



THE UNIVERSITY
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**Little Paxton Quarry,
Diddington, Cambridgeshire
Excavations 1992-1998**

**Iron Age Settlements
(Areas B-E/F)**

Post-Excavation Assessment

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Birmingham University Field Archaeology Unit
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by
Alex Jones

With contributions by
Lynne Bevan, Marina Ciaraldi, Annette Hancocks,
Emily Murray, and Stephen Willis

For further information please contact:
Simon Buteux or Iain Ferris (Directors)
Birmingham University Field Archaeology Unit
The University of Birmingham
Edgbaston
Birmingham B15 2TT
Tel: 0121 414 5510
Fax: 0121 414 5516
E-Mail: BUFAU@bham.ac.uk
Web Address: <http://www.bufau.bham.ac.uk>

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Little Paxton Quarry, Diddington, Cambridgeshire

Excavations 1992-8: Iron Age Settlements (Areas B-E/F)

Post-Excavation Assessment

1.0: SUMMARY

This report describes the features and finds of Iron Age date recovered during an on-going programme of archaeological investigations in advance of quarrying at Little Paxton, Diddington, Cambridgeshire, and provides proposals to bring the fieldwork results to full publication. The assessment also includes consideration of features of Late Iron Age-transitional date and associated finds, including material which could be very early Romano-British in date.

This report forms the third and last stage in the post-excavation assessment of the fieldwork results within the Phase 1-2 areas of the quarry (excavated 1992-8). The first stage of post-excavation assessment was concerned with the Romano-British period (Jones 1999), and the second stage comprised an assessment of the Neolithic-Bronze Age data (Jones 2000). Although assessment was undertaken in three different stages, culminating in the present report, it is intended that the prehistoric (archaeological Phases 1-3, as presently defined) and Romano-British settlements (archaeological Phases 4-6, as presently defined) will be analysed and reported-on together within a single monograph. It is proposed that the results of fieldwork within the Phase 3 area of the quarry (excavated from 1998 onwards) will be the subject of a later post-excavation assessment, and a subsequent full publication.

Activity of Middle-Late Iron Age date was recorded in three areas (B, C/D and E/F). Circular, timber-framed buildings, represented by caves-drip gullies were recorded in Areas B and E/F. The most frequently-occurring Iron Age features comprised ditched farmstead enclosures, recorded in Areas B and E/F. Animal pens of Late Iron Age date were recorded in Areas B and E/F. A square barrow of Iron Age date was recorded in Area D, and other features of Iron Age date were recorded in Areas C and D. Area E/F contained enclosures and animal-pens of Late Iron Age and transitional date. Evidence of multi-phase Iron Age field systems surrounding the settlements, was also recorded.

2.0: INTRODUCTION

2.1: Background to the project

This report presents an integrated summary of the features of Iron Age-transitional date, and associated finds, excavated during an on-going programme of archaeological excavations which began in 1992 at Little Paxton Quarry, Diddington, Cambridgeshire (Fig. 1A-B; centred on TL 202651). The report provides a post-excavation assessment of the later prehistoric data, prepared in accordance with the requirements of the Management of Archaeology Projects (MAP 2 - English

Heritage). The excavations have also involved the examination of Neolithic-Bronze Age features and finds, and Romano-British settlement complexes, which are the subject of separate post-excavation assessments (Jones 1999, Jones 2000). The fieldwork was undertaken by Birmingham University Field Archaeology Unit on behalf of Aggregate Industries UK Limited and its predecessor companies.

Evaluation of the Phase 1-2 areas (Fields 1-4) within the quarry was undertaken in two stages. The first stage involved air photograph analysis, geophysical survey and trial-trenching, undertaken in 1992 (Air Photo Services 1992; Geophysical Surveys of Bradford 1992; Leach 1992; Jones 1992). The second stage in the evaluation of Fields 1-4 involved fieldwalking and test-pitting in Fields 1 and 2 (Bevan 1996a and b; Bevan and Dingwall 1997; Bevan 1997), which was undertaken immediately prior to topsoil stripping and area excavation.

Since the evaluations confirmed that the principal settlement complexes within the quarry corresponded with the main concentrations of crop-marked features, subsequent area excavations have been targeted to examine the main concentrations of crop-marked features. The Iron Age probably marked the most intensive settlement and exploitation of the Phase 1-2 areas within the quarry.

A total of five area excavations (Areas A-E/F, Fig. 1C) have been undertaken in the Phase 1-2 area of the quarry between 1993 and 1998. The results of work in each area have been summarised in four interim reports (Jones and Ferris 1994; Jones 1995a, Jones 1998; and Jones forthcoming a). The archaeological mitigation strategy within the remainder of the Phase 1-2 areas of the quarry has involved the maintenance of an archaeological watching brief during overburden stripping, supplemented where appropriate by salvage recording.

Excavation in 1993 initially involved the examination of a Romano-British 'ladder' and other associated enclosures (Area A, Jones and Ferris 1994; and below), and of a complex of Neolithic pits, including possible pit-circles (Area B, Jones 1995a). Later features included a complex of Iron Age farmstead enclosures including two hut circles (Area B). A discrete Iron Age square barrow and other Iron Age features were dug in 1996 (Jones 1998, Area C/D). The most recent investigations, undertaken over two seasons (1997-8), involved the examination of a complex of ditched enclosures and animal pens of Middle-Late Iron Age and early Romano-British date, extending over an area of 5ha. (Jones 1999, Area E/F), which also included a small cluster of pits of Neolithic date.

Further, on-going evaluation and excavation is currently in progress in the Phase 3 area of the quarry, located to the north of the Phase 1-2 area (outside the scope of this, and the associated assessments and the related programme of post-excavation). This most recent fieldwork has involved the examination of Neolithic-Bronze Age pits, and Iron Age and Romano-British enclosures and field systems, which will be reported upon subsequently in a post-excavation assessment, to be followed by a full programme of post-excavation analysis and reporting of the evidence. Such reporting of the Phase 3 data will provide the opportunity to test and refine the models of settlement and activity developed in relation to the Phase 1-2 areas.

2.2: Aims

The overall aims of the excavations (Jones 1995b) were to define and date changes in settlement forms and economy from the Neolithic to the end of the Romano-British period, and to relate these changes to the development of the river valley environment, providing an integrated model of settlement and economic change which can be compared with evidence from other river valley environments.

The detailed aims of excavation appropriate for the study of the Iron Age were as follows:

- 1) To consider the evidence for the earliest farming activity and settlement on site.
- 2) To define the chronology of site activity.
- 3) To compare the evidence of change in settlement and economy through the Middle and Late Iron Age, with the evidence from the Romano-British period.
- 4) To attempt inter-comparison of the settlement and economic data from the two Iron Age settlements.
- 5) To examine the evidence for the land use outside the settlement areas, in particular field systems.
- 6) To consider the evidence for ritual activity, including the spatial patterning of finds.
- 7) To compare the model of changes in settlement location, form and economy proposed for the Little Paxton settlements with data for other contemporary landscapes within the Ouse Valley, and to attempt a wider comparison with similar evidence recorded within other river valley environments.
- 8) To consider the evidence for change in settlement and economy during the Late Iron Age-Romano-British transition.

2.3: Methodology (Fig. 1C)

Excavation in Field 4 (Area B) was undertaken in two stages, in June and October-December 1993. Two contiguous areas measuring 60m and 80m square were investigated, both areas being positioned to examine the majority of the crop-marked features. Excavations in Area D (Field 1) during 1996, centred around a crop-marked enclosure, and investigated an area measuring 26m by 50m, other, less substantial crop-marked features were investigated in the adjoining Area C. Excavation in Area E/F (Field 2), undertaken in two contiguous areas in 1997-8, examined an area of approximately 5 ha., which also contained Middle-Late Iron Age enclosures, in addition to evidence of early prehistoric, and Romano-British activity.

Within all area investigations, the excavation and sampling procedures were similar (as elsewhere within the quarry), to permit inter-comparison of the results. Within the excavated areas, the ploughsoil was removed by motor-scaper working under archaeological supervision, to expose the upper gravel horizon, which was later cleaned by 360 degree excavator or by hand, to define the archaeological features cut into the gravels. Sampling of the ditches was targeted at the feature intersections to elucidate the sequence of activity, with discrete lengths of linear features also being additionally hand-excavated. Pits and post-holes were examined in half-section. Samples for environmental analysis within each of the areas investigated were taken from sealed, well-dated feature fills, and were processed on-site to enable rapid

'feedback' which contributed to the evolving strategy for excavation and further environmental sampling.

Recording employed separate running numerical sequences for contexts (four digit numbers) and features (three digit numbers, prefixed by an 'F'). Features were defined to include negative features such as ditches, pits and post-holes, but also positive features such as floors and banks. Where several hand-excavated cuttings were dug through the same feature, the segments were distinguished by the addition of a decimal suffix to the feature number, and additionally the feature fills were separately numbered, to facilitate the analysis of spatial patterning within artifact distributions. For simplicity, the enclosures in Area I/F have been numbered in a chronological sequence (commencing with the Middle Iron Age enclosures) prefixed by an 'E'. The enclosures in Area B have also been numbered in a separate sequence.

3.0: RESULTS

3.1: Phasing

The Iron Age settlement and activity is defined as Phases 2-3 of the overall sequence, as follows:

Phase 1:	Neolithic and Bronze-Age
Phase 2:	Middle Iron Age (Areas B, C/D, E/F)
Phase 3:	Late Iron Age (Areas B, E/F)
Phase 4:	Late 1 st early 2 nd century
Phase 5:	Late 2 nd -3 rd century
Phase 6:	4 th -century activity

The limitations of the pottery dating for the purpose of phasing and assessment at this preliminary, assessment stage should be noted. Hill (in press) has emphasised that the terms Middle Iron Age and Late Iron Age when applied to pottery are cultural, rather than chronological indicators (see Willis below).

This assessment, and the programme of analysis and reporting proposed in this report is only concerned with Phase 2-3 features, and residual finds of this date.

This section of the report is arranged to describe the Iron Age data by phase. Iron Age settlements were identified within Areas B, C/D, and E/F. The settlements are described by phase, and alphabetically, by area. The dating evidence is tabulated (Tables 1-2).

3.2: Middle Iron Age (Areas B and I/F)

Area B (Figs 2-4)

The earliest excavated features of iron Age date comprised an enclosure, a well, a group of ditches located in the east of Area B, and two eaves-drip gulleys (Structures 1-2).

The main feature of this phase was an irregularly-shaped, pentagonal ditched enclosure (Enclosure 1), first identified as a cropmark (Fig. 1C). In plan, this enclosure comprised four straight sides (F362, F366), and one curved side (F366). The depth and profile of the ditch varied, becoming generally deeper and more rounded in profile towards the changes in alignment and at the entrances. The ditch was generally U-shaped in profile, and measured a maximum of 1.6m in width, and between 0.7m and 1.2m in depth.

Enclosure 1 had two entrances. The northern entrance, located towards the western end of the northeastern side (F366) was defined by two round-ended and slightly mis-aligned ditch terminals, positioned 2m apart. A single post-hole (F379), dug on the outside of the eastern ditch terminal, may be the sole surviving feature of an entrance structure. Both ditch terminals of the eastern entry-gap were located to the east of the excavated area, and no trace of any entrance structures could be found within the excavated area. There was no evidence of a third entrance, in the southwest corner of the enclosure, suggested by the cropmark evidence.

A well (F338, Figs. 2-3) was located 20m to the northeast of Enclosure 1. It was roughly circular in plan and measured a maximum of 1.5m in depth. A shallow gully (F354), aligned west-east, was cut to the west of the well and may have been associated with its use.

The group of contemporary features in the east of Site B comprised both shallow field boundary ditches, and more substantial, ditched features. Some of these features were cut into the infilled gully (F401) of Structure 1. The field boundary ditches (F418, F428, F403) measured a maximum of 0.1m in width and depth, and were cut on north-south and east-west alignments. No relationships could be observed between the field boundaries at their intersections. The more substantial contemporary features of this eastern group comprised a curvilinear ditch (F371) which became slighter after turning westwards and two ditches (F372, F419), cut on east-west alignments. Other shallow, and possibly-contemporary gulleys were also cut north-south, to the south of ditch F371.

Ditch F371 cut the western terminal of feature F419. The presence of a bank constructed to the south of ditches F372 and F419 was suggested by the recorded fill sequences. Evidence of later re-cutting (Phase 3, below) was also apparent in the former feature.

The ditch fills of Enclosure 1 comprised a dark brown clay-silt-sand. The lower, silty fills of the well were sealed by layers of brown silt-sand accumulating in the feature as a result of the rapid weathering and collapse of the unstable sides of this feature. In contrast, the fills of the eastern ditch group exhibited little sign of prolonged weathering, and most appeared to have become rapidly infilled with occupation debris including charcoal, except in the length of ditch F371 cut to the north of feature F372, where a more gradual process of infilling may be suggested.

A curvilinear ditched boundary (F372), located to the northwest of the excavated area and cut by the northern ditch terminal (F369) of Enclosure 2 (Phase 3, below), may be attributed to Phases 2 or 3, although no datable artifacts were recovered from the fills of the former feature. The apparently regular positioning of a group of post-holes to

the east of ditch F372 may suggest that these defined a stockade, abutting the eastern side of the ditch. The positioning of this stockade also suggests that it pre-dated Enclosure 2.

Two roughly circular eaves-drip gulleys (Structures 1 and 2; Fig. 2; not illustrated on Figs. 3-4) were dug to the northeast of Enclosure 1. Structure 1 comprised two curvilinear gulleys (F398-9), probably associated, and together defining approximately two thirds of the circumference of a circle. The northernmost gully (F398) was flat-based in profile, measuring a maximum of 0.7m in depth, and 1.1m in width. The southernmost gully (F399) was flat-based, except towards its western terminal where it became W-shaped, probably as a result of re-cutting. The latter feature measured 0.15m in depth, and between 1.2m and 0.5m in width, at its western and eastern limits, respectively. Both gulleys appear to have been dug in sections, with slight changes of angle.

The western entry-gap of Structure 1 measured 3m in width, and contained four post-holes (F407, F448-50), which may have been contemporary with the structure. Post-hole F407 was dug in the centre of the entry-gap, and features F449-50 were dug in line with the former, and at an oblique angle to the apparent main axis of this entrance. The fourth post-hole of this group (F448) was positioned opposite post-hole F449, and 1m to its north. These irregularly-shaped post-holes measured between 0.5-1.0m in width and between 0.3-0.7m in depth.

There were no other identifiable features within the interior of Structure 1, nor was there any trace identified of a gully, or post-hole alignment between the recorded eastern termini of gulleys F398-9, despite repeated cleaning. The shallow depth of the northern gully (F398), and the absence of a clearly defined eastern butt-end may suggest that its eastern continuation may have been scoured-out by plough truncation. In contrast, the original eastern terminal of the deeper-cut southern gully (F399) was clearly defined at excavation.

Structure 2 was oval in plan, measuring 8m in diameter along its longest axis, which was aligned northwest-southeast. This structure was defined by an eaves-drip gully (F401) which may have been cut in sections, with slight changes in angle. This measured an average of 0.6m in width and 0.3m in depth. An entry-gap, 2m wide, located on the eastern side of Structure 2, was further defined by an arrangement of post-holes, cut just inside the line of the two eastern gully terminals. These post-holes (F420-1 to the north; F422 to the south; not illustrated) may have defined the position of timber uprights probably framing the entrance. The only other internal features identified were two stake-holes, positioned inside this entry-gap (not illustrated). There was no evidence within the excavated area of a contemporary enclosure containing Structures 1 and 2.

The Structure 1 gulleys were infilled with dark brown silt-clay-sand (F398-9). The fills of the Structure 2 gully (F401) were a dark yellow-brown silt-sand throughout.

Later Middle Iron Age activity was represented by the abandonment and infilling of Enclosure 1 and the other Phase 2 features, including Structures 1-2, followed by the excavation of two adjoining ditched enclosures (Enclosures 3-4) which may have been contemporary.

The southern, eastern and western sides of Enclosure 3 were defined by linear ditches which curved towards the changes in alignment. Its eastern side cut Structure 1 feature: F398-9. The eastern end of the northern side of Enclosure 3 was defined by a re-cut (F454) of Phase 2 ditch F372, which also continued uninterrupted to the east to form the northern boundary of Enclosure 4 (see below). The definition of the remainder of the northern side of Enclosure 3 was probably obscured by the digging of a later ditch (F369: Phase 3) on a similar alignment. The eastern and western ditches (F384) of Enclosure 3 were U-shaped in profile, measuring up to 0.8m in depth and a maximum of 1.2m in width.

Entrances were identified on the northern and western sides of this enclosure. The eastern and southern terminals of these respective entrances were identified, but no trace of the remaining ditch terminals or of any contemporary entrance structures could have survived the subsequent excavation of Enclosure 2 (Phase 3, see below).

A number of ditches, shallow gulleys, a pit and two hearths, backfilled with burnt clay, all dug within the interior of Enclosure 3, may have been in contemporary use.

The northern, western and southern sides of Enclosure 4 were fully defined (F454, F340), but its eastern side may have been positioned outside the eastern limit of the excavated area. The northern side of the enclosure was formed by a re-cut (F454) of the Phase 2 ditch F372. The western and southern ditches (F340) were cut to a regular U-shaped profile, and measured between 1m-1.5m in width and 0.8m in depth. There was no evidence of any contemporary entrance structures or any possibly contemporary features located within the interior of this enclosure.

The southern ditch of Enclosure 4 (F340) was cut by a Phase 3 ditch (F441). The relatively unweathered profiles of the Enclosure 3 ditches suggests that they were rapidly backfilled with dark grey clay-silt after abandonment. In contrast, the fill sequences in the Enclosure 4 ditches suggest a more gradual weathering with some dumping of occupation material, including quantities of daub, as found in the southern ditch (F340).

Area C (not illustrated) and Area D (Fig. 5)

The features in Area C attributed to this phase comprised a curvilinear gully (F480), first seen as a cropmarked feature, two pits (F478, and F483), and one possible pit (F479), all cut into the gravel subsoil (2009). Gully F480 was notably irregular in plan and profile. It curved to the west, and ended in a round-ended terminal. It was backfilled with brown silt-sand (2011). Pits F478 and F483 were of U-shaped profile. Feature F479 was irregularly-shaped, and could have been of periglacial origin.

Phase 3 activity in Area D was represented by a ditched barrow or enclosure, first seen as a cropmarked feature, and by pits, post-holes and field boundary ditches, all cut into the natural gravel subsoil (2154).

The main feature of this phase was a rectangular barrow or enclosure, defined by an encircling ditch (F550, F551). The evidence for the interpretation of this feature as a barrow is discussed in Section 3.4 below. The feature measured 9m northeast-

southwest, and 7m southwest-northeast (measured from the innermost edges of the ditches). Two gaps were recorded in the ditch circuit. One, measuring 1m in width, was recorded between two round-ended terminals towards the northern end of its eastern side; the second, measuring 0.1m in width, was recorded towards the western end of the northern side.

The depth and profile of ditches F550 and F551 varied throughout their lengths. Ditch F551 was of an irregular, U-shaped profile, measuring a maximum of 0.6-0.8m in depth, and 1.2m-1.7m in width. The remainder of the barrow or enclosure ditch (F550) was U-shaped in profile with a basal slot, more pronounced along the western side. The ditch was broadest at its southwestern corner, where it measured a maximum of 2.5m in width, narrowing to 1.4m in the northwest (F550.13).

Ditches F550 and F551 were backfilled with brown silt-sands. It was notable that the upper ditch fills on the eastern side of the barrow or enclosure had a high stone content, in contrast to the upper fills on its western side, which were mostly stone-free.

A number of features were recorded within the area enclosed by ditches F550 and F551. A large, flat-based pit (F560; Fig. 5), with a barrel-shaped profile, was located within the southwestern angle of the barrow or enclosure. To the west was an oval pit (F570) cut into Phase 1 feature F561, and two gullies (F559), forming a right-angled intersection. A group of post-holes (F556, F562, F555), measuring an average of 0.3m in diameter, and a double post-hole (F557) and a gully (F553), were also recorded. Other possible features (2138, 2139) were probably of natural origin.

The features of this phase located outside the barrow or enclosure comprised post-holes and narrow gullies, mostly aligned approximately northwest-southeast. One gully (F552) was cut by ditch F550. A second gully (F575), adjoining the former gully, was cut into infilled ditch F550, but could not be traced to the west of ditch F550. Other shallow, ditched field boundaries (F569, F574) were recorded in the west of Area D, and a vertically-sided gully (F554), was excavated in the north of this area. A cluster of small post-holes (F565, F558, F563, F566, F573, F580, F579, F577, F578, F571 and F572), measuring an average of 0.3m in diameter and 0.1m in depth, were also located in the south of Area D.

Area E/F (Fig. 6)

The earliest Phase 2 activity was probably represented by two slightly irregular field boundary ditches (F748, F1055), both dug on an approximate southwest-northeast alignment.

Later Middle Iron Age activity (enclosures E1-E7) was focused towards the northeastern corner of the area excavated. Stratigraphically, the earliest enclosures of this group were enclosures E1 and E2, which may have been contemporary. Enclosure E2 was the largest enclosure of this phase, measuring a maximum of 38m internally north-south and 35m internally east-west. It contained three eaves-drip gullies (G1-3), a square four-post building (Structure 1), and a pit (F862). Part of the northern and eastern sides of eaves-drip gully G1 was recorded. Eaves-drip gully G1 was cut by eaves-drip gully G2, which measured 12m in diameter internally. It contained an arc

of post-holes on its eastern side, a pit group, and a shallow curvilinear gully on its northern side. Eaves-drip gully G3 lay in the north of the enclosure.

Subsequently the northwestern and parts of the northeastern and southwestern sides of enclosure E1 were re-cut (enclosure E3). Later, the southeastern side of enclosure E2 and the northeastern side of enclosure E3 were also re-cut (enclosure E4). The interior of this enclosure was sub-divided by a ditch. This enclosure also contained four fragmentary eaves-drip gullies (G4-G7).

Later enclosures (E5-E8) cut slightly to the southwest of the former group belong to the Middle-Late Iron Age. The northern side of enclosure E5, possibly the earliest of this enclosure group, was formed by re-cutting along part of the southern side of enclosure E2. Subsequently, enclosure E5 may have been enlarged to the northwest and to the south (enclosure E6), perhaps also forming a driveway between the southern ditches of enclosures E5 and E6. The northern side of enclosure E6 was formed by a re-cut of the northern side of the earlier enclosure. The southwestern entry-gap to this enclosure was first defined by a palisade, and later by post-pits dug at the palisade ends. Subsequently, a D-shaped enclosure (E7) was cut to the south of enclosures E5-6. Enclosure E7 cut the western side of enclosure E3, and also possibly part of the southeastern angles of enclosures E5-6. Traces of a timber ?bridge support crossing the northeastern angle of ditched enclosure E7 were found, possibly associated with the driveway between enclosures E5-E6 to the northwest.

Dating evidence

The dating evidence from the main Phase 2 features (key groups) is tabulated (Table 1).

TABLE 1: Summary of the main Phase 2 dating evidence

(Key groups only)

<i>Enclosure/other feature</i>	<i>Feature no</i>	<i>Dating</i>
Area B		
Enclosure 1	F362, F365	MIA
Enclosure 3	F384	MIA/LIA
Enclosure 4	F340	MIA
Ditch	F372	MIA
Well	F338	MIA
Structure 1	F388-9	MIA
Structure 2	F401	Prehistoric
Area C/D		
Enclosure ditch	F550-1	MIA
Other features	F478-9, F481	IA/Prehistoric
Other features	F554, F552, F5673	IA
Other features	F560	MIA
Area E/F		
-	F615	IA
E1	F703	(LIA)
E2	F756	IA
-	F800.03 (eaves-drip gully)	LIA and IA
E2	F759	MIA-LIA
E2	F713	MIA
E2	F830 (eaves-drip gully)	MIA
E3	F711	IA
E4	F708	MIA
E4	F724 (eaves-drip gully)	M-LIA
E4	F730.01	MIA
E4	F730.02	MIA-IA
E4	F746 (eaves-drip gully)	MIA
E4	F814	(LIA)
-	F1254	MIA
E6	F778	MIA
E6	F995	MIA and (LIA)
E7	F750.01	(LIA)
E7	F750.02	(LIA)-IA
E7	F953	MIA
E7	F961	MIA
E7	F976	MIA and IA
E7	F978	MIA and (LIA and AD 35-80)
E7	F980.01	(LIA)
E8	F922.01	MIA-IA
-	F1068	IA/MIA

KEY: MIA= Middle Iron Age; IA= Iron Age; LIA= Late Iron Age

Note: Parentheses indicates possibly intrusive material in uppermost fills of feature

3.3: Late Iron Age (Area B and Area E/F)**Area B (Figs. 2 and 4)**

The final phase of Iron Age activity in Area B was represented by the excavation of a further ditched enclosure (Enclosure 2), which extended beyond the western baulk of

the excavation. This enclosure was dug into a backfilled field-boundary (F371), which is unphased, but may possibly be datable to Phases 2 or 3.

The southern, eastern and northern sides of Enclosure 2 were slightly curvilinear in plan, the latter terminating in an enlarged round-ended terminal, defining the eastern side of a northern entry-gap. The alignment of the presumed continuation of this northern side, to the west of the entrance, was obscured by post-medieval disturbances (not illustrated). The enclosure ditch was cut to a V-shaped profile, and measured an average of 1.5m in width and 1.0m in depth. The sequence of fills suggested the ditch was originally complimented on its eastern side by an inner bank which later weathered into the ditch.

There were no traces of any contemporary internal features within this enclosure.

Ditch F441, cut on a north-south alignment for a length of 30m and truncating the southern ditch of Enclosure 3 (F340), may have been contemporary in use with ditched Enclosure 2. No features associated with ditch F441, which lies to the southeast of Enclosure 2, could be noted.

Area E/F (Fig. 7)

Late Iron Age activity was mostly concentrated in the west of the site. Subsequent activity, of Late Iron Age-early Romano-British date, was focused towards the east of the excavated area. This latter activity is difficult to assign confidently either to the Iron Age or the early Romano-British periods because of the lack of dating evidence, and disturbance caused by later activity. It is also possible that this activity was continuous.

Two Late Iron Age boundaries were represented by northwest-southeast aligned ditched boundaries (F1250-1). Ditch F1250 may have been diverted southward to avoid a ring-ditch probably visible as an earthwork feature at the time. North-south aligned ditch F1252 defined the approximate eastern extent of the alluvium in the west of the excavated area. A further ditch (F1253) was cut between ditches F1250 and F1251.

One focus of Late Iron Age activity, containing five irregularly-shaped enclosures (E8-E12), lay towards the northwest of the excavated area. This comprised a rectangular enclosure (E8) and two D-shaped ditched enclosures (E9-10), the westernmost (E9) dug into alluvium. The curvilinear eastern side of enclosure E10 was markedly irregular, possibly as a result of later re-cutting. This ditch was continued to the northwestern corner of the enclosure, possibly defining the northern side of a separate enclosure (E11), and a further enclosure (E12) may have been located between enclosures E8 and E10. Activity in this area could have been continuous into the Romano-British period.

A second focus of Late Iron Age activity was formed by ditched enclosures E13-E17, cut towards the southwest of the excavated area. The largest of these enclosures (E13) measured approximately 33m square internally. Its eastern side was irregular in plan, possibly as a result of being cut along the line of a meandering stream-channel. Enclosure E16, cut wholly into alluvium, may have formed a western annexe to the

adjoining enclosure E13. The western and southern ditches of enclosure E17 together formed an L-shape in plan. This enclosure group may have been contemporary with a cluster of eaves-drip gullies (G9-G15), measuring between 4-9m in diameter internally. Of this group features G9 and G10 lay just outside the enclosures. Feature G12 cut feature G11.

The third, smallest focus of Late Iron Age activity, in the southeast of the area excavated, comprised the western side of a curvilinear enclosure (E18) containing an eaves-drip gully (G16), a gully, and a pit.

Later Late Iron Age activity, possibly continuing into the Romano-British period, was characterised by the excavation of a group of mainly rectilinear enclosures towards the east of the excavated area. Rectangular enclosures E19-E21 were laid out along the southern side of ditch F1250, which was re-cut (F1255). Enclosure E21 had an entrance at its southeastern angle, further defined by a gully cut diagonally across the entry-gap, with a post-pit to the northwest. Two pairs of ditches, both forming an L-shape may have formed parts of further enclosures (E22, E23).

Two conjoined rectilinear enclosures (E24-E25) were cut across abandoned enclosures E22-23. Subsequently rectangular enclosure E25 was re-defined to the west by a further enclosure with its long axis aligned north-south (enclosure E26). Subsequently, the northern, southeastern, southern, and western ditches of this enclosure were re-cut forming a further enclosure (E27), later extended to the northwest, forming a D-shaped enclosure (E28), which extended eastwards up to ditch F1253. Part of the presumed southwestern side of enclosure E28 had been dug-away by later ditches (enclosures E29-E31), although the southwestern terminal of an entry-gap on the northwestern side of this enclosure remained visible.

No Phase 3 features were found in Area C/D.

TABLE 2: Summary of the main Phase 3 dating evidence

(Key groups only)

<i>Enclosure</i>	<i>Feature</i>	<i>Dating</i>
Area B		
Enclosure 2	F369	MIA/IA
Area E/F		
-	F1257	LIA
E10	F1120	MIA AND 1 ST CENT AD
E11	F1094	LIA/IA
E12	F1156	M-LIA
E12	F1156.01	IA
E12	F1189	MIA AND LIA AND IA
E14	F645	MIA
E15	F620, F615	M-LIA
E15	F1035	MIA AND IA
E16	F1182 (eaves-drip gully)	LIA
E17	F1006	LIA AND IA
E18	F613	MIA/10 BC-AD 80
E27	F848	M-LIA
E27	F850	(MIA)
-	F1254	LIA
-	F993	M-LIA
-	F1003 (pit)	(MIA)
-	F1261-2	M-LIA
E27	F845.02	MIA AND LIA
E27	F897.04	LIA AND AD 35-80
-	F1254	MIA AND LIA
-	F1254	LIA
-	F946	LIA AND MIA
E40/E34	F1137	(MIA)
E41	F993.01	LIA
-	F1068.01	LIA
-	F1171	MIA AND IA

3.4: Discussion

This section of the assessment provides a preliminary review and interpretation of the evidence.

Phase 2: Middle Iron Age

Area B

Present dating evidence suggests a hiatus in activity here between the Late Bronze Age and the Middle Iron Age. It is tempting to suggest that this abandonment may have been influenced by a deteriorating climate, and in particular by increased rainfall which may have caused the periodic flooding of this settlement zone. The stream identified during the earlier investigations of the Romano-British settlement (Area A, Fig. 1C) may also have been in existence during this settlement.

Although the individual sub-phases of Phase 2-3 activity are characterised by marked changes in structural arrangements, an apparent element of continuity is provided by

their location (with the possible exception of Enclosure 1), within an area which appears to be fairly closely defined.

The earliest Middle Iron Age activity was focused on Enclosure 1, and in the area to the east of the enclosure. Evidence of any contemporary structures within Enclosure 1 may have been removed by plough truncation. The remaining features of this phase comprised a well, a deeply-cut 'ranch-type' boundary, and other possibly associated ditches in the east of the excavated area. The distribution of pottery finds within the infilled ditches suggests a focus of activity sited to the north and east of Enclosure 1, the ditch fills in these areas also containing large quantities of charcoal and other occupation debris.

Structures 1 and 2 were defined by their eaves-drip gulleys, and by the surviving traces of timber-framed structures within their entrances. Structure 1 was cut by the eastern ditch of Enclosure 3, and clearly pre-dated it. Structure 2, located within the interior of Enclosure 4, could have been associated.

Although the cutting of ditch F372 in the later Middle Iron Age provides a degree of continuity with the arrangements of the earlier Middle Iron Age, the later Middle Iron Age was otherwise characterised by the excavation of two new and adjoining enclosures (Enclosures 3-4). The former contained traces of internal structures, including gullies, post-holes and hearths backfilled with red clay. In contrast the interior of Enclosure 4 was devoid of features. Enclosures 3 and 4 may have been contemporary.

Areas C-D

The Phase 2 features in Areas C and D were of Middle Iron Age date, broadly contemporary with enclosures 1-3 in Area B (Fig. 1C; Jones 1995a, fig. 2), and enclosures E1-E8 in Area E/F (Fig. 6). The regular, rectilinear form, and comparatively small size of the Area D barrow or enclosure does not, on present evidence, appear to be paralleled at Little Paxton, the remainder of the Iron Age enclosures appearing to be irregular-sided or of curvilinear form. Although such morphological analysis of air photograph evidence can form the basis of the assessment and classification of enclosures (e.g. Whimster 1989 26-34; Jones 1994, 100-108), it should be noted that the form of the cropmarked feature in Area D is of pentagonal shape, because of the superimposition of a plough furrow over part of the western side of the cropmarked feature. Comparison of the measurements of the cropmarked and excavated Iron Age enclosures from Little Paxton highlights the comparatively small size of the Area D example.

The rectilinear form and size of the main Area D ditched feature is perhaps most closely paralleled by ditched square enclosures of Iron Age date, such as those excavated at Maxey (Pryor *et al.* 1985, fig. 44, enclosures 17 and 18, measuring 6m and 8m square respectively; Simpson 1985, fig. 168, various enclosures measuring an average of 6m by 10m), which are interpreted as ditched barrows of Arras type, principally found in East Yorkshire (Stead 1991). Such barrows originally comprised a mound of material dug out of the encircling quarry-ditch, enclosing an internal burial. The form of these ditched sites is described by Whimster (1981, 111) as 'almost invariably square although in many cases the sides are not absolutely parallel,

and it is normal for the corners to show marked round angles'. Whimster records examples near Cambridge, at Fenstanton, Fulbourn and Hemmingford Grey in Cambridgeshire (Whimster 1981, Appendix D3), and Hinxton (Hill, Evans and Alexander 1990), while their wider distribution includes examples in Derbyshire (e.g. May 1970), Essex (e.g. Lavender 1991), Lincolnshire, Dorset, Sussex and Gloucestershire (Whimster 1981, 123)

The excavated example from Area D at Little Paxton is distinguished from the square barrows catalogued by Whimster by the absence of an internal burial, and the presence of one, or possibly two, entrance causeways, an attribute considered by Whimster (1981, 123) to indicate a domestic function, as in the case of the ditched square enclosures at Lockington, Leicestershire and Tixall, Staffordshire. Plough truncation may have removed all trace of the internal burial at Little Paxton, as has been suggested for barrows sited at Aston upon Trent Derbyshire (May 1970), and Garton Station, Yorkshire (Stead 1991, 22). Equally, the presence of an entrance causeway does not necessarily militate against the interpretation of the Area D enclosure at Little Paxton as a barrow. Stead interprets a number of square ditched enclosures from Garton Station (Stead 1991, fig. 20: enclosures G, H, J, L) and Kirkburn (*op. cit.* fig. 23: enclosures K3 and K4) as barrow enclosures, despite the presence of a single entrance causeway. Although the interpretation of this square barrow group from Garton Station is complicated by the insertion of multiple Anglian burials into three of the Iron Age barrow group, and the absence of burials in seven such square barrows, Stead (1991, 24) interprets all these ditched features as Iron Age barrows, because of their form, size, and the proximity of other datable Iron Age barrows containing burials.

Stead suggests that causeways were retained at the Garton Station barrows because access was required to their interior, leading to the construction of an internal bank, instead of an overall mound. Following this interpretation, ditches F550 and F551 in Area D at Little Paxton may be interpreted as quarry ditches, interrupted by a single entrance causeway to the east. The narrow gap between ditches F550 and F551 on the northern side of the ditched barrow is an unusual feature. It is too narrow to define an entrance causeway, and may be interpreted as evidence of gang-work, as it could define the division between segments of the ditch dug by different gangs. The narrow gap between ditches F550 and F551 would perhaps not be unusual if features F550 and F551 were quarry-ditches, but would perhaps be more unexpected in the context of a ditched farmstead enclosure.

A number of features were recorded within the interior of ditches F550 and F551. Pits and post-holes are recorded within the interior of other excavated square barrows, for example at Maldon, Essex (Lavender 1991, fig. 2) and at Maxey (Pryor *et al.* 1985, 73), where post-holes were interpreted as marker-posts. Little dating evidence was recovered from these internal features at Little Paxton, and it is impossible to define their relationship with the encircling ditch on the present necessarily limited study of the dating evidence, although it is possible that these features, such as pit F560, could have pre-dated the square barrow. The remaining Iron Age features in Trench D mainly comprised post-holes, located to the south of ditch F550, which may have defined one or more timber buildings, although no ground-plans could be identified.

An alternative interpretation of the Area D ditched feature is that it could have defined a small enclosure, possibly associated with farming. Its form and small size could have been determined by functional factors.

Area E/F

The earliest Phase 2 enclosures (Fig. 6) were E1 and E2. Enclosure E2 was associated with a square four-post structure, interpreted as a granary. Eaves-drip gullies G1 and G2 joined the southwestern and eastern ditches of enclosure E2 respectively. This arrangement would have assisted water run-off from features G1 and G2, and is paralleled by a similar association between eaves-drip gullies and enclosure ditches highlighted by Evans (1997, 222) at Wardy Hill. If these eaves-drip gullies at Little Paxton emptied directly into the enclosure ditches, the enclosure banks must have lain outside the ditches. One gully (G2) was especially well-preserved, and traces of the internal hut walls, defined both by a curvilinear gully and by a post-hole alignment, were recorded. Many of the eaves-drip gullies were fragmentary, only surviving in the more deeply-cut parts of their circumference. If deliberate, the excavation of differing segments to different depths could have been intended to create soakaways.

The most notable attribute of the Middle Iron Age enclosures was their apparent clustering. Enclosure E3 was formed by re-cutting of the enclosure E1 ditches, and enclosure E4 was formed by re-cutting lengths of the backfilled ditches of enclosures E3 and E2. Similarly, the later enclosure group E5-E7 was also formed by the partial re-excavation of earlier enclosures within this cluster. This apparent association between the enclosures within the cluster could suggest that the intention was to create a system of inter-linked channels for drainage (e.g. as at Wardy Hill, Cambridgeshire, Evans 1997, fig. 21.3), in addition to defining the bounds of individual ditched enclosures. Alternatively, the enclosure layout could have been intended to bring water closer to the settlement, possibly to water livestock.

The layout of elements of this enclosure cluster may also have been functionally-determined. Annexes may be suggested within enclosures E1/E3 and E4. The layouts of the adjoining southern sides of enclosures E5 and E6 may have defined a driveway, as is also suggested by the recovery of fragments of a timber ?bridge support in the northeastern angle of later enclosure E7. The complex treatment of the southwestern entrance to enclosure E6 also suggests an association with stock farming, possibly contemporary with continued occupation of the adjoining enclosures (E2, E4).

The suggested evidence for the layout of this enclosure cluster, forming an apparently integrated system of 'water-management', either for drainage or to water livestock, may imply an element of social organisation on the part of this small community. Clearly, a considerable effort would be required to excavate, and then periodically clean-out the ditches. This ditch system suggests an adaptation by a small but permanent settlement to the problems of water-management in this low-lying area, rather than merely a seasonal centre for a community based upon transhumance.

The placement of the entry-gaps within the Phase 2 enclosures suggests that the northwestern-southeastern axis, represented extensively within the Phase 3 landscape (e.g. Fig. 3; French and Wait 1988, fig. 26), may have been established in Phase 2.

Phase 3: Late Iron Age

Area B

The final phase of occupation in Area B (Figs 2 and 4), dating to the Late Iron Age, was also marked by a change in structural arrangements, although Enclosure 2 encroached slightly within the area of the earlier Enclosure 3. Enclosure 2 was also devoid of internal structures, possibly because of plough truncation.

Area E/F

Although some continuity of Mid-Late Iron Age settlement is suggested by the possible occupation of enclosures E5-E7 into the Late Iron Age, the Phase 3 settlements (Fig. 7) were mainly concentrated to the south and southeast of the Middle Iron Age enclosure cluster, and the remains of this later phase were also the more extensive. The focus of earlier Late Iron Age activity adjoined the eastern edge of the alluvial zone. The area bounded by ditches F1250, F1251, F1252, F1253, on its northern, southern, western and eastern sides respectively, may have formed a 'compound', an arrangement which may be distinguished from the later use of the land to the east of ditch F1253. Parts of this 'compound' may have formed enclosures (E8, E10), although further enclosures (E9, E11) appeared to straddle the western boundary of this area (F1252). The relationship between this ditch and the enclosure group could not be established because of a Phase 4 (Romano-British) re-cut of the ditch.

A further group of ditched Late Iron Age enclosures (E13-E17) was located to the south of the former group. The ditches of enclosures E13-E17 were more-deeply-cut than those of enclosures E8-E12, and the areas defined by the former group were also more extensive. The irregularly-cut western sides of enclosures E13 and E16 are unusual, suggesting a re-cutting of a slightly meandering stream-channel. Another possibility is that the slightly sinuous form of these ditches was intended to slow water flow. Enclosure E18, in the southeast of the excavated area, represents a further contemporary focus of activity, mostly located to the east of the area excavated.

The remains of later Late Iron Age settlement were morphologically, and probably also functionally, distinct from those of earlier Phase 3 activity. This Phase 3-4 activity was mainly concentrated in the angle between Phase 3 ditches F1250 and F1253, which defined the northern and western limits respectively of this activity possibly spanning the Iron Age-Romano-British transition.

The later Iron Age activity was represented by a group of rectilinear ditched enclosures, including three (E19-E21) laid out adjoining the southern side of the eastern excavated end of ditch F1250. A further group of rectilinear enclosures (E22-E27) lay to the south. Enclosures E19-E27 may be interpreted as animal pens (e.g. Orton Hall Farm, Mackreth 1996). This feature group provides an element of functional continuity with the Middle Iron Age landscape, although the enclosures of this later phase are morphologically very distinct. Even after allowing for the undoubted truncation of the enclosure E19-E27 ditches by modern agriculture, the ditches and presumably the associated banks may not have been adequate to contain

livestock. It is possible that fences may have been erected along the tops of the banks to further contain the animals. Such earthen banks would most probably have been built outside the ditches, a more suitable arrangement to contain, rather than to exclude, animals, although this cannot be proven from the heavily-truncated ditch profiles at Little Paxton. Traces of fencing are suggested by the scattered post-pits located to the southwest of enclosures E20 and E21.

Enclosure E27, stratigraphically the latest feature of the enclosure E22-E27 group, was formed by a D-shaped enclosure joining the northwestern corner of rectangular enclosure E27. The northwestern side of enclosure E28 was formed by the southern part of ditch F1253, and an entry-gap was retained between this ditch and the northwestern terminal of the northeastern side of this enclosure. A feature of the enclosure E19-E27 group was the evidence for the complex treatment of their entrances. Such entrance arrangements support the interpretation of this enclosure group as being associated with animal husbandry. Few fragments of animal bone were recovered from the enclosure ditch fills, but more would not be expected unless the enclosures were used as slaughter-pens.

The suggested evidence for an Iron Age precursor to the Roman temple complex (Cambridgeshire SMR No. 2482; French and Wait 1988, fig. 26; Alexander n. d.; Jones forthcoming b), located to the west of Area E/F, could suggest an alternative interpretation of the evidence for Phase 3 activity - namely that it was conducted in a ritual, rather than a purely pastoral, context - although this hypothesis cannot be proved or disproved on the present information.

The relevant research themes are considered in Section 5.2.

4.0: ASSESSMENTS

4.1: Introduction

This section of the report provides assessments of the finds and environmental data belonging to the Iron Age (Phase 2, Middle Iron Age; Phase 3, Late Iron Age). The finds and environmental data are considered alphabetically, beginning with Site B, and ending with Site E/F, or from all sites combined in the case of small groups of material. A number in parentheses following a layer or feature number denotes the quantity of an item.

The assessment of material in each category concludes with a statement of its predicted research potential, based upon the main excavation research aims. The potential of each material category to contribute to the updated research aims is considered further in Section 5.0 below.

4.2: Factual data and statement of potential

4.2.1: Stratigraphic/structural data

As with the earlier prehistoric activity (Phase 1, Neolithic-Bronze Age), and Romano-British activity (Phases 4-6), the Iron Age deposits were confined to 'negative' features cut into the natural sands and gravels. Features such as banks or floors were not identified. Ploughing from the medieval period onwards had caused severe truncation of the cut features such as pits and ditches, and might have entirely obliterated some slighter features such as post-holes or eaves-drip gulleys. Nevertheless, some circular hut heaves-drip gulleys were recorded in Areas B and E/F.

A number of the Iron Age enclosure and other boundaries had been repeatedly re-cut during Phases 2-3, while others had been re-cut in the early Romano-British period (Phase 4).

The survival of Iron Age waterlogged deposits was largely confined to the deeper-cut ditched features within Area E/F.

4.2.2: Digital data

The Area E/F excavations were planned using the Penmap mapping system. The manually-planned Area B settlement will have to be converted to this format, to ensure compatibility. The Penmap mapping system records X, Y and Z co-ordinates (easting, northing, and height). The Penmap data is presently multi-phase. As a preliminary to full use of the mapping it will be necessary to manipulate the field data to create phase plans.

A stratigraphic database has been prepared, including details of all evaluations and excavations from 1992-1998. As part of the proposed analysis, it is intended to create a unified finds database. The information from prehistoric and Romano-British settlement complexes will be recorded in the same manner, to enable inter-comparison.

Statement of potential

- Spatial distribution

The Penmap data, in conjunction with the finds database, will assist in the preparation of spatial distribution plots of the main finds (pottery, animal bone) categories, and also of environmental evidence, each arranged by phase. The spatial distribution data will be of particular importance in determining the use of space within individual enclosures, given the quantity of pottery and animal bone recovered, and also the relative paucity of the internal buildings. Spatial distribution analysis will be undertaken for Area E/F, and for Area B, if viable.

- Landscape and settlement

The addition of contour data to the digital map base, in conjunction with the height co-ordinates recorded by the Penmap mapping, will enable a digital terrain model to be established. In combination with the digital terrain model, digital mapping of the extent and depth of the alluvium will enhance our understanding of the relationship between the settlement pattern and the natural landform.

- Relationship between settlement and economy with landscape change

The digital terrain model will enable comparison to be made between the natural landform, the recorded changes in the settlement pattern, and the economic evidence relating to the prehistoric and Romano-British periods.

4.2.2: Quantifications

TABLE 3: Quantification of the paper archive

<i>Record type</i>	<i>Area B</i>	<i>Area C/D</i>	<i>Area E/F</i>
Feature records	90*	40*	440*#
Layer records	260	220	1350#
Site drawings (excluding Penmap)	128	60	600#
Colour photographs: films	14	8	22#
General/administration	1 file	1 file	3 files
Environmental sample records	1 file	1 file	4 files
Survey records	1 file	1 file	2 files
Finds assemblage summaries	1 file	1 file	3 files
Black and white photographs: films	15	8	24#

KEY. * For linear features denotes number of features, not the total number of all cuttings through all linear features. # Excludes Romano-British features.

4.3: Finds

4.3.1: Quantifications

TABLE 4: Quantification of the finds archive

<i>Material (Excludes unidentified fragments)</i>	<i>Area B</i>	<i>Area C/D</i>	<i>Area E/F</i>
Stone objects	14	1	18
Pottery	1297	198	6938
Briquetage	-	-	35

All quantifications by number, not weight.

4.3.2: Worked stone objects by Lynne Bevan and Rob Ixer

Four querns were recovered from Area E/F: a beehive quern (F711.02), a quernstone with perforations for wooden handles (F951), and two fragments from upper querns (F718, F1189). Another possible rubbing stone was recovered from F551.01. Of interest in the collection was a large block of limestone with a smooth, worn depression in its upper surface which might have resulted from the action of being used as a door swivel (unstratified, Area E/F). Other stone objects were less-obviously worked and included two possible rubbing stones, both of which were from the Area D Late Iron Age square barrow where they had been used as post packing (F560).

In addition a number of potential pot-boilers or hearthstones were recovered from the following layers: F330 x 1, F332 x 6, F334 x 1 complete cobble, F338 x 5 (all Area B); F560 x 1 (Area D); F604 x 1, F702 x 4, F724.01 x 1, F750.02 x 1, F955.02 x 1 (all Area E/F). These sandstone cobbles and pebbles show a characteristic reticulated shattering pattern due to heating and rapid cooling. Six fragments of burnt micaceous sandstone/siltstone were also identified (F337 x 1, F346 x 5) which were more likely to have been hearthstones than pot-boilers. Other stone items included a fragment of unworked tufa (F334), a fragment of coarse-grained igneous rock, probably an erratic (F966), and a fragment of a greenstone (F941).

Further research, selective illustration, and the compilation of a catalogue and full report is recommended for all of the quernstones and the possible rubbing stones. One of the quernstones, made from sandstone which might have originated from the Coventry coal measures (F1189), and two of the rubbing stones, will also require thin-sectioning. Thin-sectioning is also recommended for the possible door swivel, and the two possibly unworked, but geologically-interesting fragments of igneous rock and greenstone from F966 and F941, for provenance since these do not appear to be erratics, but may be imports. No further analysis will be required for the potential pot-boilers/hearthstones.

4.3.3: Waterlogged wooden object by Erica Macey

An incomplete wooden trough was derived from the western side of Enclosure E15. The trough is 300mm wide and survives to a length of 400mm. It had an estimated original length of c. 700mm. The rim of the trough is rounded to the top of the sides, with a horizontal flange which is cut back and chamfered. Possible toolmarks can be seen on both the internal and external surfaces. The exterior toolmark is rather

abraded, due to wear during use, but it can be identified as a stop mark from an implement at least 52.5mm wide. A smaller tool, 24mm wide, was used to work the interior surfaces; a complete stop mark can be seen at the side/base angle.

The trough has been cut from a half log of a hardwood tree. The exact species is uncertain.

Although similar troughs of prehistoric date are recorded, the majority are unstratified. A catalogue of the item, species identification (by Rowena Gale) and a search for parallels is recommended.

4.3.4: Pottery by Steven Willis

Introduction

A sample of approximately 50% of the total Iron Age pottery, amounting to approximately 4000 sherds (weighing over 30 kg), comprising the key groups, representative of the different settlement foci, and of the feature types within each settlement area were selected for assessment. The key groups also constitute the stratified pottery groups considered most informative for site dating, for establishing the site sequence and for assisting in the characterisation of this site. In addition to pottery, a small quantity of transport briquetage is present as well as a considerable amount of sundry fired clay, that is neither pottery or briquetage, and essentially undiagnostic.

The key groups represent integral collections (i.e. they are complete) and are well collected. Sherds generally show limited or no abrasion (as is the case with the Romano-British pottery from the site), and only modest chemical weathering has occurred. However, the condition of the Iron Age assemblage is, on balance, not good. The groups comprise comparatively fragmented collections with low average sherd weights. Much of the pottery is friable (especially, though not exclusively, those items in fabrics with calcareous inclusions) and is prone to further break-up. The submitted groups are individually of moderate size with only a few groups comprising more than 100 sherds. Moreover, in many cases the excavated groups contain considerable numbers of sherds which evidently derive from single vessels. This latter phenomenon may be due to the original deposition of clusters of sherds from the same vessel, or, perhaps more likely in a proportion of cases, the break-up of larger sherds once they had been incorporated within deposits. The general character and size of the recovered groups is, in large part, a function of both pottery consumption and deposition practices during the life of the site, and the excavation sampling strategy (see below). The fact that the groups amount to comparatively modest quantities of material with large proportions of sherds deriving from a limited number of vessels is a classic pattern of culturally Middle Iron Age sites. One consequence is that there are comparatively few featured sherds likely to assist with site dating. In addition, the fragmentary nature of the assemblage and the necessarily modest size of the samples collected from feature sectioning mean that the majority of the illustratable pieces comprise only rims, there being merely a small number of illustratable part profiles.

The great majority of the pottery submitted is Iron Age, with a small number of pieces which might be described as Late Iron Age/Transitional. Typologically the Iron Age pottery includes Middle and Late Iron Age styles, with the bulk of the material being Middle Iron Age. In essence the material divides between two ceramic phases which at this particular site appear to have overlapped. By its nature the material is not closely datable and chronological understanding of the ceramics of the later prehistoric period in the Cambridgeshire area is complicated and currently evolving (Hill in press). Excluding the few earlier items the potential date bracket will be c. 400/350 BC -AD 70 for the Iron Age groups.

Assessment methodology

Most Iron Age pottery was much less standardised than was Roman pottery and hence considerable typological variation often occurs in the details of fabric, form and decoration. The methodology adopted for this assessment attempts to categorise typological and other details in order to best understand the broad nature of the material and establish its potential.

The methodology adopted for the assessment *vis-à-vis* pottery fabrics followed the guidelines and conventions outlined by the Prehistoric Ceramics Research Group (PCRG 1995), drawing on the seminal paper of Peacock (1977). Examination of the sherds established the existence of considerable variation in the fabric types present, the determining variable being tempering inclusions. In practice, it was found that these differences could be consistently determined by unaided visual examination as these fabric types were familiar. Examinations were checked using a x20 microscope. Sherds from each feature group were accordingly allocated to one of 18 different fabric categories, described below. The sherds were then counted and weighed and basic data on the number of rims and vessels represented by rims were recorded per layer. Vessel form, rim type and the occurrence of decoration and surface residues (carbonized deposits and/or limescale) were also noted.

A compendium of sketches of rim types was maintained and coded according to the generic vessel form, and the presence of decoration and surface residues was recorded.

Quantity

Quantitative information regarding the pottery from the Key Groups as submitted is summarised in Table 5. It is possible that some of the few items in Fabrics X1 and X2 may be from Roman rather than transitional types

TABLE 5: Details of pottery from the key groups

Number of submitted layers with pottery	126
Number of sherds of Iron Age/transitional pottery	3742
Wt of sherds of Iron Age/transitional pottery	29.407kg
Number of Iron Age/transitional pottery rim fragments	304
Number of Iron Age/transitional vessels represented by rim fragments	203

A small number of fragments from Iron Age transport briquetage vessels (salt containers) were also present and data relating to their occurrence and quantity is summarised in Table 6.

TABLE 6: Iron Age briquetage from key groups

Number of submitted layers with briquetage	6
Number of fragments	35
Wt. of briquetage fragments	147g

In addition some 170 plus pieces of fired clay were present amongst the key groups. These fragments are certainly not from pottery vessels nor briquetage and may originate from random scorching of clay surfaces and perhaps daub. These undiagnostic items are of very low archaeological potential. They lack distinctive features and are not considered further in this assessment, apart from a recommendation concerning their treatment in the published report (see below).

Range and variety

The range of fabrics, forms and decorative schemes amongst the Iron Age pottery is wide. The range and types present are, though, not unusual for a site of this date in Cambridgeshire.

Fabric and manufacture

Sixteen fabric types are represented amongst the Iron Age pottery examined. In addition, there are two fabric classes relating to typologically Transitional/Romano-British types present (Fabrics X1 and X2). All 18 categories are principally based upon inclusion type though there are other (corresponding) differences. All inclusions are evidently deliberately added temper. A large proportion of sherds can be described as heavily tempered. The fabrics may be summarised as follows on the basis of inclusions:

Fabrics associated with typologically Iron Age and Transitional pottery

Fabric C/E: Quartz grains, hard. Fabric may be oxidized or unoxidized

Fabric D: Grog

Fabric F: Calcareous fragments (of variable size: mostly splintered fossil shell, but there are occasional examples of limestone fragments)

Fabric G: Rare calcareous fragments

Fabric H: Grog and quartz grains

Fabric I: Calcareous fragments and grog

Fabric J: Flint

Fabric L: Flint and sparse quartz grains
Fabric M: Predominantly grog tempered, calcareous fragments rare
Fabric O: Quartz grains and calcareous fragments
Fabric P: Grog, quartz grains and fine calcareous fragments
Fabric Q: 'Chaff' and quartz grains
Fabric R: Fine quartz grains and some fine calcareous fragments
Fabric S: Quartz grains, sparse flint fragments and sparse fine calcareous fragments
Fabric T: Grog and fine calcareous fragments
Fabric U: Sparse or rare grog; a fine fabric

Fabrics associated with typologically Transitional/Roman pottery.

Fabric X1: Light grey fabric(s) with moderate or common fine quartz grains
Fabric X2: Oxidized pale red fine fabric with common fine calcareous fragments

The nature of the tempers used is well represented in the region. There is no reason to believe that these fabrics associated with the Iron Age vessels are other than quite local, though some vessels may have been made elsewhere in the region. There was a clear preference for potters to use quartz grains, grog and calcareous fragments and Fabrics C/E, D and F predominate with many of the other fabrics having combinations of temper types. Fabric varieties such as G, J, L, Q, S, T and U are all infrequent. Two observations made previously on a part of the present sample by Woodward remain valid for the wider assemblage namely that, there is to some degree a correlation between temper character and vessel form, and that quartz grain tempering seems to be a consistent feature through the sequence, rather than becoming an increasingly significant temper during the later Iron Age as is often the case elsewhere (Woodward 1995). Quartz grains and grog are both efficient tempers and will have been readily accessible. Calcite tempering is common amongst Iron Age assemblages in East Anglia and Lincolnshire.

The variety of fabric recipes used in making this pottery is perhaps unsurprising, though trends and biases need to be compared to regional norms.

Some trends amongst the material are worthy of note here and will require some further investigation in the final report. First, most of the layers which contained comparatively sizeable groups of Iron Age pottery yielded proportions of the three fabrics which dominate the assemblage as a whole. Fabrics with grog temper seem to become somewhat more prominent amongst the groups provisionally assigned to the later Iron Age sequence.

The vessels have been manufactured with some care and skill. Virtually all the sherds come from hand-made vessels. With a proportion of items, careful surface finishing has obscured the manufacturing technique (Seager Smith 1998, 13), which is particularly the case with the typologically later Iron Age vessels.

The calcareously-tempered storage jars are associated with oxidized surfaces, but these types apart, the impression gained is that there is no clear correspondence between vessel colour and form. Any further work for a published report should examine this question.

The briquetage fragments occur mainly in a typically 'clean' light weight chaff tempered fabric with red exterior surface, and occasionally unoxidized interior and margin.

Forms and functions

The basic, generic forms present are limited to bowls, jars and storage jars, together with some beakers, a thumb pot and indeterminate items, either bowls or jars. However, a wide range of form variants is represented amongst the vessel classes. The fragmented nature of the material means that only a low proportion of the assemblage is sufficiently extant to ascertain form profiles and sizes.

The generic form type of the rim sherds present confirms that the majority of the vessels represented are jars, with bowls also well represented. This contrasts with the composition of the late Iron Age assemblage from Swavesey (Willis 1999) which is dominated by bowls amounting to 51% of the recovered rims. This asymmetry is probably due to chronological factors as there is a differing chronological emphasis between the two sites, with Swavesey seemingly lacking a Middle Iron Age phase. However, cultural factors may also be significant, with the contrast arising from differing cultural tradition and taste. The Middle Iron Age pottery from Little Paxton quarry belongs to an enduring regional ceramic tradition of hand-made practical forms with simple rims and occasional decoration (Knight 1984; Wild 1987; Jackson and Dix 1986, figs. 29-31). Typical are slack-profiled or bag-shaped jars with upright or slightly everted rims; bowls have similar rims; both forms can appear with slashed (incised) rims, that is with cut marks angled across the top of the rim and its outer edge; elaboration via thumb/finger pad impressions on the rim are infrequently present.

The typologically later Iron Age vessels present typically have shoulders with cordons and/or corrugations consistent with Late Iron Age vessels from southeast England (Thompson 1982; Cunliffe 1991), which have often been referred to as 'Belgic' or late La Tène. A number of the later Iron Age forms present at Little Paxton can be paralleled with examples from elsewhere in the wider region. In particular Late Iron Age forms from Little Paxton are represented amongst the *Camulodunum* series (Hawkes and Hull 1947). The Late Iron Age pottery includes sherds from a number of beakers, including butt beakers and cordoned types; a high proportion of these sherds display combing. One deposit associated with Enclosure 18 (F613.02, 2224), yielded sherds from the base of a clear copy of a Gallo-Belgic butt-beaker (*Camulodunum* type 113) dating to c. 10 BC-AD 80. No sherds from the Gallo-Belgic proto-type butt beaker, *Camulodunum* 113, were present amongst the pottery examined. In Britain it is unusual for butt beaker copies to occur at sites in any number without the imported vessel being present (Willis 1998). An extraordinary beaker sherd was recovered from feature F978, layer 4002. This large sherd has a thin even bitumen (or similar) coating across its exterior surface, overlying decoration, resulting in a black gloss finish. Such coating is difficult to parallel in Late Iron Age Britain, though contemporaneous pottery assemblages in Northern Gaul often include items with such a coating on their rims (Willis forthcoming).

The storage jars present are evidently tall forms with a high shoulder, neck, and in some cases rolled rim; their straight sided bodies taper moderately to the base. They

occur principally in Fabric E, though also in D (increasingly so, it would seem, with time). These forms display a high frequency of decoration at Little Paxton, as elsewhere in the southeast and east midlands, with vertical or near vertical combing on the body. Vessels of this type span the Middle and Late Iron Age, with a likely date range through the 3rd century BC to the later 1st century AD.

In sum, whilst there are a range of typological variants, the assemblage is, at the generic level, limited. The ceramic repertoire is heavily weighted to jars and bowls. This pattern is consistent with the typologically Middle Iron Age emphasis of the bulk of the assemblage. An increase in diversity of form types does not occur in this region until the Late Iron Age. In fact, a picture is emerging which makes plain that many sites in the Peterborough, North Cambridgeshire, Norfolk and northern Suffolk region fail to participate in the Late Iron Age in ceramic terms, but largely adhere to Middle Iron Age ceramic traditions up to, and into, the Roman era.

The forms present show a close affinity to those occurring amongst other culturally Middle and Late Iron Age assemblages from the region. The only vessels classifiable as 'finewares' amongst the ensemble are the beakers, and some of the bowls dating to the Late Iron Age. Overall the assemblage has a distinctly 'undifferentiated' character, with an absence of 'status' vessels. Quite how the form composition of this assemblage, and the indices of its usage, compare with those of other regional sites will need to be addressed in the report for publication.

Finally, the presence of soot, carbonized residues and limescale can provide an indication of the functions for which the vessels were used. Amongst the pottery examined a proportion of sherds have such surface deposits. All three types of residue occur through Phases 2 and 3 and across the site. A moderate number of sherds have interior limescale deposits suggesting that they had been used in a process/es involving the boiling of water. A higher number of sherds have exterior soot/carbonized residues, indicating use over fires and perhaps the burning of foodstuffs which have boiled over the side of the vessels. A not dissimilar proportion of sherds have interior carbonized deposits. The impression gained is that carbonized residues may be more frequent at this site than at other contemporary sites in the region. The frequency of the interior carbonized deposits in particular seems comparatively high.

Decoration

Some 10.8% of the Iron Age pottery sherds have some decoration present. This proportion may be reduced by the presence of so many very small sherds amongst the collection which may be too fragmentary for some types of decoration to be discernible. A range of decoration types are manifest and these varieties have been classified and coded, as follows:

Combing (on exterior):

- Combing
- CD - Combing and dimples
- CH - Horizontal combing
- CS - Combing / scoring
- CSV - Spaced vertical combing
- CV - Vertical combing
- CVD - Vertical combing and dimples
- CVH - Vertical and horizontal combing
- CVS - Vertical combing / scoring

Late Iron Age elaboration:

- LCC - Combing and cordons on exterior
- LCD - Cordons on exterior
- LVC - Vertical combing and cordons on exterior
- LCG - Corrugated vessel wall
- LMG - Multiple grooves on exterior

Rim decoration:

- RS - Slashed rim (slashes on top of upright rim)
- RT - Thumb-pad impressions on rim

Scoring (on exterior):

- S - Scoring marks
- SFL - Faint curving impressed lines

X-hatching (on exterior):

- XHB - Burnished X-hatching
- XHC - X-hatch combing
- XHD - X-hatch decoration

Other decoration (on exterior):

- BHE - Highly burnished
- D - Dimple marks in bands
- DRI - Rows of impressed dots
- ITM - Bitumen (or similar) coating
- URS - Rustication

A sizeable proportion of decorated sherds are body sherds from large 'storage' jars, which show combing characteristic of the form type (Kenyon 1948, fig. 34, no. 13; Clamp 1985, fig. 31, nos. 11-2). It is important that this style of decoration is not confused with the far less-regular scoring of vessel surfaces as associated with the Ancaster-Breedon tradition (Elsdon 1992). The two styles have been conflated by some reporters, resulting in erroneous conclusions. 'Scored ware' is merely a sub-set of jars and some bowls of the Ancaster-Breedon tradition which happen to be scored (Elsdon 1992; Cunliffe 1991; Willis 1998); the tradition is culturally Middle Iron Age. Combed vessels, as present at Little Paxton, are part of a different tradition of vessels which belong to both the Middle and Late Iron Age repertoires, they display regular tightly-spaced and aligned incised lines, and as noted above, are generally large jars typically of storage jar proportion. Genuine examples of Ancaster-Breedon/Scored ware vessels are few and infrequent amongst the present material. This is exactly as one would expect since the site is on the periphery of the distribution of the style.

No incised geometric or stamped motifs are present of the types found on some later iron Age pottery from Northamptonshire and Lincolnshire (Hunsbury and Dragonby-Sleaford types respectively).

Statement of potential

Iron Age pottery from Cambridgeshire has been an area of increasing study latterly and understanding of the Little Paxton material is likely to benefit from the knowledge gained from the recent study of other regional assemblages, a number of which are being published. Considered analysis of the assemblage, with reference to other contemporary assemblages, should yield quality data regarding the development of the settlement and economy of the site and contribute to the expanding picture of later prehistoric ceramics and cultural life in Cambridgeshire and East Anglia.

The statement of potential for the Romano-British pottery from Little Paxton (Evans and Hancocks 1999) identified the need for a uniform approach to both the Romano-British and prehistoric pottery from the site, in order to best meet the main academic objective of the project, namely an understanding of the long term evolution of the site and its relationship to its surrounds. The present assessment echoes this suggestion and the consequent need for the pottery recording methodologies to be compatible (*ibid.*). The Iron Age pottery from the key groups should be fully quantified, including by (separately) rim and base EVE, and the qualitative characteristics coded. The recorded data, as with the Romano-British pottery, should be entered into an Access database. The format for the latter should follow the BUFAU system for Romano-British pottery, with appropriate adjustments made reflecting the differing characteristics of the Iron Age material.

• Chronology

The spot-dates for the Iron Age key groups are tabulated (Tables 1-2). Where feasible actual calendar year date ranges are given, otherwise the cultural association of the pottery is recorded. More detailed analysis will allow site chronology to be refined. Although there are complicated issues to consider, the nature of the material and the advantageous site sequence hold a firm prospect of enhanced chronological refinement which will be beneficial in the examination of various research themes.

Establishing the chronology of the Iron Age pottery sequence for the site is not straightforward. The site lies in a region for which there have been few ceramic dating anchors. Moreover, recent work has raised more questions and increased uncertainties (Willis in press). Often Iron Age sites are dated more confidently by metalwork and continental pottery imports where these occur, or via the relative sequence as identifiable from the stratification (which in the case of this particular site is especially helpful)

Typologically Early Iron Age forms are absent (Woodward 1995). The majority of the Iron Age pottery is typologically Middle Iron Age including simple forms and some Ancaster-Breedon/Scored ware, as noted above. The start date for these forms is not secure and over the past 30 years has tended, by specialists, to be pushed further back into the Iron Age, with a possible debut in the 5th century BC. A recent thermoluminescence dating programme has suggested even earlier dates (Elsdon 1992;

Willis 1998). On balance a start date for the Little Paxton pottery sequence might be *c.* 400 BC, though this possibility requires examination from a more detailed analysis of the forms present, together with an appraisal of any other dating evidence available. Woodward's assessment of part of the present material teased out some useful typological-chronological pointers (Woodward 1995). Such a considered approach should be beneficial for further work on the assemblage, though the sample of diagnostic items is quite limited.

The major division within the Iron Age pottery is between the Middle Iron Age and the Late Iron Age types. In principal, of course, these represent differing sequential ceramic phases, though it is now readily apparent that at many sites in northern Cambridgeshire and further north into the east midlands, these two phases not only overlap but in the case of some sites co-exist up to the period of the Roman conquest (Pryor *et al.* 1984; Rollo 1988; Hill *in press*; Willis 1998; *in press*). In other words whilst in actual terms a site, or phase may date to the Late Iron Age, culturally the artefacts and perhaps social practices continued along Middle Iron Age lines, making detection of Late Iron Age occupation that much more difficult. There is certainly overlap at Little Paxton.

However, the quantity of Late Iron Age pottery from the excavations is not large and there are very few groups from amongst the later Iron Age enclosures (as identified stratigraphically) which contain anything like quantitatively strong typologically Late Iron Age pottery elements. There are various potential explanations which further work should pursue. One possibility, though perhaps unlikely, is that there was a hiatus in occupation near to the end of the Late Iron Age, from perhaps *c.* AD 20; the apparent absence of imported Gallo-Belgic pottery could be evoked to support this thesis. An alternative possibility is that Middle Iron Age ceramic traditions at the site continued into the mid 1st century AD, as at some other regional sites, though with some limited uptake of Late Iron Age styles. This likelihood has important implications for understanding not only what J.D. Hill has termed 'Iron Age foodways', but also for interpreting the character of cultural life and practice at the site during this period more generally.

The start date for the Late Iron Age types (the vessels with cordons, carinations, corrugated upper walls, etc.) is not securely anchored either, especially since the conventional dating of the late Iron Age in southeast England is now in doubt, with the probability that types have been consistently ascribed dates which are unnecessarily 'late' (Haselgrove 1997). Hence the earliest examples of this material at Little Paxton are likely to pre-date the turn of the millennium. Equally, pottery of this type is known to continue in use in Cambridgeshire into the period following the conquest. Roman material culture was evidently slow to arrive in at least some sites in the county. The potential date range for the Late Iron Age types, following the principal of Haselgrove's cogent thesis, is therefore *c.* 65/50 BC–AD 60/70.

Examination of trends in pottery fabrics will be important during further study of the assemblage. The evidence, however, suggests that in the case of Little Paxton, there is no simple pattern of sequential change in the nature of fabrics through the Iron Age as occurs in some regions. Hence differing proportions of fabrics within groups does not provide an index of group date. One might have predicted that the frequency of grog and quartz grain tempered wares would increase at the expense of calcite with time.

The quantitative data require analysis but initial examination suggests that any rise in the frequency of grog and quartz grain tempered wares is, at best, moderate. Moreover, there is a sustained form-fabric correlation through time.

The endemic archaeological problem of artifact residuality may be relatively minimal at Little Paxton, given the extent of the sequential, spatial development of settlement.

- Functional/spatial patterning

The extensive nature of the site and the fact that the excavation works have been able to recover samples from across the site, and in particular from many well-characterised enclosures means there is unusually good scope for examining the degree of spatial variations in the prehistoric pottery. This should elucidate aspects such as the possibility of differing functional areas, depositional practices, and site formation processes. Proportions of decorated wares, and items with extant surface residues should be examined for patterning/contrast across the site, and be compared with data from other sites in the region of equivalent date. The presence of multiple sherds from the same vessel within a single deposit could possibly evidence a structured pattern of deposition. Further analysis should establish whether there is a correspondence between the presence of residues and fabric and/or form type.

- Status and identity

As with the Romano-British pottery (Evans and Hancocks 1999) analysis of the typology of the later prehistoric assemblage will enable questions of status and identity to be addressed. The impression gained from the assessment is that the Iron Age pottery reflects a sustained normal, or unexceptional level of status. This is especially clear for the later Iron Age period with both low levels of beakers and other fine wares, and an apparent absence of imports, all of which are normally taken to be indicators of site status. In contrast all these types can be prominent at (apparently) contemporary sites further south (Hill in press). Little Paxton conspicuously differs from the pattern at Swavesey, c. 16km to the east, at which fine wares are very well represented (Willis 1999).

Judging from the comparatively low levels of typologically Late Iron Age pottery present, the site population sustained, to some degree, a Middle Iron Age ceramic consciousness through to the Roman conquest period. If verified by detailed analysis, this trend must have implications for the understanding of life, practice and cultural identity at the site as a whole during the later Iron Age. The actual picture for each of the enclosures should also be established. The possibility that these apparent trends are a function of the excavation strategy needs to be examined in the further analysis, although in almost all cases the excavation strategy was the same throughout the fieldwork, precisely to enable a valid basis for inter-comparison of the results.

It will be extremely helpful for characterisation of the site if volumetric analysis can be undertaken, to establish the ratios of pottery and other finds recovered *vis-à-vis* volumes of soil excavated. It could be readily ascertained using standard post-excavation software packages. It is highly recommended that this work be pursued for the results will undoubtedly prove instructive with regard to understanding status and identity and can be compared with patterns now established for other Iron Age sites.

• Trade/economy

Unlike the Romano British pottery, the fabrics of the Iron Age vessels will not be a guide as to the source of the vessels, as they are not diagnostic of provenance. There is no evidence of pottery production at Little Paxton during the Iron Age. It is likely that much of this pottery was produced locally. However, the prospect of some specialisation in production (in the case of combed storage jars, the slack-profiled Ancaster-Breedon/scored wares and perhaps some of the beakers and other late Iron Age forms) in the region and of distance-trade should not be dismissed with the ease with which such ideas once were (Haselgrove *et al.* 1999). Recent work on the British Iron Age has revealed something of the complex exchange networks that evidently once existed. The briquetage from the site is also an index of such networks.

The final report should aim to establish if there are correlations between method of manufacture and vessel form or fabric. The results of this analysis could then be considered alongside Hill's thesis that the potter's wheel was a technology adopted by Late Iron Age people because they wished to produce new, specific, ceramic forms, and that the choice of a temper to be used in potting was also culturally-influenced (Hill in press).

Other recommendations

Fabrics: The rapid sorting of sherds into fabrics for this assessment has generated reliable data, though for the purposes of further study some of the fabric categories, such as D and F, might be profitably split into fine and coarser variants, etc.

Petrology: no specialist petrological work is required.

Technology: any further study should aim to record the method of manufacture of the items, that is to say, whether items are hand - or wheel-made (see above).

Items of fired clay: no other work be undertaken on the 170 plus undiagnostic pieces of fired clay present amongst the key groups, other than recording their incidence and quantity (by count and weight per deposit) and including this basic information in the published text.

Number of items for illustration: 152.

4.3.5: Animal bone by Emily Murray

Quantity

The quantities of animal bone from Iron Age layers assessed is tabulated (Table 7).

TABLE 7: Animal bone assessed

<i>Area</i>	<i>Identification</i>	<i>% assessed</i>	<i>Total Wt.</i>	<i>Wt. assessed</i>	<i>% Wt. assessed</i>
B	Enclosures 1, 3-4	100			
B	Enclosure 2	100			
B	Various features	100			
B	Total	100	6918	6918	100
D	F550 + F560	100	-		
F	All features	14	18142	2657	14.6
F	Phase 2	-	1		
F	Phase 3	-	1		
F	Total	22	133817	-	

A total of 46 boxes of hand-collected bone were retrieved from Iron Age deposits at Little Paxton. A sub-sample was assessed (Table 7). In addition to the hand-collected animal bone, some of the processed flots from Area B, and Area E/F were noted to contain a small number of rodent and/or amphibian bones, as well as one or two fish vertebrae. The limited amount of this material will necessarily limit the potential for interpretation and inter-comparison of the Iron Age and Romano-British faunal data at final analysis stage.

Assessment methodology

The faunal samples were recorded using a modified version of a system devised by Davis (Davis 1992; Albarella and Davis 1994). This system considers a selection of anatomical elements as 'countable'. The presence of non-countable specimens of interest, such as antler, horncores, pathologies and non-countable elements from unusual species, are also noted. The measurements inferred vary according to element and species but most follow von den Driesch (1976). Mandibles are considered to be ageable where two or more teeth are present with recognisable wear. No attempt was made to differentiate sheep and goat at this stage. The number of 'countable bones', ageable mandibles and measurable bones recorded in the assessment are summarised in Tables 8-9.

The material not considered in the assessment from Area E/F was briefly scanned to determine whether it differed from that which was assessed, and also to note any unusual elements. Final phasing data was not, of course, available at this assessment stage, and thus the quantifications and estimates made for the assemblages are by area (Tables 8-9), not by phase. No unstratified material has been assessed, nor should it be considered for final analysis.

Provenance/dating

The deposits assessed from Areas E/F were those designated 'key groups'. The bones from Area E were derived from deposits in enclosure E15 and E18 ditches, while the bones from Area F came from a variety of features, mostly ditches.

Full data concerning residuality and contamination was not, of course, available at the time of assessment. There has however, been some difficulty in distinguishing Phase 2 and 3 activity, due to the nature of the ceramic traditions, and the necessarily limited

dating evidence at this assessment stage. Furthermore, there is a possibility of continuity between the Late Iron Age and early Romano-British activity, which also complicates the phasing. It is probable, therefore, that some Late Iron Age deposits could be affected by problems of contamination, while ditch re-cutting in Phases 2-3 in Area E/F may have introduced some element of residuality.

Range/variety

Details of the animal bone assemblage are tabulated (Tables 8-9).

TABLE 8: Animal bone, number of 'countable bones' (after Davis 1992) used for assessment with estimates of their totals for the full assemblage

Area	Exc. Phase	Countable bones					Bird Total	Comments
		Cattle	Sheep/Goat	Pig	Others			
B	E1	0	1	0	0	0	1	-
B	E2	12	11	3	10	0	36	Horse, dog, antler
B	E3	3	2	0	6	0	11	Horse
B	E4	1	2	2	76	0	81	Dog (partial skel.), juvenile pig skull fragments
B	Other feas.	13	7	2	3	0	25	Horse, cat
B	Total	29	23	7	95	0	154	
D	F550	3	3	0	1	0	7	
	F560							
E	F15	1	3	2	2	0	10	Horse
E	F18	1	0	0	14	0	14	Horse
E	Total (assessed)	3	3	2	16	0	24	
E	Total (est.)	21	21	14	114	0	170	
F	Phase 2	24	10	1	4	0	39	Horse, gnawing
F	Phase 3	27	20	4	11	2	64	Horse, human, eagle?, gnawing
F	Phase 3	48	38	15	29	1	131	Antler, horse, duck (widgeon size), dog (partial skel.), gnawing
F	Total (assessed)	99	68	20	44	3	234	
F	Total (est.)	707	486	143	314	21	1671	

TABLE 9: Animal bone, number of ageable mandibles (2 or more teeth present with recognisable wear) and bones suitable for measurement used for assessment and estimates of their total

Area	Fea. Phase	Ageable mandibles				Measurements				Total	
		Cattle	Sheep/Goat	Pig	Total	Cattle	Sheep/Goat	Pig	Others		Bird
B	E1	0	1	0	1	0	1	0	0	0	1
B	E2	1	0	1	2	3	3	1	4	0	11
B	E3	0	0	0	0	1	1	0	0	0	2
B	E4	0	1	0	1	0	2	0	14	0	16
B	Other fea.	5	1	1	5	5	2	1	2	0	10
B	Total	4	3	2	9	9	9	9	2	20	0
E	E550 + E560	0	0	0	0	2	1	0	1	0	
E	L15	1	0	1	2	1	1	1	0	0	
E	E18	0	0	0	0	0	0	0	0	0	
E	Total assessed	1	0	1	2	3	2	1	1	0	
E	Total estimated	7	0	7	14	21	14	7	7	0	3
F	Phase 2	0	0	0	0	6	1	1	2	0	10
F	Phase 3	0	1	1	2	2	9	1	0	1	13
F	Phase 3	1	8	1	10	15	18	3	6	0	
F	Total assessed	1	9	2	12	23	28	5	8	1	
F	Total estimated	7	64	14	85	164	200	36	57	7	

Area B

The preservation of bone from Area B was quite good, with the notable exception of the small assemblage from Enclosure 1. The cortical surface of the bone from this enclosure was in a state of exfoliation, presumably caused by the corrosive action of acidic soils. The state of preservation of bone from Enclosure 3 was also marginally poorer than that from Enclosures 1 and 4. The main domesticates, cattle, sheep/goat and pig were represented in the assemblage from Area B, while a number of bones of horse, dog and cat were also present. Two fragments of a maxilla of a juvenile pig were noted from Enclosure 4 (F444, 1957) in which the M² and canine were both in the preliminary stages of eruption. A fragment of antler which included the shed burr was present in ditch F383 from Enclosure 2 (1832), along with a worked piece of antler tine (F369, 1785). Gnawing made by a dog and/or cat was evident on cattle bones from feature F411 (1895).

A partial dog skeleton from the primary fill of a ditch was recovered from Area B (1950 F411). The bone was very dark in colour suggesting that it had been waterlogged. The specimen was immature and the majority of metaphyses present were unfused. The occurrence of both the metaphyses and unfused epiphyses would suggest that the skeleton was discovered in its undisturbed primary deposit. It is quite probable that it was interred in an articulated state. Given that the majority of the epiphyses are unfused, little metrical data will be retrievable, although the skull will be measurable and is of further interest as it has an abscess located above the alveolus of the upper right canine.

Animal bone preservation within the small assemblage from Area D ranged from fair to poor. The number of 'countable' bones from Area D is too insignificant to merit discussion or further analysis, except from noting that the shaft of a cattle tibia had an ossified haematoma (F560, 2154).

The preservation of the bone from Area E/F was very good. A number of the bones were discoloured and very dark, evidently through prolonged waterlogging. Unfortunately there was a high degree of fragmentation, of which some was fresh breakage. The principal domesticates, comprising cattle, sheep/goat, pig and horse were identified as present in Area E. The relative high frequency of horse from Enclosure 18 can be accounted for by loose teeth which may have exaggerated the totals calculated for the whole assemblage. The same range of species was represented in Enclosure 15 as in Enclosure 18. The material which was not fully assessed included a horse skull (F260, 2317) with possible bit wear on the upper pair of P²s (second upper premolars).

The largest quantity of Iron Age animal bone was retrieved from Area F. Cattle and sheep/goat were the two principal species represented. The high frequency of the former may have been affected by the excavation strategy. Pig, horse and dog were also present, while indirect evidence for the latter was provided by gnawing on a number of bones.

Area F was also the only area assessed to produce avifaunal material. This included an uina of a small duck (wigeon size) from Phase 3 feature F194 (3665). Another Phase 3 feature (F1094, 3665) produced a coracoid and femur of what a preliminary

examination suggests to be a large raptor, possibly white-tailed eagle. These are interesting specimens and will require consultation with further reference material for positive identification at final analysis stage. These bird bones, coupled with the pieces of deer antler and the hedgehog mandible (see below), are the only wild species recorded from the Iron Age contexts. In the Romano-British assemblage wild animals (red and roe deer and badger) were found in the Phase 5-6 Area A Romano-British settlement, where it was suggested that they may represent elite activity (Albarella and Hammon 1999, 26). However, no similar bone was found in Area E/F.

A small number of non-countable elements were noted from Area F. These included cattle horncores, all of the shorthorn type (Phases 2-3), an antler tine from Phase 3 feature F845 (4028), and a pathological bovine tibia which displayed extensive exostoses, possibly of infectious origin on the distal epiphysis and shaft (F1253, 3484).

Two human bones, a distal radius and a proximal femur of an infant, were also present in a layer from the enclosure ditch on the northwestern side of enclosure E4 (F814, 2942).

A scan of the material not assessed in detail identified another partial immature dog skeleton. The location of this specimen within a ditch terminal (southern side of enclosure E7, F977, 4000), may suggest ritual deposition. A small number of juvenile and waterlogged dog bones were noted from F978, a feature which cuts ditch F978 belonging to the same enclosure. It is quite probable that these are derived from the same skeleton which was disturbed through re-cutting. A partial dog skeleton and cat skeleton were also noted from a Romano-British feature (F1075.03) in Area E/F (Albarella and Hammon 1999, 27), both being discoloured as a result of waterlogging. A hedgehog mandible from ditch F815 (2785), was also noted within the assemblage scanned.

Statement of potential

It is recommended that the entire faunal assemblage be scanned, and quantified, with detailed reporting of the material from key deposits only.

One of the main aims of the overall project is the potential for comparison of economic data between the Iron Age and Romano-British settlements at Little Paxton. Clearly, the transitional period will be key to this understanding, and thus much of the potential of the faunal assemblage will be determined by the resolution of the phasing. Examination of the Iron Age (and Romano-British) animal bone should not be undertaken until after detailed pottery spot-dating, to ensure the final phasing data is available, and any potential issues of residuality are resolved. At final analysis stage it will be important to compare metrical data from Iron Age and Romano-British deposits, to highlight evidence for 'improvement'. Comparison of the tooth wear and fusion data will allow comparison of husbandry practices. Sheep/goat appear to provide the greatest potential for this analysis (see Tables 8-9; Albarella and Hammon 1999).

There is the potential for spatial analysis of the faunal material from Area E/F, but not from Areas B and D where the quantities of material are too small.

it will of course be important to compare the results from Little Paxton with other Iron Age sites in the region, including Edix Hill, Barrington, near Cambridge where a pit containing a dog skeleton and cow skull was discovered (Davis 1995). The NISPs at both this and another Late Iron Age site at Wardy Hill, Cambridgeshire, dominated by sheep. This assessment suggests that cattle are the predominant species at Little Paxton, as for example at Norman Cross, Fort Hill East and West and Vinegar Hill (Albarella 1998) which like Little Paxton, have produced both Iron Age and Romano-British material.

4.3.6: Charred plant remains by Marina Ciaraldi

The charred plant remains and waterlogged plant remains (see Section 4.3.7 below) have been assessed separately.

Quantity

Quantification of the samples assessed is provided by Table 10.

TABLE 10: Charred plant remains, samples assessed

Layer	Feature	Species	Charcoal	Y?	M	F	%	Comments
D	2007	F478				10	100	
D	2008 F	F478				70	10	
D	2008	F478				50	10	
D	2 01	F550.01						Scanned. Roots
D	2 16	F552				10	100	Scanned
D	2 18	F551				50	50	2 bags
D	2 19	F551				10	100	
D	2 22	F550						Sample too small to assess
D	2 23	F550						Sample too small to assess
D	2 24	F552						Sample too small to assess
D	2 27	F550.6				60	10	Sample too small to assess
D	2 29	F555						Sample too small to assess
D	2 30	F556				30	50	
D	2 33	F558	xx very small			400	10	
D	2 34	F558				30	100	
D	2 40	F560				50	30	Stags
D	2 42	F562				30	50	
D	2 44	F564	Trypsium F. uncharred			20	50	Modern of W.L. seeds
D	2 48	F567						Sample too small to assess
D	2 52	F550				30	30	
D	2 54	F560				20	50	
D	2 57	F551.01						Sample too small to assess
D	2 61	F550.07						Sample too small to assess
D	2 62	F571						Sample too small to assess
D	2 74	F560				60	50	
D	2 27	F613.02	xx large			100	50	Mineral. W.L.
F	2 30	F603.02						Sample too small to assess
F	2 31	F613.02	xxx very large?			800	10	W.L. bones
F	2 41	F615				40	50	Charred bones
F	2 56	F622				800	10	Bones. W.L sample; unusual matrix
F	2 63	F604.00				500	10	W.L samples
F	2 77	F645	xx small			100	30	
L	2 78	F627	x small			120	30	Rodent tooth

Area	Letter	Feature	Seeds	Charcoal	Y?	M	F	%	Comments
E	2:79	F627		x small			80	30	
E	2:87	F620	Lots of WL seeds, no charred seeds, some		?		-	-	
E	2:96	F632.02							Too small to scan. Full of small snails
E	2:97	F629.03	Bands ++, cereals +, grasses ++, m		y		70	10	Very rich, almost pure seeds
E	2:27	F641.01	Cereals 1	x small			110	20	Bones
E	2:30	F645.01					10	100	
E	2:40	F629.01	Cereals - vicia/ath 1				30	100	
E	2:67	F620	Triticum 1 (carb) Full of WL elder seeds		?		10	100	WL
F	0:00	F627	cereal 1, brassicaceae (Sisymbrium?) 1				40	50	
F	0:00	F607.01	Few WL seeds and twigs				-	-	WL
E	2:03	F601.01					10	100	Dirty flint
E	2:06	F603.01	Cereals -, m (barley -partly charred, 3 joint)				20	100	Roots
E	2:07	F604.01	Barley 3, indet. 1				40	60%	Roots
F	2:17	F605.02	Cereals 6, tuber		?		15	50	Sort for tuber?
E	2:23	F613.01			?		50	50	WL no charred plants, some WL seeds, some insects
F	4:01	F100							Sample too small to assess
F	4:01a	F100							Sample too small to assess
F	6:03	1117							Sample too small to assess
F	2:12	F705.01	Cereals+- WL		y	6	check	100	
F	2:64	F723.01	Avena 1, Poa 1, glb 2, WL seeds		?	6	10	100	Roots
F	2:37	F711.01	Cereals 5, barley 2, Triticum 2, Carex 1, Poa 1		?	6	10	50	Mineral WL, roots
F	2:32	F726.03				6			Sample too small to assess
F	2:35	F726.02	Cereals 3, barley 2, glb 1, en 1, Vicia/ath 2, no		?	6	10	100	WL
F	2:30	F730.01	Cereals 2, barley 1, R. acetosella 1, Labiateae 1, x small			6	20	50	Mineral WL
F	2:01	F720.02				6	5	100	Lots of snails
F	2:02	F720.02	Cereals 3			6	10	100	Lots of snails
F	2:90	F744	Cereal 1, barley 1, bromus 1, carex 1, xx med			6	100	50	Mineral WL
F	2:59	F753.05				6	20	100	Mineral WL
F	2:79	F753.03	Triticum 3 (1 germ) cereals 2, grasses 1, xx med			6	100	50	
F	2:09	F720.03	Prunus (stone and pulp)	xx small, some		6	500	10	Large sample
F	2:76	F727.02				6	10	100	WL
F	2:81	F727.02							Sample too small to assess
F	2:09a	F720.03	Barley 1, cereals 2, grasses 1	Few largish pieces		6	150	50	Mineral WL, small bones
F	2:93	F755							Sample too small to assess
F	2:73	F759.02	Cereals 1			6	10	100	

Area	Layer	Feature	Seeds	Charcoal	Y/P	M	F	%	Comments
F	2810	F769.01	Cereals 2, bromus 1			6	10	100	Mineral. WL
F	2789	F753.02		x small		6	10		Slag
F	2760	F754							Sample too small to assess
F	2721	F750.02	Cereals 5, polygonum 2, carex 2, rumex 1, x med		?	6	120	30	Small bone
F	2853	F770.02	Triticum 5 (free-threshing), galium 1 glb1 xx small		?	6	150	30	Lots of snails
F	2889	F793				6	10	100	Small bones
F	2909	F779.02							Sample too small to assess. Almost entirely snails
F	2963	F800.02	Triticum 1 (free-threshing), grasses 1, fork 1,			6	10	100	Roots
F	2845	F750.02				6	20		Scanned from bag
F	2904	F769.02				6	20		Scanned from bag. Lots of roots
F	2997	F800.03				6	5		Not scanned
F	3036	F831				6	5		Scanned from bag
F	3052	F842				6	2		Not scanned
F	3054	F844							Not scanned
F	3056	F850				6	10	100	
F	3081	F748.06	Cereals 1	x large		6	80	50	Mineral. WL, modern roots
F	3091	F854				6	5	100	Scanned
F	3051	F862	Cereals 3			6	30	50	
F	3074	F862	Barley 1, cereals 2, grasses 1		?	6	50	50	Unusual kind of barley
F	3078	F862	Indst 1 glb 1	x large		6	100	50	
F	3017	F846.01				6	10	100	
F	3094	F855	Cereals 2, cb ++		y	6	20	50	Modern seeds
F	3098	F906	Cereals 3, rj 2 (attached, not fully ear)			6		50	Modern seeds
F	3117	F862	Cereals 5, bromus 1, rj 1 (barley), berry 2	xx medium	y	6	100	50	
F	3120	F880.01							Sample too small to assess
F	2939	F812.01	Rumex 1, grasses 1, glb 1	Few large pieces		6	50	50	
F	2852	F709.07				6	5		Scanned
F	3155	F880.03				6	5		Sample too small to assess
F	3126	F898.01	Cereals ++, (badly damaged)		y	6	15	50	Roots
F	3143	F899	Cereals +, vicia/lath			6	30	50	Roots
F	3207	F908.01				6	10		Sample too small to scan. Roots
F	3115	F861.02	Cereals 7, vicia/lath 3, corylus 1		?	6	30	50	Roots
F	3252	F918.01							Sample too small to scan. Bone
F	3254	F919	Cereals ++, cb 1, glb + (split)		y	6	40	50	Roots
F	3232	F913.01	Cereals ++, barley +, triticum, plantago 1, cb 1, vicia/lath 1		y	6	30	50	

Area	Layer	Feature	Seeds	Charcoal	Y/?	M	V	%	Comments
F	3279	F922.01				6	50	50	
F	3280	F922.01	Bromus 1, vicia/lath 1			6	40	50	
F	3251	F896.01	Cereals +- glb +-		y	6	50	50	Roots
F	3158	F904.03	Barley 4, cereals 2, cb 1, glb 1, Pisum? 1	Some large pieces	?	6	100	50	Roots
F	3147	F894	Cereal 1, carex 1			4	30	50	
F	3136	F936	Cereals 3, vicia/lath 1 (large)			4	30	100	Roots
F	3141	F913.03	Cereal 1, glb 1			4	30	50	
F	3123	F934	Barley +, cereals +, r 1 (barley) glb ++ (spelt)		y	4	30	50	Roots
F	3142	F943	Cereals 4			4	20	100	Small snails
F	3144	F943			y	4	20	100	
F	3162	F944	Barley 1, sherardia 1, vicia/lath 1, WL seeds		?	4	100	20	WL
F	3128	F891.03	WL seeds and few charred seeds			4	20	100	WL
F	3179	F913.02	Barley 3, en 1, glb 1, vicia/lath 5		y	4	50	50	
F	4084	F1001	WL seeds (rubus sp., prunus), no charred seeds		y	4	40		WL
F	3165	F945	Cereal 1, vicia/lath 1			4	20	100	
F	2172	F601.04	Triticum +++ (spelt?), emmer?, bromus +		y	4	200	10%	Almost pure grains. Re-process?
F	3374	F947.01	Triticum +-		y	4	10	100	
B	1804	F372.02							Too small to assess
B	1809	F372.02							Do.
B	1810	F372.02							Do.
B	1842	F372.02							Do.
B	1843	F372.02							Do.
B	1850	F372.02							Do.
B	1854	F372.02							Do.
B	1859	F372.01							Do.
B	1860	F398.01							Do.
B	1861	F399.01	Cereals 1				100	50	
B	1863	F402					50	50	
B	1865	F403					50	50	
B	1866	F404	Cereals 1, Triticum 1, bromus 1, vicia/lath				150	50	
B	1872	F401.02	Triticum 1				10	100	
B	1878	F411.01	Cereals 3, grasses 3, en , tuber	xx med	y		160	20	Small bone
B	1879	F411.02	Cereals 4				120	30	
B	1885	F411.02					20		Scanned
B	1893	F414.01	Cereals 1				30		Scanned

Area	Loyer	Feature	Seeds	Charcoal	Y?	M	F	%	Comments
B	1894	F415.01	Carex 1				10	100	
B	1896	F415.01					30		Scanned
B	1899	F401.01	Cereals 1				30	50	
B	1923	F422.01	Spelt 1				20	100	
B	1924	F401.05	Tuber 1		?		20	50	Worth sorting for tuber
B	1779	F362.04	Residue from pot						
B	1927	F424.01	Cereals 2				30	100	
B	1928	F425.01	Barley 2, triticum 1, cereals 2				20	100	Flint
B	1929	F399.02					30		Scanned
B	1930	F398.02							Scanned
B	1933	F427.01	Prunus 1	xx med	?		300	10	Worth sorting for prunus
B	1936	F399.03	Cereal 1				40	100	
B	1937	F399.03	Cereals 4				40	50	
F	3407	F956	Cereal 1, vicia/lath 1, bud scale	x large pieces		4	40	100	Mineral WL, small bones, roots
F	3471	F953	Cereal, barley 2, spelt 1, triticum 2, bromus 3,		y	4	10	100	Mineral WL
F	3417	F951				6	5	100	Mineral WL, small bone
F	3371	F953	Cereals 3, galium 2, grasses 2, m	X small		6	40	50	Mineral WL
F	3430	F946	Grasses			6	10	100	Roots
F	3454	F968				6	5	100	
F	3447	F963				6			Too small to assess
F	3441	F939.03				6			Too small to assess
F	3455	F955.02	Cereal +, barley ++, Rumex +, cb -, glb -		y	6	40	50	
F	3414	F958		X small		6	10	100	
F	3458	F955.02	Cereals 2, m 1			6	10	100	Fish vertebrae, lots of snails
F	4026	F845.02	Barley +, cereals +, bromus 1, grasses 1, glb 1		?	6	60	30	Dirty flot, interesting small bone
F	4064	F994	WL seeds		?	6	100	10	WL sample
F	4089	F993.01	Cereals 2	X large		6	30	100	
F	4091	F993.01	Cereals 5	Xx some largish		6	120	30	
F	4029	F1006	Barley 4, triticum 2, cereals 2, rumex 2, carex 2,	Xxx some large	y	6	150	30	Burnt bone
F	5021	F1006	Cereals 1, vicia/lath 2			6	5	100	
F	4067	F996	Cereals 1, barley 2, triticum 1, polygonum 1,	Xx some large	?	6	120	30	Bone
F	4125	F1008	Triticum 1 (free-threshing), cereal 1			6	100	50	Snails, very dirty flot
F	4079	F1010	Barley 1, cereals 4, rumex 1, polygonum 1,	Some large pieces	?	6	110	30	Dirty flot
F	3402	F1024		xx small		6	150	10	Small bone
F	4099	F1035	Cereals, serratia 1, grass 1, rumex 1, glb 1	x med		6	70	50	Small bone

Area	Layer	Feature	Seeds	Charcoal	Y/?	M	V	%	Comments
F	3533	F1039.04		x small		6	30	100	
F	3529	F1056	Cereals 1 barley 1, grasses 1, glb 4, vicia/lath		?	6	10	100	
F	3544	F1039.03	Cereals 4 triticum 1 (free-thr), barley, grass 1,	xx large	y	6	300	10	3 bags. Ashy matrix
F	4084	F1006				6			Too small to assess
F	3627	F1075.01	Barley 1, cereal 1, galium 1, rumex 2,	x small		6	50	50	Modern seeds
F	3628	F1082		x small		6	50	50	Roots
F	3615	F1078	Triticum 2, barley 2, cereals 10, bromus 1,		?	6	100	50	
F	3670	F1095	Triticum 1, grasses 1			6	50	50	
F	3677	F1094	Rumex 1, sambucus 1 (WL)	x med		6	50	30	Mineral WL, small bone
F	3667	F1094				6	10	100	Roots
F	3666	F1094		Few med pieces		6	10	100	
F	3665	F1094				6	10	100	
F	3691	F1110	WL, seeds		?	6	110	10	WL sample
F	4067a	F996		xxx med		6	200	10	Fish scale.
F	3725	F1075.03	Cereals 3, triticum 1 (free-threshing) grasses 7,	xx small. Some	y	6	250	10	
F	3711	F1147	Sambucus +- , hemlock both WL		?	6	50		WL sample
F	3907	F1175	Triticum 2 (free-threshing), cereals 2, barley 1,		?	6	10	100	
F	3168	F846.02	Residue from pot only						

Key: v= full analysis recommended. ? full analysis recommended subject to final phasing/residuality; M= mesh size; V= flot volume, in litres; %= percentage assessed.

Assessment methodology

The recovery of biological remains from the excavation was achieved through intensive sampling of excavated features, usually undertaken on-site and during excavation to enable 'feedback' to be provided concerning the potential and level of preservation of the remains. Samples of 20 litres or the equivalent of the entire deposit of small features were routinely collected from selected datable deposits. A total of 191 samples were collected from Iron Age features. The samples were processed either using a flotation machine, or by bucket flotation, using 0.4-0.6mm mesh sizes. The heavy fraction (residue) was recovered on a 1mm screen.

Some of the samples, even though originally waterlogged, were dry at the time of sampling, and processed as such (indicated as WL in Tables 10-11), for the recovery of the charred plant remains. Waterlogged plant remains were assessed separately (see below).

The residue from some samples was sorted by eye. The flots were scanned under a low power stereo microscope.

Due to the large number of samples requiring assessment, and the importance of obtaining an overview of as large a number of the samples as was possible, it was decided to scan all flots rapidly, rather than assessing a sub-sample in more detail. Only a small percentage of each sample (Tables 10-11) was observed under the microscope. Identifications were made without the use of a reference collection and are necessarily preliminary.

Provenance/dating

Since the phasing is necessarily provisional at assessment stage, the plant remains have been considered as a single assemblage. Details of the deposits are contained in Tables 10-11.

Range/variety

The range and variety of the plant remains assessed is tabulated (Table 11).

TABLE 11: Charred plant remains, further details

Area	Layer	Feature	Seeds	Feature type	Y/%	L'	M	F	%	Comments
B	1878	F411.01	Cereals 3, grasses 3, cm tuber	Enclosure ditch	y	-	-	160	20	Small bones
B	1924	F471.05	Tuber 1	Enclosure ditch	?	-	-	20	50	Worth sorting for tuber
B	1933	F473.01	Prunus 1	Enclosure ditch	?	-	-	300	10	Worth sorting for <i>Prunus</i>
L	2217	F695.02	Cereals 6, tuber	Leaves-drip gully	?	20	5	15	50	Worth sorting for tuber
F	2297	F629.03	Barley +, cereals 1, grasses 1+, m +, Vicia/Lathyrus +	Boundary ditch	y	15	5	70	10	Very rich, almost pure grain
F	2372	F631.04	Triticum + (spelt?), emmer?, Bromus +	Ditch	y	-	14	200	100%	Almost pure grains.
F	2537	F711.01	Cereals 5, barley 2, Triticum 2, Carex 1, Poa 1	Enclosure ditch	?	18	6	10	50	Mineralised by WL, modern roots
F	2564	F723.01	Avena 1, Poa 1, glb 2, WL seeds	Enclosure ditch	?	16	6	10	100	Modern roots
F	2721	F750.02	Cereals 5, Polygonum 2, Carex 2, Rumex 1, Raphanus?, glb 3, m 1	Enclosure ditch	?	20	6	120	30	Small bone
F	2853	F776.02	Triticum 5 (free-freshing), Galium 1 glb (spelt), Corylus 1	Animal enclosure	?	20	6	150	30	Lois of snails
F	3074	F862	Barley 1, cereals 2, grasses 1	Pit	?	20	6	50	50	Unusual barley grain
F	3094	F885	Cereals 2, cb 1	Pit	y	20	6	20	50	
F	3115	F891.02	Cereals 7, Vicia/Lathyrus 3, Corylus 1	Enclosure ditch	?	20	6	30	50	Modern roots
F	3117	F962	Cereals 7, Bromus 1, n 1 (barley), berry 2	Pit	y	20	6	100	50	
L	3126	F898.01	Cereals 1+, +	Ditch/gully	y	20	6	15	50	Modern roots, very damaged seeds
F	3158	F904.03	Barley 4, cereals 2, cb 1, glb 1, Pisum? 1	-	?	22	6	100	50	Modern roots
F	3232	F913.01	Cereals +, barley +, Triticum, Plantago 1, cb 1, Vicia/Lathyrus 1	Enclosure ditch	y	20	6	30	50	
F	3254	F818	Cereals +, cb 1, glb - (spelt)	Pit	y	16	6	40	50	Modern roots
F	3335	F934	Barley 1, cereals +, m 1 (barley), glb + (spelt), Vicia/Lathyrus 1	-	y	20	4	30	50	Modern roots
F	3344	F943	Barley 1, Sherardia 1, Vicia/Lathyrus 1, WL seeds	-	y	20	4	20	100	
F	3371	F953	Cereal 1, barley 2, spelt 1, Triticum 2, Bromus 3, R. acet. r1 glb, Animal pen (spelt)	-	y	12	4	10	100	Mineralized by WL
F	3375	F947.01	Triticum +	-	y	14	4	10	100	
F	3455	F955.02	Cereal +, Barley +, Rumex +, cb +, glb +, Vicia/Lathyrus 1	Enclosure ditch	y	20	6	40	50	
F	3529	F1056	Cereals 1, barley 1, grasses 1, glb 4, Vicia/Lathyrus	Enclosure ditch	?	20	6	10	100	

F	3544	F1039.03	Cereals 4. Triticum1 (free- (hr). barley. grass 1. ch 1. glb 4.ci. Corylus	Animal pen gully	y	20	6	300	10	Ashy matrix
F	3615	F1078	Triticum 2. barley 2. cereals 10. Bromus 1. Vicia/athyrus 1	Enclosure ditch	?	20	6	100	50	
F	3725	F1075.03	Cereals 3. Triticum 1 (free-dhrshing). grasses 7. Galium 1	Enclosure ditch	y	20	6	250	10	
F	3907	F1175	Triticum 2 (free-dhrshing). cereals 2 barley 1. grasses 2	Enclosure ditch	?	15	6	10	100	
F	4026	F845.02	Barley 3. cereals + Bromus 1. grasses 1. glb 1 (spelt)	Animal pen	?	20	6	60	30	Small bone
F	4029	F1906	Barley 4. Triticum 2. cereals 2. Rumex 2. Carex 2. grasses. glb 2. V/L 20	Enclosure ditch	y	20	6	150	30	Burnt bone
F	4067	F496	Cereals 1. barley 2. Triticum 1. Polygonum 1. Carex 1. glb 2	Enclosure ditch	?	20	6	120	30	Bone
F	4079	F1010	Barley 1. cereals 4. Rumex 1. Polygonum 1. Galium 2. glb 2.en 1. V/L	Enclosure ditch	?	20	6	110	30	

ORIGINALLY
WATERLOGGED
SAMPLES (DRY AT TIME
OF SAMPLING)

Area	Layer	Feature	Seeds	Feature type	Y/?	F	M	F	%	Comment
E	2223	F613.01		Enclosure ditch	?	20	5	50	50	WL no charred plants, some WL seeds, some insects
E	2231	F613.02	Branus + (carb) Lots of WL seeds	Enclosure ditch	?	20	5	800	10	WL; bones
E	2256	F622	Few WL seeds, no charred seeds	Enclosure ditch	?	20	5	800	10	Bones, WL; unusual matrix
E	2263	F604.00	Some WL seeds lots of twigs	Enclosure ditch	?	20	5	500	10	WL
E	2267	F620	Triticum 1 (carb) Full of WL elder seeds	Boundary ditch	?	10	5	10	100	WL
E	2287	F620	Lots of WL seeds, no charred seeds, some twigs and insects	Boundary ditch	?	12	5	-	-	WL
F	2512	F705.01	Cereals ++.	Boundary ditch	y	18	6	-	100	WL
F	2535	F726.02	Cereals 3, barley 2, gfb 1, cn 1, Vicia/Lath 2, no WL seeds	Animal pen	?	18	6	10	100	WL
F	3128	F891.03	Barley 3, cn 1, gfb 1, vicia/lath 5	-	y	20	4	20	100	WL
F	3362	F944	WL seeds and few charred seeds	Pit	?	20	4	100	20	WL
F	3366	F945	WL seeds (rubus sp., prunus); no charred seeds	-	?	10	4	40	10	WL
F	3691	F1110	WL seeds	Pit	?	20	6	110	10	WL
F	3711	F1147	Sambucus ++, hemlock both WL	Enclosure ditch	?	20	6	50	50	WL

Key: V = sample volume in ml WL = waterlogged samples; y = samples suggested for further analysis; ? = samples suggested for possible further analysis subject to phasing/residuality; F= float volume (ml)

Despite the large number of soil samples processed, only 34 samples contained a sufficient quantity of charred plant remains to justify further analysis (Table 11).

The charred plant remains observed comprised cereals and crop waste. The presence of non-cereals species was limited to only a few fragments of hazelnut shell (*Corylus avellana* L.) and a single *Prunus* sp. stone.

The majority of the samples contained a mixture of cereal grains, chaff and some weeds, suggesting that crop processing certainly took place on site.

Two flots (F601.04/2372 and F898.01/3126) comprised almost exclusively cereal grains.

Spelt, barley and perhaps a free-threshing wheat were identified in the assemblage. The dried-out waterlogged seeds were not identified at this stage although their abundance was recorded (Table 11).

Preservation of the charred plant remains was relatively poor, even where samples had a high seed density (e.g. F601.01/2372 and F629.3/2297). The seeds appeared to have been badly distorted during charring but it is clear that also other taphonomic factors must have affected the preservation. The seed surface was badly corroded and encrusted with minerals and soil. In some cases a reddish deposit was noticed on the charred remains, which might have been due to the deposition of ferric minerals during seasonal waterlogging. Such alternation of wet and dry conditions can damage charred plant macroremains (Hubbard and el Azm 1990). Periodic flooding from the nearby River Great Ouse could have caused such variations.

Change in the soil humidity may possibly be related to nearby gravel extraction. Current research, at Willingham/Over, in the Lower Great Ouse Valley, is currently addressing the possibility that gravel extraction might have an effect on the moisture regimes of the soil. The researchers suggest that changes in the moisture content of the of the soil are related to gravel extraction, and do affect the level of preservation of organic remains (French *et al.* 1999).

Some of the samples had clearly been waterlogged (Tables 10-11), including a few samples containing charred plant remains (F705.01/2512, F726.02/2635 and F891.03/3128).

Statement of potential

The potential information obtainable from the Iron Age plant assemblage is affected by the relatively poor preservation of the charred remains. In most of the cases the grains are so damaged that they could only be identified as cereals. Identification to species level will only be possible in some cases. Non-cereals seeds are also relatively badly preserved and their identification will also be difficult.

Because the phasing at this assessment stage was necessarily provisional, it was not possible to identify significant differences between the plant assemblages belonging to Phases 2 and 3, although this is not to say that such patterns could not be discerned where more detailed phasing is available. Further analysis should be targeted to

identify any differences in crop husbandry through the Iron Age, and between the Iron Age and the Romano-British period (Smith 1999)

Excavated Iron Age sites providing useful comparative material include St. Ives (Fryer and Murphy 1996), Trumpling (Wilson 1973), Stonea camp (Murphy 1992) and Lingwood Farm (Murphy 1998).

4.3.7: Waterlogged plant remains by Marina Ciaraldi

Quantity

A total of 29 waterlogged samples from Iron Age ditches were assessed to establish whether plant macroremains were preserved, and to assess their potential importance for the reconstruction of the contemporary environment and economy. The samples assessed are tabulated (Tables 12-13). Seeds from originally waterlogged deposits, which were dry at the time of excavation, were sampled together with charred plant remains (Section 4.3.6 above).

Assessment methodology

Plant remains were identified without using reference material and the identifications are provisional only.

Provenance/dating

Phase 2-3 waterlogged deposits were found only within Area F. Details are tabulated (Tables 12-13).

Range/variety

The results of the assessment are tabulated (Tables 12-13). The plant assemblage recorded in the samples appear to be rather homogeneous, with a clear predominance of plants associated with disturbed ground, such as common nettle (*Urtica dioica* L.), thistles (*Carduus/Cirsium*), fat hen's goosefoot (*Chenopodium* sp.) or nightshades (*Solanum* sp.). Plants typical of wet environments were also recorded, for instance some of the knotweeds (*Polygonum* sp.) and the gypsywort (*Lycopus europaeus* L.).

Some cereal weeds were also observed, though they tended to be charred rather than waterlogged.

Statement of potential

The preservation of the waterlogged plant remains was generally good apart from a few cases where the plant remains had deteriorated during the period of their storage. Some of the samples were too small to be worth assessing, but nevertheless they have been listed in Tables 12-13.

Despite the homogeneity of the plant assemblages from the various samples, some differences have also been noticed. For example, it is clear that there are some samples which have more plants from wet environments, while in others there is

potentially presence of weeds. It will be important to investigate further the nature and meaning of such differences.

Four samples have been selected as particularly rich and significant for their plant assemblages (Table 12, F709.06/2546, F815/2957, F703.06/2991 and F839/3885). It is recommended that these samples are analysed in detail, and reported-on. If the analysis of the four samples reveals a difference, it will be worthwhile rapidly scanning the remaining samples in order to establish whether they can be grouped as well. The homogeneity of the species present should make their recording and identification very speedy. The composition and the interpretation of groups of samples could be significant in understanding environmental changes associated with different periods of occupation or different areas of the site. The presence of weeds could also be important in detecting the zoning of different activities within the Area F settlement. Of particular importance is the potential for comparison with the charred plant remains and beetles from the Romano-British settlements, to elucidate changes in environment.

TABLE 12: Waterlogged plant remains from Phase 2 deposits (note: phasing is provisional)

Area	Feature	Layer	V	Seeds recorded	Insects	Comments
F	F714	2560	100	Sambucus 3, Lycopus europea 1 anthere	Pupae (-), beetles (1)	
F	F709.06	2546	71	Triticum charred 5, oats charred 1, Fumaria (++) , Urtica dioica (++) , Solanum (+) , Labiatae (+) , Sambucus (++) , Rubus (+) , Chenopodium (++) , Carduus/Cirsium (+) , Ranunculus (+)	Pupae (+) , beetles (+)	Abundant fragments of charred material. Charcoal (x)
F	F708.03	2606	1001	Bromus 1, Solanum 1, Urtica 1, Cruciferae 1, Rumex 1, emmer/spelt fork (charred), 1		Very small sample
F	F718	2591	100	Cereal (charred), 1, Polygonum (+++), Rumex (+), Urtica (1-), Stellaria (1-), Solanum (-),	Beetles (1), pupae (-)	Very small sample
F	F713.04	2657	100	Carduus/Cirsium (+), Lycopus eur. (+), Sambucus (+), Urtica (+),		Very small sample
F		2722	100	Solanum (+), Polygonum (-), Labiatae (-), Urtica (-), Stellaria		Very small sample
F	F745.01	2697	100			Not scanned, too small
F	F779.02	2915	100	Sambucus (-), Polygonum (+), Chenopodium (+), Labiatae (+), Umbelliferae (-), Solanum (-)		Very small sample
F	F815	2957	41	Berry (+) , Urtica (++) , Chenopodium (+++) , Polygonum (+) , Silene (+) , Labiatae (+) , Lycopus eur.(+) , Triticum (charred) (+) , oats (charr.) (+) , Bromus (charr.) (+) , Galium (charr.) (+) , Carduus/Cirsium (charr.) (+) , Solanum (+) , Ranunculus (+) , Hemlock (+)		Large sample of charred remains 1 phalangis
F	F703.06	2991	100	Stellaria (++) , Labiatae (+) , Umbelliferae (+) , Papaver (+) , Cruciferae (+) , Malva (+) , Sambucus (+)		Small sample
F	F779	2850	100	Umbelliferae (-), Ranunculus (1), Carduus/Cirsium (-), Urtica (-+), Solanum (1), Polygonum (-)	Beetles (-)	
F	F813	2968	100	Labiatae (-)	Beetles (1)	Very small sample

Samples in bold recommended for further analysis. Sample volume processed in ml, unless otherwise noted. V= volume (in ml) processed.

TABLE 13: Waterlogged plant remains from other Iron Age deposits

Area	Feature	Layer	V	Seeds recorded	Insects	Comments
F	F839	3885	100	Bud (+), Ranunculus (++) , Leaves (++) , Urtica (+) , Stellaria (++) , Carduus/Cirsium (+) , Sonchus (+)	Beetles (few, well pres.)	Small sample
F	F845	3065	100			Very small sample
F	F1094	3678	100			Only a few charred plant remains
F	F955	3398	-	Rumex acetosella (+), Lychnis (+), Cruciferae (+), Stellaria (+), Sambucus (-), Labiatae (+)		Very small sample
F	F979	3497	-	Not scanned - too small		
F	F845.02	3431	-			Wood and charcoal only. Very small sample
F	F846.02	3468	-			Wood. Very small sample
F	F1039.01	3500	-	Stellaria (++)		Very small sample. Charred plant remains
F	F1086	3595	-			W/L wood
F	F1001	4085	-			W/L wood
F	F1125	3769	100		Beetles (+)	Small sample. Large pieces of charcoal
F	F967	3434	-	Not scanned - too small		
F	F963	3449	-	Not scanned - too small		
F	F994	1064	-	Not scanned - too small		
F	F1008	4128	-	Ranunculus (+), Urtica (-), Polygonum (-)		Very small sample
F	F1011	4122	-	Not scanned - too small		
F	F1037	3510	-	Not scanned - too small		

Sample in bold recommended for further analysis. Sample volume processed in ml., unless otherwise noted. V= volume (in ml) processed.

4.3.8: Insect remains

Insect fragments were noted where present during assessment of the waterlogged plant remains. None of the samples, however, contained a large enough sample of well-preserved insect remains to merit further analysis.

4.3.9: Charcoal identification

A quantity of charcoal has been recovered from the processing of environmental samples. Since this material derives from sealed deposits (e.g. within ditches), identification of the wood species present (by Rowena Gale) is justified. The purpose

of the study will be to identify the wood species used as kindling, evidence for woodland management and coppicing, and the range of species present in the surrounding area.

5.0: UPDATED PROJECT DESIGN

5.1: General

The river gravels along the west bank of the River Great Ouse between Buckden to the north and St. Neots to the south have been significantly affected by gravel extraction. The Little Paxton site is significant as one of the few multi-phase settlement complexes in the river valley to have been subjected to a detailed programme of archaeological investigation. An overview of the archaeological resource of the Cambridgeshire river gravels (French and Wait 1988, figs. 26-7: from the early prehistoric to the medieval periods) included a survey of the evidence from Little Paxton and the surrounding area. The report (French and Wait 1988, 78-9) identified enclosures, field systems and a temple of 3rd-4th century date both within and immediately surrounding the Phase 1-2 areas of the quarry, and highlighted their broader archaeological value.

This section of the assessment is based upon the site-specific research themes applicable to the Iron Age settlements and other sites investigated within the Phase 1-2 areas of the quarry. Key research themes are highlighted by reference to the regional research strategy (Glazebrook 1997) agenda (Brown and Glazebrook 2000), and the relevant published excavation reports and synthetic works.

This assessment is solely concerned with the Iron Age data. The final report will integrate the Iron Age evidence into a single, themed, landscape-based, multi-phase interpretation of all the prehistoric and Romano-British excavated evidence. In particular, the final report will focus on the evidence for change in settlement and economy during the Late Iron Age-early Romano-British transition.

5.2: Key research themes

A number of research themes is considered briefly below: some degree of 'overlap' is inevitable between the themes.

1) Settlement and society

- Society

Society is defined to include 'diverse interactions between and within various scales of human groupings on the basis of age, gender, rank, kinship, lineage and status...' (Gwilt and Haselgrove 1997, 1). Evidence for social organisation and its relationship to settlement form and function is highlighted as a priority in the regional research agenda and strategy (Bryant 2000, 17). Detailed analysis of the Middle-Iron Age data will contribute towards the ongoing debate concerning how far the changes recorded in the later Iron Age are the result of developments in the Middle Iron Age, or the impact of the 'Late pre-Roman Iron Age' and/or Romanisation.

Although not necessarily contemporary, the small group of Iron Age enclosures in Area B, and the larger number in Area E/F suggest the presence of different-sized family or other groups. As noted above, the layout of the Area E/F Enclosures E1-E7 suggest some form of social organisation, as may the possible evidence for specialised

activity, represented by the animal pens. Some of the enclosures within this complex could represent communal space, or a focal point for 'communal relations' as was suggested by Gwilt (1997) at Wakerley, Northamptonshire.

Herds and flocks are unlikely to have been sustained by every individual group or settlement within the Iron Age countryside. Instead, periodic gatherings could have been held for the birth of young animals, and their exchange, although this process could have fallen short of the regular, seasonal stock movements implied by transhumance (Fitzpatrick 1997, 75). The Area E/F complex of stock enclosures could possibly have been used for such seasonal gatherings.

The size of the Little Paxton Iron Age data set will enable spatial and chronological relationships to be explored between the Iron Age enclosure groups, as well as with Romano-British features, a regional research priority highlighted by Bryant (2000, 17). The identification of the extensive, and morphologically-diverse Area E/F settlement will enable evidence of settlement zoning and spatial organisation, such as that between habitation, ritual, agriculture and for stock management to be discerned, an identified regional research priority (Bryant 2000, 17).

The square barrow (Area D) perhaps serves to indicate a degree of social contact with East Yorkshire, and moreover, to hint at possible group and lineage relationships (Gwilt and Haselgrove 1997, 6).

- Chronology

Chronology is important to establish a valid chronological model which can be used to test social and economic change within their wider social and economic context, and to relate changes in settlement and economy with the development of the river valley environment. Hill (in press) noted that the terms Middle Iron Age and Late Iron Age are cultural, rather than chronological indicators; Middle Iron Age pottery in some areas remained in use until the end of the later Iron Age (Bryant 1997, 23), as at Little Paxton. Of particular importance is detailed analysis of the later Late Iron Age-early Romano-British pottery assemblage in order to distinguish the transition between Late Iron Age and early Romano-British settlement. One possibility which should be explored in the final analysis and report is that the paucity of Late Iron Age type vessels on the site is caused by an abandonment of the site around AD 20, although this cannot be proven on the present evidence. If proven, this hypothesis could have important implications for understanding of the settlement chronology.

'Exploring Our Past' (English Heritage 1991, 36) also highlights the particular importance of the study of the later Iron Age-early Romano-British transition, to understand if the changes archaeologically-evident in the early-Romano-British period were the result of 'Romanisation', or of changes in later Late Iron Age trade contacts and/or agricultural practices. The existence of detailed excavation data of the succeeding Romano-British landscape (represented by ditched enclosures and associated field systems), and the broader context provided by aerial photography within the wider Great Ouse Valley area provides the opportunity to compare the patterns of landholding during the late prehistoric and Romano-British periods (e.g. as in the Welland Valley, Simpson *et al.* 1993).

In Cambridgeshire, the dating evidence for the Iron Age is poor. The evidence from Wardy Hill, Werrington and Hinxtion suggests hand-made and wheel-thrown pottery may have been in contemporary use, which limits the value of pottery on its own as a chronological indicator. Radiocarbon dating is not useful for refining Iron Age chronology, and on the present evidence from this assessment the pottery may only be datable within ranges of 200-500 years. The regional research agenda and strategy (Bryant 2000, 14) highlights the limited numbers of stratified Iron Age pottery assemblages which have been reported-on within the county, which has restricted the understanding of Iron Age chronology. The absence of an established Iron Age chronology is a major barrier to understanding social and economic processes, and relating these to variations in vegetation and land-use.

- The two Iron Age settlements

The key aspect of the Middle-Late Iron Age settlement pattern at Little Paxton is the two spatially discrete settlements (Area B and Area E/F). While the Area B settlement focus is relatively small (limited to four Middle-Late Iron Age enclosures), the Area E/F settlement may be distinguished by a larger number of enclosures, up to 17 in number, by the deliberate clustering of enclosure-groups, and by evidence of specialisation, represented by ditched farmstead enclosures and animal pens.

The Area B and Area E/F settlements are also distinguished by the abandonment of the former during or at the end of the Late Iron Age, as at Farmoor, Oxfordshire (Lambriek and Robinson 1979), Fengate (Pryor 1984), Maxey (Pryor *et al.* 1985), and Werrington (Mackreth 1988), and the continuation of settlement at the latter into the early Roman period, as at Barton Court Farm, Oxfordshire (Miles 1986), Claydon Pike (Miles 1984) and Stanwick (Neal 1989).

- Settlement and contemporary context

Only sporadic settlement was recorded in East Anglia during the Late Bronze Age/Early Iron Age (Bryant 1997, 23), with only few sites being occupied on the lighter soils along the river valleys, and the fen edge, including Brampton on the Ouse Valley, and increased activity along the fen edge in the Early Iron Age. Structure 1, in Area B may be the earliest structure of Iron Age date at Little Paxton.

The excavated evidence from East Anglia indicates an expansion and intensification of settlement during the Middle Iron Age (Bryant 1997, 26), which also extended to include fenland sites such as Fengate, Haddenham and Wardy Hill, as well as settlements away from the river valleys, on boulder clay. The large numbers of settlements post-dating 150 BC suggests a population increase and/or a discontinuity in the settlement pattern. Increasingly, larger, nucleated settlements were established in the 4th-2nd centuries BC. A higher proportion of settlements were enclosed by ditches.

Fulford's review (1992) of Iron Age sites on the river gravels of southern England suggests that it was in the century from around 50 BC that the Roman settlement pattern was established. Sites founded earlier generally tended not to survive beyond the early Romano-British period, possibly because of the re-organisation of estates into larger units and the drift of people to nucleated settlements in the early Romano-

British period. Evidence of Late Iron Age/Romano-British settlement continuity is a feature of the region (Bryant 2000, 16).

2) Economy

The scale of the excavations at Little Paxton has also enabled the examination of the immediate surroundings of the settlement areas, including evidence for field and other boundaries. English Heritage (1991, 38), and the eastern regional research agenda and strategy (Bryant 2000, 16) have highlighted the academic importance of identifying patterns of contemporary field and estate boundaries, of which there are few published examples at present. In some areas, such field boundaries have an added importance in reflecting the preceding Late Bronze Age landscape.

Greater understanding of the agricultural economy of the region is essential to comprehend the social, economic and related cultural processes, including increased agricultural specialisation. The relevant key areas highlighted for analysis in the eastern region research and agenda include the study of large and potentially informative assemblages of animal bone and charred plant remains (Bryant 2000, 14).

- Animal husbandry

Because of the calcareous nature of the gravel subsoils, animal bone was generally well-preserved (in particular the large assemblage from Area E/F), in contrast to other animal bone assemblages from acidic gravels, where the bone is generally very poorly-preserved, or too small in quantity for meaningful statistical interpretation. The large assemblages of animal bone recovered will contribute to the understanding of the nature of animal husbandry. The dominant animals were cattle, followed by sheep/goat, with pig, horse and dog also represented. Useful comparisons can also be made between the composition of the Iron Age and Romano-British animal bone assemblages, to determine changes in husbandry practices and evidence for animal 'improvement' in the later period, and their origins. Analysis of the animal bone will include inter-comparison of the animal bone assemblages from Areas B and E/F.

The layouts of the Area E/F rectilinear enclosures and possibly of Enclosures E3-4 in Area B suggest an association with stock management. Analysis of the spatial distribution of the animal bone will provide an understanding of waste disposal practices and stock management. The evidence from the Iron Age can be usefully compared with data from the Romano-British period. The scale of the animal pens could suggest Little Paxton formed a focus for the exchange and trade of livestock, on a seasonal basis.

Another aspect of the Iron Age animal bone assemblage is the presence of wild animals and birds, including a possible eagle, red and roe deer antler, and badger. Such bone could represent special deposits.

- Trade

The pottery from the site mostly comprised jars and bowls. Typologically, these vessels were Middle Iron Age in date, suggesting that the settlements failed to participate ceramically in the Late Iron Age. Alternatively, the relative paucity of Late

Iron Age pottery could be explained by an abandonment of the site in the immediate pre-Roman period, as is suggested above. Resolution of this issue will also contribute towards an understanding of issues of status and identity for the Little Paxton settlements, as well as their chronology.

Most Iron Age pottery was produced within 10 km of the home base (Bryant 1997, 23), but in eastern England it is more difficult to source clays petrologically than for other regions, such as Wessex. It is possible that there could have been some specialisation in the pottery reaching Little Paxton, possibly including the combed storage jars, the slack-profiled Ancaster-Breedon/Scored wares and the briquetage, which also represents wider exchange networks. The region has few published assemblages of Iron Age pottery assemblages which have been subject to detailed analysis and quantification, limiting the potential for inter-site comparison (Bryant 2000, 14). One of the most important benefits of such inter-site comparison would be the opportunity to better comprehend Iron Age chronology, the importance of imports, and of wheel-thrown pottery. Analysis of the imported wares should be a particular priority to comprehend the chronology, status and trading contacts of the site. The range of Late Iron Age 'Belgic' fine wares at Little Paxton is slightly wider than at Tort Hill West (Hancocks *et al.* 1998), or Catswater (Pryor 1984) possibly due to the fact that Little Paxton lies further to the south, and thus closer to the areas where an extensive repertoire of Belgic wares has been adopted.

The potential for the Area E/F settlement to possibly represent a centre for the exchange of livestock has been noted above.

- Other farming activity

Increased agricultural production was the most important economic development of the region's Iron Age (Bryant 2000, 16). Regionally, the predominant Iron Age crops were emmer, spelt, six-row hulled barley, with lesser amounts of bread-wheat, rye, wild or cultivated oats, and peas. The charred plant remains from Iron Age deposits at Little Paxton comprise cereals and crop waste, including spelt, barley and perhaps free-threshing wheat. Their composition suggests that crop processing was undertaken at Little Paxton. The waterlogged seeds are potentially informative of the ground conditions, either wet or dry, and the presence of weeds.

3) Relationship with the natural environment

The prehistoric (and Romano-British) settlements at Little Paxton were sited to take advantage of topographically-higher locations. The key research aim for the overall Little Paxton project concerns the interaction between changes in settlement and economy from the Neolithic to the end of the Romano-British period and the development of the valley floor environment. Developing such a landscape-based approach to the study of settlements is a key regional research aim (Bryant 2000, 17).

The proximity of the Area B and Area E/F settlements to the River Great Ouse, and in particular their close proximity to palaeochannels, suggests that these settlements could have been very susceptible to, and be good indicators of, changes in water-level, notably the poly-focal Area E/F settlement. A detailed, computer-based map will be prepared, with mapping of the stream-courses and adjoining alluvial zones.

This data can be related to a wider, preliminary model of changes recorded elsewhere in other river valley environments (e.g. Robinson 1992; French *et al.* 1992). On a wider scale, the river valley environment can also be compared with evidence from the fen edge (*ibid.*).

Environmental deterioration, especially increased rainfall, may have influenced settlement form (Evans 1997, 218). During the Early/Middle Iron Age non-enclosed settlements (Area B, Area E/F) may have been replaced by ditched settlements, as a response to changing, raised water levels, and increased flooding. At Little Paxton this process may be represented by the cluster of Phase 2 ditched enclosures (Enclosures E1-E7, Area E/F, Fig. 6). This cluster may have provided an integrated system of 'soakaways' requiring the influence of a hierarchical authority, since the efforts of individual household groups may have been too small-scale to have any effect. Other, possible responses to localised flooding may be seen in the shifting nature of Iron Age settlement focus, particularly within the poly-focal Area E/F.

Changes in water-level, in particular a rise in water level, may not always have had a detrimental effect. In addition to drainage, the enclosure ditches may have performed a secondary function to provide drinking water for animals.

Robinson (1992, 205) has suggested that flooding was recorded in the early Roman period in the Ouse valley, although noting that comparatively few studies have been undertaken along the valley. In contrast, in the Upper Thames valley, increased flooding was recorded from the Late Bronze Age to Middle Iron Age. The 'choice' of enclosed settlement forms, and their morphology may suggest localised flooding in the Little Paxton area during the Middle-Late Iron Age.

Pottery will provide the principal dating evidence for the deposition of water-lain sediments in the ditch fills at Little Paxton. Analysis of the charred and waterlogged seed remains and pollen present, including weeds, will contribute towards an understanding of the soil conditions. In particular, the waterlogged plant remains include plants typical of disturbed ground such as nettles, and plants usually found in wet environments, such as knotweeds and gypsywort. Detailed analysis of the waterlogged and charred plant remains could contribute towards an understanding of the environmental changes associated with different phases of site occupation, and possibly also the zoning of different areas within the largest, Area E/F settlement.

Regionally, Murphy (1997, 30) notes sustained evidence of woodland clearance from the Bronze Age, continuing into the Iron Age. Analysis of the charcoal species present will also contribute to an understanding of the nature of the surrounding environment, together with possible evidence for woodland management, such as coppicing.

4) Ritual and religion

The square barrow (Area D), constructed following the Arras tradition (Stead 1991) represents the most obvious element of Iron Age ritual activity. A major focus of Iron Age burial and ritual at Hinxton, Cambridgeshire, including a number of square barrows has recently been published (Hill, Evans and Alexander 1999). Other, more

subtle, but more extensive evidence of everyday ritual at Little Paxton may be elucidated through the detailed study of the spatial patterning of pottery and animal bone. Such evidence may be readily identifiable at full post-excavation, given the comparatively large size of the Little Paxton data-set. Analysis of the artifact-rich deposits would provide a chronology, and details of ritually-structured deposition, noted as being a priority in the regional research agenda and strategy (Bryant 2000, 17).

Elements of an earlier, Neolithic-Bronze Age ritual landscape may have become fixed conceptually and physically, and have continued to be respected into the Iron Age. One of the main Iron Age boundaries (F1250/F1255) in Area E-F appeared to deviate around the possible location of a cropmarked ring-ditch, which may have survived as an earthwork feature at the time. Similarly, the entrance to Middle Iron Age enclosure E6 may have respected the location of Neolithic-Bronze Age pits F958 and F991. Other examples of such respect for earlier 'sacred' locations may be found through detailed analysis of both the Neolithic-Bronze Age data, and the Iron Age settlements, which could assist in comprehending some of the driving forces behind landscape continuity, or its antithesis. Identifying such elements of landscape continuity is a regional research priority (Bryant 2000, 17). Some ceremonial places of earlier prehistory such as barrows were still considered significant focal places in the Iron Age (e.g. Maxey, Pryor *et al.* 1985; Simpson *et al.* 1993; Taylor 1997, 202). Substantial time and effort would have been expended in maintaining boundaries within such cultural landscapes. Important ditch junctions, such as that between ditches F1250/F1253 (Fig. 7) could have been key places within the landscape, meeting points, markets, or defining the boundaries of different estates.

The importance of 'place' may in part explain the care and effort taken to create flood defences (Evans 1997, 219), for example, Area E/F enclosures E1-E8 (Fig. 6).

With the exception of the square barrow, there is little evidence for a recognisable burial rite at Little Paxton, as in other contemporary sites. The predominant burial rite could have been excarnation by exposure, with partial burial when the corpse was limited to dry bones (Carr and Knusel 1997), at which time the individual could have passed to the 'otherworld'. Such partial deposition in pits and enclosure ditches (Fitzpatrick 1997, 79) could relate to secondary ancestor rites, emphasising the cohesion of family groups. At Little Paxton excarnation is represented by small, but culturally significant deposits, including ditch fills from the Area E/F settlement which mixed human skull fragments with partial dog skeletons, echoing an association between human and dog skeletal remains in a Roman context at Cambridge (Alexander and Pullinger 2000, 46-7).

Rituals may have taken place at certain times in the agricultural cycle, to give meaning to it. The agricultural cycle had a profound impact upon symbolic and ideological concerns, it was drawn upon a metaphor for the structuring of peoples lives' (Gwilt and Haselgrove 1997, 3). The changing seasons and the agricultural cycle will have profoundly affected everyday life in the Iron Age, although the present day practical/domestic activity versus ritual dichotomy may have been inappropriate in an Iron Age context (*ibid.* 2).

Furthermore, the individual settlements, enclosures and pits had their own individual life-cycles. Strategically-deposited artifacts may have performed a regenerative function (Fitzpatrick 1997). The significance of 'placed deposits' has been explored by Hill (1995) for Iron Age Wessex, and the importance of their study is emphasised in the eastern regional research agenda and strategy (Bryant 2000, 17). Hill (1995) in particular has studied the deposition of cultural material, structured according to particular historically and culturally-specific intentions. Wait (1995) has noted that special animal deposits (for example the mixed deposits of dog and human skeletal fragments in Area E/F at Little Paxton) occur within settlement interiors, while the remains of feasts were placed within boundary ditches. Another example of such patterning is the location of deposits including the bones of wild animals (as at Wakerley, Northamptonshire, Gwilt 1997), which may be treated as 'special deposits', although wild species occur in Iron Age contexts at Haddenham Delphs (Evans 1997). The evidence for structured deposition will be explored through computer-based mapping of the finds distributions. These will be undertaken for Area E/F (pottery and animal bone) and Area B (pottery only). In other cases there is too little material for valid statistical comparison.

The layout of the circular buildings at Little Paxton may also reflect seasonal influences. The entrances lay either to the east or west, the position of sunrise at the equinoxes, or at points between them (Fitzpatrick 1997, 77).

The association of the Romano-British shrine (Jones forthcoming) to the east of Area E/F with a sacred tree, and the proximity of the shrine to the river Great Ouse suggests it may have perpetuated an Iron Age predecessor in the form of a natural shrine. Celtic religions worshipped the invisible forces of nature in the open air, venerating sites such as trees, forests, and secret, watery places (Lewis 1966, 4). It is also possible that elements of the Area E/F settlement could have been associated with a contemporary shrine, although this nexus cannot presently be proven.

5) Comparison with evidence from the elsewhere in the River Great Ouse Valley, and in other river valley environments

Gwilt and Haselgrove (1997, 1) have noted the 'current imbalance in British Iron Age studies, whereby research on Wessex and the Upper Thames valley, or on the Late Iron Age of southeast England is over-represented in relation to the rest of Britain'. The comparatively modest level of study of the Iron Age of eastern England is also noted in the research agenda for Eastern England (Bryant 2000, 14). The proposed programme of work at Little Paxton quarry would on a national scale help address this imbalance in research, as well as contributing towards a developing understanding of the Iron Age of Eastern England.

On a national basis the Little Paxton settlements can be compared with published sites such as Dragonby, Lincolnshire (May 1996), Barton Court Farm, Oxfordshire (Miles etc. 1984), Mingies Ditch, Oxfordshire (Robinson 1993), Farmoor, Oxfordshire (Robinson and Lambrick 1979), and sites in the progress of being reported-on (e.g. Crick, Northamptonshire (Hughes and Woodward in preparation); and at Courteenhall, Northamptonshire. On a more local scale, the results of work at Little Paxton should be compared with other large-scale excavations, for example Cat's Water, Fengate (Pryor 1984), Werrington (Mackreth 1988), Barrington (Malim 1998),

West Stow (West 1989), Eiton, Cambridgeshire (French 1994), and Maxey (Simpson 1985). Comparison should also be made between the Little Paxton data and the results of excavation and survey in Fenland areas (Hall 1987 and 1992) and the recent survey of the Iron Age in northern East Anglia (Davies and Williamson 1999).

6) Critical appraisal of project methodology

The relative efficacy of the fieldwork methodology will be assessed (in relation to all the prehistoric and Romano-British evidence), and its strengths and weaknesses will be dissected. The potential of alternative strategies will be briefly explored, and recommendations made to improve data recovery.

5.2: Aims

In the final report all aspects of the Iron Age economy and the settlement evidence will be considered in relation to the comparative evidence provided by the prehistoric settlements, as appropriate in order to highlight these changes from the Neolithic to the late-Roman period, and to suggest a relationship with the development of the river valley environment.

In addition, since the field programme is currently on-going, and is not due to be completed until 2001/2, a further opportunity exists at the culmination of the Phase 3 Little Paxton fieldwork programme to test the models of settlement and economy presented in the fieldwork Phase 1-2 final report.

The overall research aims for the Iron Age (and earlier prehistoric periods and Romano-British) periods can be re-focused, as follows:

1.0: Settlement and society

- 1.1: Chronology, evidence for establishment and abandonment.
- 1.2: Settlement in its contemporary context.
- 1.3: Layout of 'domestic' settlements/ the functional use of space/ finds distributions.
- 1.4: Relationship of settlements with stock management/ arable farming.

2.0: Economy

- 2.1: Trading contacts.
- 2.2: Animal husbandry.
- 2.3: Arable farming.

3.0: Relationship with natural environment

- 3.1: The natural environment - micro-geography of area/ alluviation/ water level/ soil fertility.
- 3.2: Water management, ditches and irrigation.
- 3.3: Surrounding flora and fauna.
- 3.4: Relationship between the development of the river valley environment and changes in the settlement pattern and economy.

4.0: Ritual and religion

- 4.1: Possible functional and chronological relationship between settlements,

square barrow and burial

4.2: Evidence for spatial patterning in finds distribution; 'closing deposits'

5.0: Comparison with evidence from other river valley environments.

6.0: Critical appraisal of project methodology

The Phase 1-2 investigations at Little Paxton comprise a sufficiently large and varied archaeological dataset to permit a critical appraisal of project methodology to be proposed, based on analysis of data from the prehistoric and Romano-British settlement complexes.

6.0: PUBLICATION SYNOPSIS

It is proposed to publish the report describing the Iron Age settlement and activity at Little Paxton as part of a volume also including description and interpretation of earlier prehistoric activity, and Romano-British settlement evidence, followed by an overall synthesis of all the evidence. The report will be published in the British Archaeological Reports Series, British Series. British Archaeological Reports have agreed to publish the report in principle.

PREHISTORIC AND ROMANO-BRITISH SETTLEMENTS IN THE RIVER GREAT OUSE VALLEY: ARCHAEOLOGICAL EXCAVATIONS 1992-1998 AT LITTLE PAXTON QUARRY, DIDDINGTON, CAMBRIDGESHIRE.

The suggested layout of the volume (including other contributions concerning the earlier prehistoric period and the Romano-British period) is given below:

Part 1: Introduction to the excavations

Part 2: Early prehistoric period (Neolithic-Bronze Age)

Part 3: Later prehistoric settlement (Iron Age)

Part 4: Romano-British settlements

Part 5: Landscape overview: general discussion and conclusion

The provisional layout of **Part 3** (only) is listed below:

Text

Summary of the stratigraphic and finds evidence (1000 words#)

Introduction (5000 words#)

Results and interpretation (25000 words, 5 tables)

Finds

Small finds/stone objects (1000 words, 1 table)

Iron Age pottery (10000 words, 6 tables)

(including transitional wares)

Zoological and botanical evidence

Animal bone (5000 words, 5 tables)

Charred plant remains (4000 words, 2 tables)

Waterlogged seeds (4000 words, 3 tables)

Charcoal identification (2000 words, 2 tables)
Discussion and conclusion (12000#)
Critical review of project methodology (2000#)

TOTAL 51,000 words, excluding elements marked #
26 Tables.

In addition, there will be a review of the Iron Age settlement evidence in the overall landscape overview (Part 5).

KEY: # = also includes Neolithic-Bronze Age and Romano-British settlement data

Figures

- 1 Site location
- 2 Drift and solid geology
- 3 Areas investigated
- 4 Areas investigated: the archaeological strategy
(Figures 1-4 will be in Part 1)

- 5 Phase 2, Areas B, C/D, E/F, simplified plan
- 6 Phase 2-3, Area B simplified plan of all features
- 7 Phase 2, Area B, detailed plan
- 8 Phase 2, Area C/D, simplified plan of all features
- 9 Phase 2, Area C/D, sections
- 10 Phase 2-3, Area E/F, simplified plan, north
- 11 Phase 2-3, Area E/F, detailed plan, south
- 12 Phase 2-3, Area E/F, detailed plan, west
- 13 Phase 2, Area E/F, sections
- 14 Phase 2, Area E/F, sections
- 15 Phase 3, Areas B, C/D, E/F, simplified plan
- 16 Phase 3, Area B, detailed plan
- 17 Phase 3, Area B, sections
- 18 Phase 3, Area E/F, detailed plan
- 19 Phase 3, Area E/F, detailed plan
- 20 Phase 3, Area E/F, detailed plan
- 21 Phase 3, Area E/F, sections
- 22 Phase 3, Area E/F, sections

- 23 Phase 2, finds distributions, Area B
- 24 Phase 2, finds distributions, Area E/F
- 25 Phase 3, finds distributions, Area B
- 26 Phase 3, finds distributions, Area E/F, structural features
- 27 Phase 3, finds distributions, Area E/F, other features
- 28 Small finds
- 29 Wooden object
- 30 Pottery
- 31 Pottery
- 32 Pottery
- 33 Pottery

- 34 Pottery
- 35 Other ceramic objects

- 36 Iron Age settlement patterns (*in Part 5*)

7.0: TASK LIST AND PROGRAMME

A summary of the proposed programme is provided by Table 14.

TABLE 14: TASK LIST AND PROGRAMME

Because the overall aim of the project is to create an integrated, landscape-based model of settlement and economy in relationship to changes in the natural environment, from the early prehistoric-late Romano-British period, it is critical that all specialists maintain close communication at all stages of the project. All nominated specialists (with the sole exception of Rowena Gale), are staff of the University of Birmingham, which will facilitate close communication during post-excavation.

Rigorous project management will be required to ensure that all associated tasks are undertaken concurrently, and with the necessary degree of close liaison between relevant specialists (especially between Iron Age and Romano-British pottery specialists). It is also essential that the same specialists undertake related analysis/reporting of material from prehistoric and Romano-British deposits, for example animal bone [E.Murray], and charred/waterlogged plant remains [M.Ciaraldi]. Within these related specialist reports, the key tasks must be undertaken concurrently (e.g. the recording of Iron Age and Romano-British pottery). Such Iron Age post-excavation tasks which are related to the Romano-British post-excavation programme are marked # in Table 14. NOTE: They are not marked as related to the Iron Age post-excavation programme in the Romano-British assessment (Jones 1999), which was prepared first).

<i>Task</i>	<i>Description</i>	<i>Initials</i>	<i>No. of days</i>
STAGE A, PRELIMINARY ANALYSIS. Performance indicator, completion April 2001			
1	Project management, Stage A	AEJ	2
2	Review of pottery dating, re-define pottery phasing and identify residuality	All	6#
3	Pottery advice/liaison	AW	1
4	Update phasing (Area B and C-D; 1 day each; Area E/F, 6 days total)	AEJ	8#
5	Data entry: database	EMa	2#
6	Site archive: update Harris matrix	AEJ	1
7	Penmap data input/manipulations/database supervision	LD	3#
8	Preparation of location plans: drafts	AEJ	1
9	Prepare information pack for specialists	LB	1

10	Pottery, preparation of fabric & form series	AH	6#
11	Small finds, analysis and reporting	LB	3
12	Stone objects, petrology	RI	1
13	Wooden trough, analysis and reporting	EMa	1
14	Pottery, recording	AH	18#
15	Pottery, summations, manipulations	AH	5
16	Animal bone, analysis	EMu	20#
17	Charred plant remains, analysis	MC	10#
18	Waterlogged plant remains, analysis	MC	6#
19	Charcoal, analysis	RG	-
20	Revision of phasing/update Penmap plans	AEJ	2#
21	Database revision of phasing/pottery	EMa	3
22	Preparation of location plans	ND	5
23	Review phasing/draft report synopsis	AEJ/AH1/1	

STAGE B: REPORTING AND ILLUSTRATION. Performance indicator, completion August 2001

24	Project management, Stage B	AEJ	3.5
25	Library research	AEJ	5
26	Pottery, library research	AH	5
27	Pottery, advice and liaison	AW	1
28	Coarse pottery, reporting	AH	19#
29	Briquetage, analysis/report	AH	2
30	Animal bone, reporting	EMu	26#
31	Charred plant remains, reporting	MC	7#
32	Waterlogged plant remains, reporting	MC	4#
33	Charcoal, reporting	RG	-#
34	Update database	EMa	1
35	Finds Officer, Stage B liaison with specialists	LB	2
36	Preparation of small finds illustrations	ND	6
37	Preparation of pottery illustrations/inking	ND	23
38	Checking small finds illustrations	LB	0.5
39	Checking of pottery illustrations	AH	1
40	Preparation of computer finds plots distributions	LD	4#
41	Pottery discussion/ distributional analysis	AH	10#
42	Preparation of draft site phase plans and sections	AEJ	8#
43	Preparation of site phase plans and sections	ND	12#
44	Preparation of site description and interpretation	AEJ	10#
45	Other site plans/spatial distribution data	LD	1#
46	Check site plans and sections	AEJ	1
47	Correct site illustrations	ND	1
48	Preparation and integration of finds spatial analysis	LD	2
49	Preparation of discussion	AEJ	6#
50	Correct finds illustrations/mounting	ND	2#
51	Final updates to pottery database etc.	EMa	1
52	Completion/correction to computer site drawings	LD	1#

STAGE C, COMPLETION OF FIRST DRAFT/DEPOSITION OF ARCHIVE. Performance indicator January 2002

53	Project management, Stage C	AEJ	3
54	Finds Officer, Stage C, liaison with specialists etc.	LB	2
55	General edit	AEJ	5
56	Edit pottery report	AW	2
57	Correct draft pottery report	AH	1
58	Correct animal bone report	EMu	1
59	Internal edit of first draft	IF	3
60	Final corrections to text	AEJ	1
61	Corrections to computer site drawings	LD	0.5
62	Corrections to illustrations	ND	1
63	Corrections to computer data	LD	0.5
64	Submission for external refereeing	AEJ	0.5
65	Final revisions to text	IF	1
		AEJ	1
		LB	0.5
66	Preparation of camera ready copy	PP	8
67	Proof checking etc.	AEJ	2
68	Preparation and dispatch of archive	KM	3

KEY: (contributors, in alphabetical order)

AEJ = A. Jones, Project Manager/Author/Editor

LB = L. Bevan, Finds Manager/stone objects

MC = Marina Ciaraldi (waterlogged/charred plant remains)

LD = L. Dingwall, computing

ND = N. Dodds, illustrator

RG = Rowena Gale, charcoal identification

IF = I. Ferris, Editor

RI = R. Ixer, petrology

EMa = E. Macey, finds database

KM = K. Muldoon, Archive/Records Supervisor.

EMu = Emily Murray, animal bone

PP = Page-proof preparation

AW = Ann Woodward, pottery specialist advice/editing

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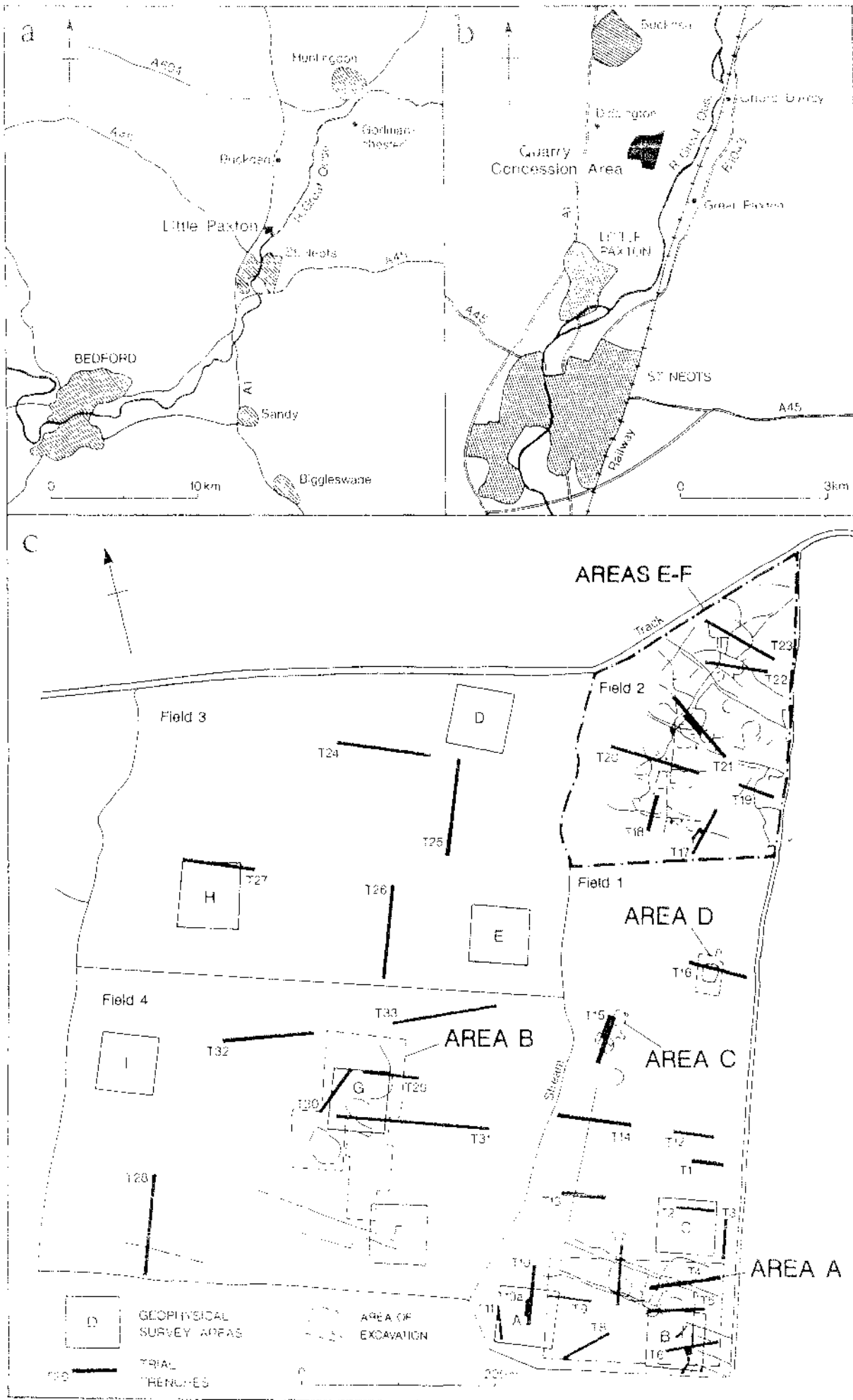


Figure 1

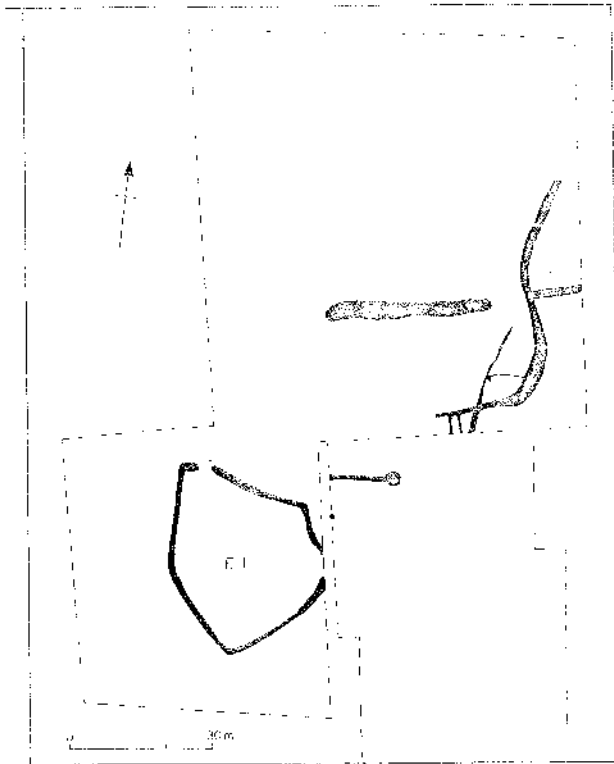


Figure 3

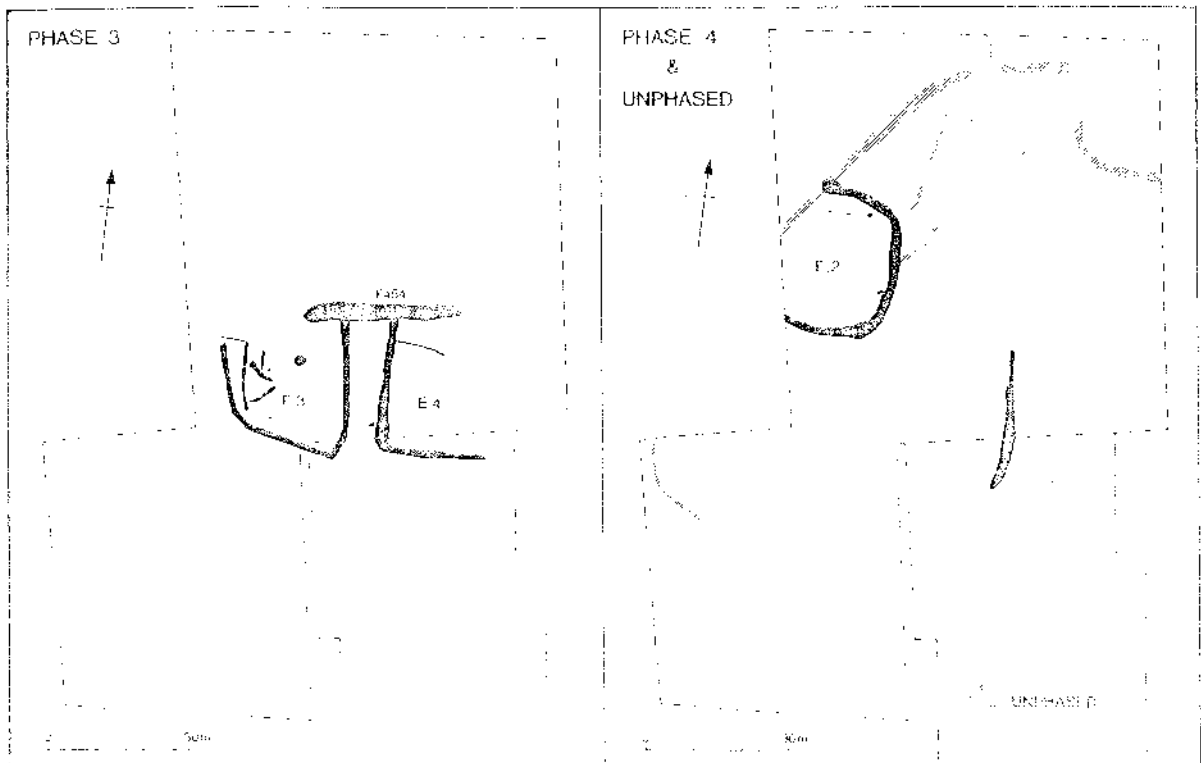


Figure 4

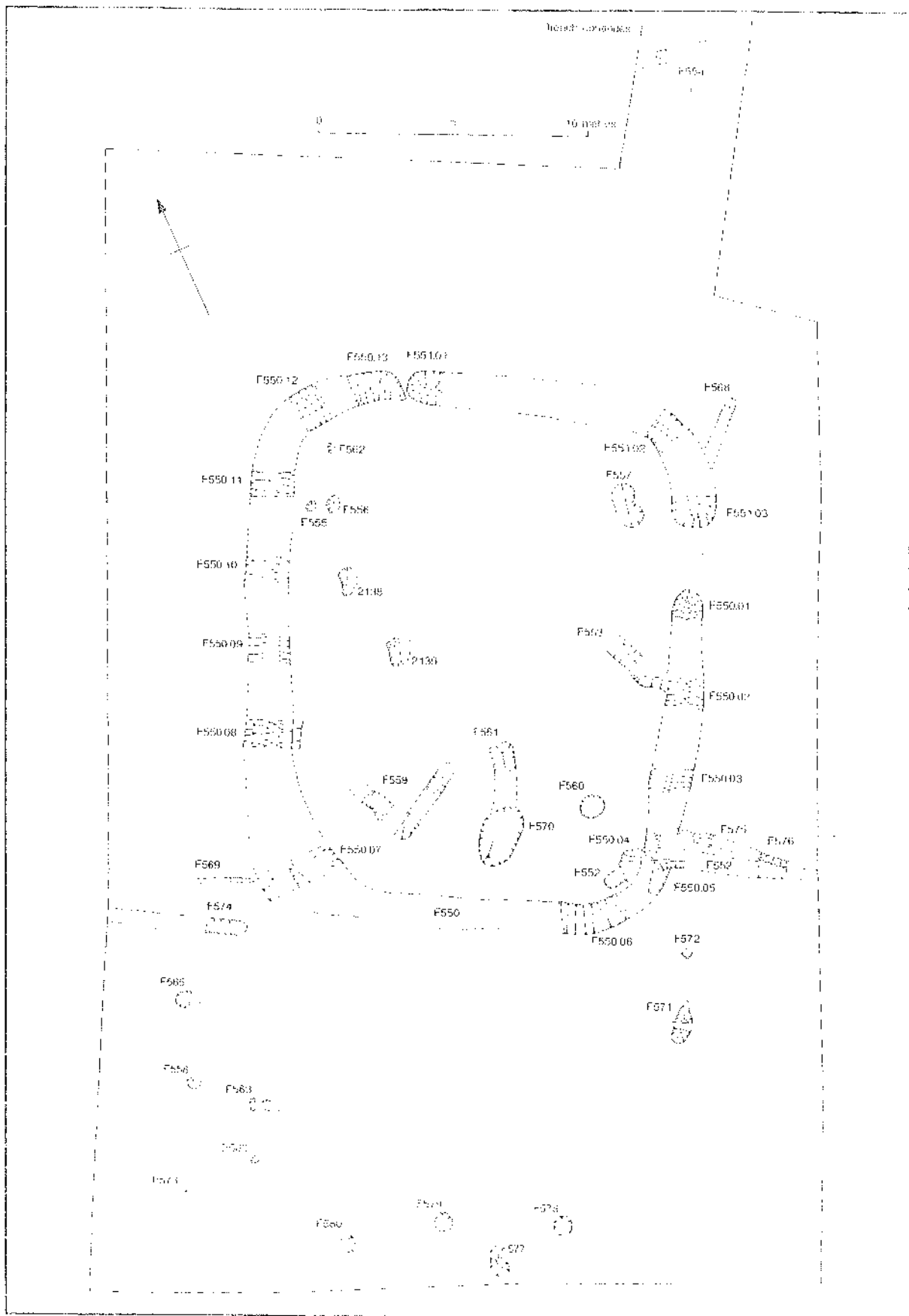


Figure 5

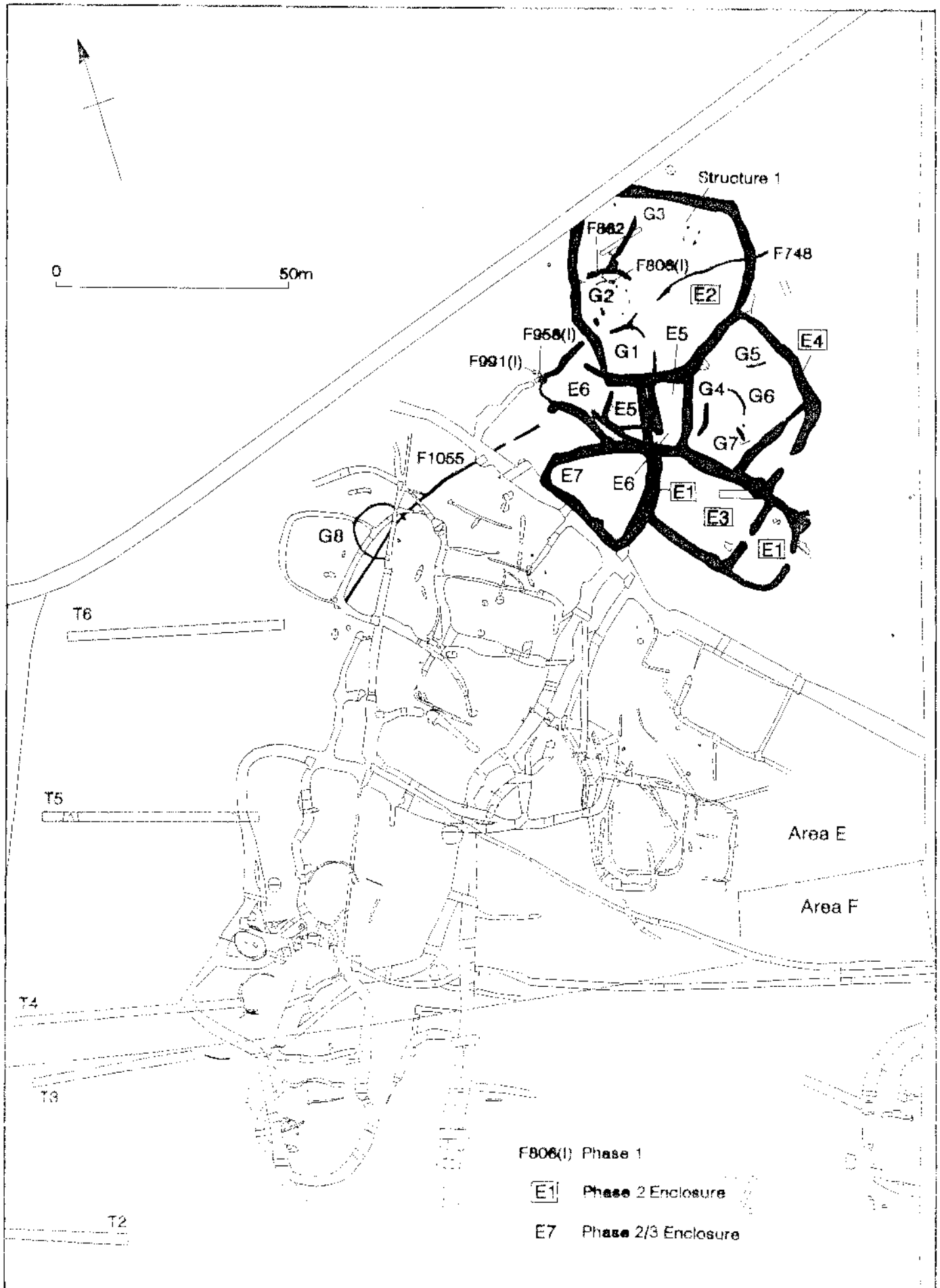


Figure 6

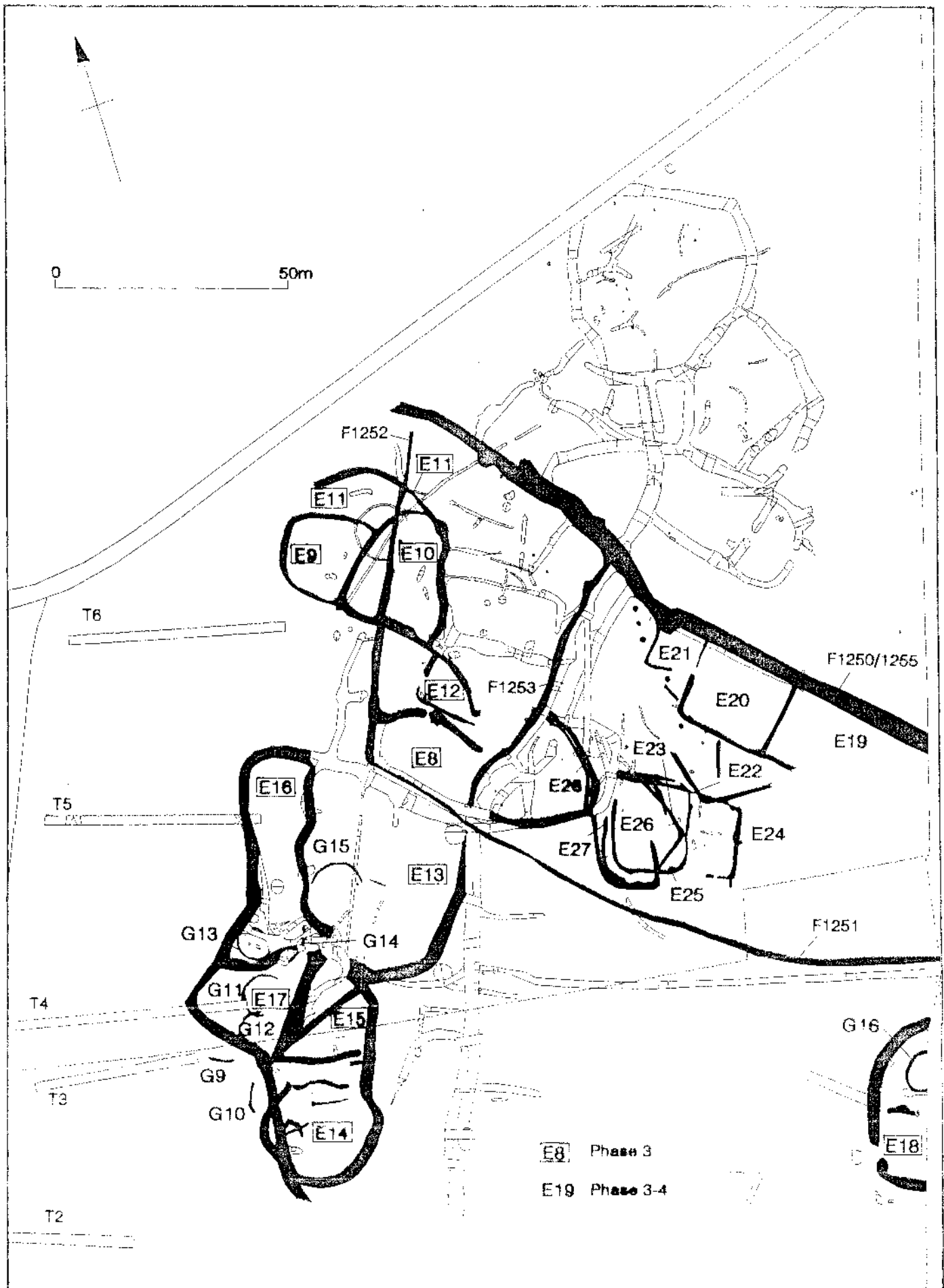


Figure 7

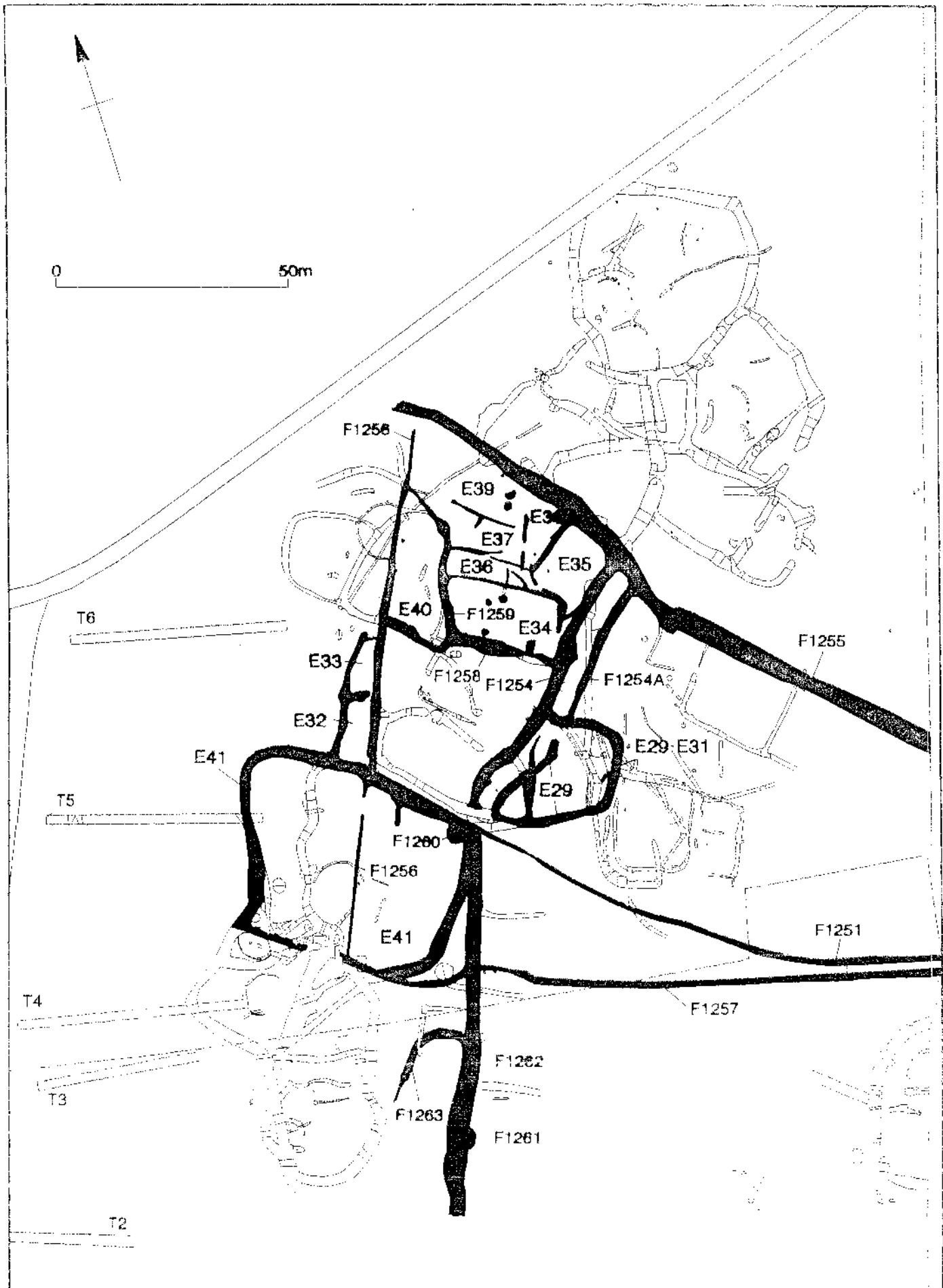


Figure 8