest an increase in the overall percentage of retouched pieces within assemblages ranging from <1% in the later Neolithic to up to 15% in the later bronze age, the range of tool types, however, decreases. All the tool types recovered on this site were amongst those retained until the late bronze age. Two of the 4 scrapers (recovered from machining) are characteristically bronze age. Of the other 2 one, from F.75, is probably Neolithic the other, from F.93, is an undiagnostic side scraper. Several other pieces are also undiagnostic. These include a broken flake and a knife from F.90, an awl from F.76, and a flake from F.93. Two tools appear to be without obvious parallels. A 'T' shaped piece from F.83 may be a form of chisel whilst a carefully retouched piece from F90 may be a knife. The latter is most probably Neolithic, the former is undiagnostic.

The lack of primary cortical flakes in the assemblage (only 2.42% of the total compared to 71.43% tertiary flakes) indicates an absence of primary phase reduction within the area of the excavation. This again mirrors the findings from the previous investigations. There are also very few cores (2 certain and 1 probable) supporting the suggestion that deposition occurred after initial reduction. It is curious that this pattern appears to be common across the chronological spread of the lithic material.

One of the most interesting features of this assemblage is the frequent occurrence of flakes struck from polished implements of both flint and fine grained stone. Nine flakes originating from at least 6 different polished implements were recovered from 6 features and from initial machining. Two flakes, apparently from the same polished implement were recovered from each of F.90 and F.93 and a similar, though unpolished flake, from F.163. One flake, each from a different polished implement, was recovered from F.95,

F.135, F.157, F.177 and machining spoil. It is difficult, without additional evidence, to suggest a date for this activity. It is presumably later than the earlier Neolithic, when it is most likely that the polished implements derive from, but more close dating is not really possible. The question as to whether the activity represents simply a by-product of the *ad hoc* use of easily accessible raw material, or a deliberate 'cancelling' of a no longer powerful symbol remains open.

After analysis of the lithic material the initial impression of a mixed assemblage still remains. There are clearly identifiable early Neolithic and bronze age elements, but the assemblage does not split into two distinct groups in the way that, for example, the material from "The Hollow" at Bourn Bridge does (Pollard 1995: 51). Material from the possible Neolithic features (F.90 and F.93) is not sufficiently distinct from the rest of the assemblage to assist with dating. In conclusion, the assemblage is mixed and appears to encompass a wide date range, with elements ranging from the earlier Neolithic through to the later bronze age.

## 7) Neolithic pottery J. Pollard.

Sherds of Neolithic pottery were recovered from three pits, F.90, 92 and 93; all the features being similar in form and fill. In total there are 55 sherds/crumbs weighing 328g, of which three (38g) from F.90 are in Iron Age fabrics and undoubtedly intrusive. Excluding the Iron Age material, around 10 vessels are represented, defined on the basis of fabrics, rims and decorated sherds. Most of the vessels are bowls in the Peterborough Ware tradition (Smith 1965). All of these are highly decorated with incised and impressed (twisted and whipped cord, and bird-bone) horizontal bands, in some cases forming herringbone, occurring across the exterior of the body, neck, rim and in the mouth of the vessel interiors. Specific attribution to a particular sub-style of Peterborough Ware is difficult - reflecting the inapplicability of strict ceramic classification for the period - though the defined concave necks and thickened rims might suggest the sherds belong to Mortlake rather Ebbsfleet bowls.

In addition to the Peterborough Ware, at least one earlier Neolithic plain bowl is represented by a thickened everted rim from F.92/3, and a sherd decorated with an incised lattice pattern from the same feature group may derive from a decorated bowl, possibly of Mildenhall ware (Longworth 1960). Significantly, the condition of both of these sherds is no different to that of the Peterborough bowls, implying that they are not residual and form part of a single contemporaneous assemblage.

Although generally of small size, most of the sherds are quite fresh, with original surfaces surviving well. There is no indication that any of the Neolithic pottery is residual in its context, although given the fragmentary nature of the vessels the sherds are unlikely to represent primary refuse, and they may have been curated from a midden for re-deposition in the pits. The homogeneity of assemblage, along with the similarity evident in the form and fill of the pits in which the pottery was deposited, suggests that the material relates to either a single episode or contiguous episodes of short-lived occupation, dating to the latter half of the fourth millennium cal. BC.

Other finds of Peterborough Ware are known from the immediate stretch of the Ouse Valley, at Fenstanton and Meadow Lane, near St. Ives (Green 1961), and Barleycroft Farm, Bluntisham (Evans & Pollard 1995). However, to the writer's knowledge the Fen Drayton pottery probably forms the largest closed assemblage of Peterborough Ware from the Cambridgeshire Great Ouse Valley. In this respect, the pit contents (ceramics, lithics, faunal and botanical material) should really be considered in totality so that the some sense can be gained of the range of activities present, their duration, and the context of deposition. Publication of the pits is recommended.

Details of the pottery, according to feature (excluding the Iron Age sherds) are as follows:

**F.90 [279].** Seven sherds/crumbs from a minimum of two vessels. All are in a soft, slightly laminated fabric with sparse sand and sparse small ?grog. Five sherds, including two thickened rims, show traces of decoration through the impression of twisted and whipped cord. One intact rim is everted, flattened, and thickened externally, with a slight lip internally. There are faint traces of impressed or incised decoration on the top, and immediately below herringbone whipped cord.

**F.92/93 [215].** 45 sherds from eight identifiable vessels came from these two features:

*Vessel 1.* Nine sherds (89g), of which four refit to form part of the rim, neck and shoulder. Moderate to hard fabric with common fine sand and occasional small burnt flint (infrequently distributed). The vessel profile includes an expanded, flattened, everted rim, with a well-defined concave neck and sharply angled shoulder. The decoration comprises multiple horizontal bands of bird-bone (proximal tibia?) impressions.

*Vessel 2.* Nine sherds (74g), including two rim fragments. Moderately hard fabric with frequent fine sand and common poorly sorted small to medium flint. The Mortlake-style rim is of thick and heavy expanded form, rounded on top, below which is a shallow concave neck and gently angled shoulder. The bowl is decorated all over with horizontal bands of finely incised herringbone. There are a series of apparently haphazard diagonal incised lines within the interior just below the rim.

*Vessel 3.* 14 sherds/crumbs (42g) from a thick-walled vessel. Fabric as vessel 2, but with more frequent flint. Decorated with horizontal bands of incised diagonal lines, possibly forming herringbone.

*Vessel 4.* One sherd (8g), comprising part of the body, shoulder and base of the neck. Fabric as vessel 1. Decorated with multiple horizontal lines of continuous twisted cord, beginning just below the shoulder. The neck is extremely thin and has fractured along its base.

*Vessel 5.* One body sherd (12g). Fabric as vessel 1. Decorated with fine incised irregular lozenges. This probably belongs to an earlier Neolithic 'decorated bowl' rather than a Peterborough Ware vessel.

*Vessel 6.* Two plain body sherds (12g) in a compact sandy fabric. These may be Iron Age.

*Vessel 7.* Seven sherds/crumbs (16g) in a soft, laminated, corky fabric (resulting from the dissolution of an organic or calcareous temper), containing sparse small sand and occasional small ?grog. The vessel form is indeterminate.

*Vessel 8.* Two sherds (8g) from an early Neolithic plain bowl. Moderately compact fabric with sparse very fine sand and very occasional small flint. One sherd belongs to a thickened everted rim.

## 8) Iron Age pottery J.D. Hill.

### *Nature of the assemblage and aims of the report*

The pottery assemblage from excavations at Fen Drayton consists of 1269 sherds weighing at least 7360 gms; Mean Sherd Weight 5.79 gms. The assemblage ranges in date from the middle/late Bronze Age to the Roman conquest period. although the majority of the material is of a later Iron Age date (c. 300BC-AD40/60). The material was recovered from 33 features. Approximately a third of the pottery came from the ditches of a later Iron Age enclosure system [F.100, F.101, F.146, F.162], with over 1800 gms of pottery recovered from the butt end of ditch F.162. Other material came from house gullies, pits, post holes and other ditches. The material represents only a small sample of the pottery on the site. Because of the limited time to investigate the site, few features were extensively excavated. This limits the potential information that can be supplied by the pottery. Despite these limitations, the recovery of pottery does not appear to have suffered too badly, with relatively small sherds recovered from a number of features. The pottery is well preserved and does not appear to have suffered major post-depositional changes. The assemblage is very varied in nature and origins. The low overall mean sherd weight shows that much of the material is poorly preserved and residue material. Small quantities of residue sandy fabric pottery were recovered from a number of the probable Roman field ditches and other features post dating the main later Iron Age phase of occupation. Other features, contemporary with this occupation, contain higher densities of abraded material. A small number of features contain well preserved pottery which was probably deposited soon after it was broken. These deposits often contain a portions of single vessels, although the butt of ditch F.162 is exceptional with large sherds, including two bases, from several individual vessels. Only three features produced more than 1000 gms of pottery each (F.128, F.162 & F.163), and only another 6 more than 100 gms. There are no contexts from which partial or complete vessel profiles can be reconstructed.

This evaluation is based on a preliminary examination by hand of all the assemblage to establish the date range of the material, the range of forms and fabrics present. No further detailed recording of the material or analysis has been carried out.

### *Chronology and Affinities*

The pottery can be divided into two broad groupings;  
Bronze Age and early Iron Age  
Later Iron Age

#### *Bronze Age and early Iron Age*

A small number of features produced burnt flint or dense shelly fabric sherds similar to Bronze Age and early Iron Age material elsewhere in the region. The shallow odd shaped pit F.85 produced 2 large thick sherds in a distinctive heavily white shell tempered pottery and with a finger tip impressed rim. These sherds appear to have come from a large barrel shaped, flat rimmed vessel. The form and the distinct fabric suggest a middle/late Bronze Age date. Other probable Bronze Age/early Iron Age material is small and only distinguishable by their fabrics. F.133 produced small and abraded sherds in a similar shell fabric to that found in F.85. However, the other early pottery is marked by burnt flint fabrics and may belong to the late Bronze Age/early Iron Age [F.84, F.175, F.177, F.191]. All this early material is of a small size and possible residual nature, although it does indicate activities across the excavated area from the middle Bronze Age through to the early Iron Age (c.1250-400 BC).

### Later Iron Age

The bulk of the pottery belongs to the later Iron Age (c. 300BC - AD40/60). Often called 'middle Iron Age' pottery, this tradition of hand made material typifies the pottery of the both the middle Iron Age and much of the late Iron Age across northern East Anglia and parts of the East Midlands (e.g. Elsdon 1992, Evans & Sejeantson 1988, Willis 1993). Providing a closer dating within this period is difficult, and largely depends on the presence of wheel made southern East Anglian pottery and their local imitations or datable metalwork. Both are missing at this site.

The material from this phase represents the typical limited range of bowls and open jar forms found on other sites in the region (e.g. Briscoe 1949, Davies 1993, Pryor 1984, West 1990). Apart from the residue material in later features, this pottery is well preserved and often of a large size compared to the Bronze Age and early Iron Age pottery. It comes from a number of features associated with both of the circular structures, the main enclosures and other associated features. Despite the stratigraphic relationships between a number of the ditches, pits and circular structure gully F.128, there are no clear chronological differences within the pottery. The exception is the material from several post holes such as F.150/146, F.159 and F.163. The pottery is made from a range of sand and white shell tempered material. The sandy fabrics could have been locally made, although the white shell inclusions in the other fabrics probably come from limestone or limestone derived clays associated with the Jurassic ridge. A significant proportion can be classed as 'scored wares', with deep irregular scored lines running across the body. As on other Iron Age sites several dumps/deposits of large parts of a few vessels can be identified, such as the major part of a dense sand tempered pot from F.163, may refitable sherds from the north butt of circular structure gully F.128, and the large deposit from the butt of F.162.

It is extremely difficult to date closely either the beginning or the end of this main phase of occupation. Scored ware and plain ware pottery of the types found at Fen Drayton were in use throughout the later Iron Age. In the East Midlands the proportion of scored ware on sites increases through the period, but it is not known if the same appears in Cambridgeshire. As noted above, several features may be late in the later Iron Age. Denser sand tempered material, hand made but produced with more controlled technologies, have been recovered from first century AD contexts at Wardy Hill, Coveney (Hill 1995). As such, similar denser, better made material as in F.163 and F.150/147 *might* be of early first century AD or conquest period date (c.1-70 AD). The small post hole F.159 produced a small quantity of pottery in both hand made sand and shell fabrics, but also includes a single slightly abraded white coloured, grog tempered sherd. This sherd is probably later first century BC through to early Roman in date. As such, the main phase of occupation at the site started somewhere in the later Iron Age and could have lasted into the first century AD. None of the probably latest pottery comes from features directly associated with the main phases of enclosures, circular buildings and pits.

### Discussion

The pottery from Fen Drayton adds to the growing corpus of later Iron Age pottery from sites along the Fen edge (see Hall & Coles 1994, Evans & Sergeantson 1988). Although often small assemblages from limited excavations, such as this one, taken together the pottery from these sites provide a useful database to consider questions of production and exchange, social status and cultural affinity along the southern Fen Edge. The mix of sandy and shelly wares on this, and other, sites has interesting implications for the production, distribution and use of pottery in the area. An important issue raised by this site is the nature and status of 'scored ware' (Elsdon 1992). Deep irregular scoring is a common feature of pottery of this date in the East Midlands and the Nene valley. It occurs along the Fen edge around Peterborough. Further south and east the distribution is patchy. It may occur in very small numbers on some sites, such as on the Isle of Ely, or not at all. While other sites, such as Lakenheath (Gell 1949) and Aldwick, Barley (Cra'aster 1961) have large proportions of scored ware. This patchy distribution argues against a simple functional explanation for

deep scoring in this part of Eastern England. Whether the use of scored wares should be understood in terms of ethnic or cultural affiliations is unclear (see Elsdon 1992 for discussion). The presence of a large assemblage of 'scored ware', made in both sandy and shelly fabrics, at Fen Drayton provides further material to consider this question.

## 9) Medieval land division D. Hall.

The landuse of Fen Drayton is shown by three maps dated 1792, 1840 and 1841, (St. Johns College (SJC) map 222 (estate); Cambridgeshire Record Office QRDC61 (Enclosure); Cambridge University Library Map bb.53(1).01.55; Tithe). That of 1792 shows the open-field layout marking all the furlong boundaries, common pastures, fen and the meadow held in severalty (i.e. intermixed ownership). All are named. The arable land lay to the south and the pastures to the north next to the River Ouse. The Enclosure map and Tithe map show the boundaries of the great fields and the pastures, accurately mapped, and reproduced by the VCH as a land use map 'c. 1800'.

The CAU site spans the division between Marsh Common and Low Fen, which was marked by the Oxholme Ditch. Both these pastures were common and not held in strips in 1792. No evidence can be found that they were ever divided into strips since c. 1250, because terriers of open-field holdings, chronologically evenly spread over c. 1250-1792, mention the severalty meadows marked on the 1792 map but no others that can be shown to be the later commons. For instance the 18th century meadow names of Pit Furlong (1379), Hollack Furlong (c. 1250, 1379), Leed Furlong (c. 1250) and Far Fen (1422 as Frech Fenn) are referred to at the dates following their names in brackets (SJC 25/35; 25/186; 25/207). Low Fen was named as a (common) fen and not a meadow in 1422 (SJC 25/207).

Any earlier division into strips would have been by the same method as the severalty meadows of 172, that is by blocks of very straight divisions (each block was called a furlong and subdivided into groups called hides (see SJC terrier 25/207 of 1422). The strips had intermixed ownership like the arable lands but had no physical divisions on the ground. They were marked out in the standing grass each spring by pacing from known boundaries and from marker stones or holes. After mowing and carrying of hay the meadows were used for common pasturing.

Even if Marsh and Low Fen commons did have ditched divisions in the Saxon period, subsequently abandoned and buried by alluviation, the ditches would be expected to lie in blocks of straight strips and certainly be contained and separated by Oxholme Ditch and are therefore older.

The excavated strips are c. 4m wide and two complete examples are 52m and 120m in length. These are moderately similar in size to Roman examples still surviving as ridged earthworks at Bullock's Haste, Cottenham (SAM 66), which are 8-40m in length. These have been interpreted as horticultural lazybeds. It is not known if the Cottenham ridges have ditches between them. Another small block of parallel ditches occurs at Waterbeach (Hall 1996 Forthcoming, Fig. 66-7).

Similar ditched strips have been discovered at Grendon and Wollaston, Northants. The Grendon examples are undated, but run under a medieval parish boundary (D. Jackson, pers. comm.) and the Wollaston examples lie under medieval meadows near a Roman villa (I. Meadows, pers. comm.). They are up to 120m in length covering several hectares, and have trenches of enriched soil with postholes in them, indicating that the trenches are horticultural rather than the land between. They are believed to be vineyards.

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