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BEDFORD SOUTHERN BYPASS
POST EXCAVATION ASSESSMENT REPORT
VOLUME 2: The Evidence

Report No. 95/14
DRAFT
September 1995

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For the Highways Agency
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Volume II of five.

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Bedfordshire County Archaeology Service
Contracts and Consultancy

Volume 2: The Evidence

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1. INTRODUCTION

1.1 Organisation of the report

This document forms the second volume of five within the Bedford Southern Bypass Assessment Report. It presents the data upon which the statements of potential within Volume 1 and 3 have been based. The data is presented site by site and within that in sections detailing the main data classes, structural, non ceramics (with separate sections for flint where this is a notable part of the assemblage), ceramics, animal bone etc. Within each section a basic structure is followed, the data first being quantified, usually a simple expression of the number of records, objects or samples, followed by a breakdown of its provenance, essentially an expression of its spatial or chronological distribution across the site. Finally a detailed description is given; for the structural in the form of a site narrative; for the majority of other classes of data in a mixed narrative and tabulated form.

In general the above structure has been followed for all datasets although where small amounts of material are involved, e.g. human remains and macroscopic plant and animal remains, a more flexible approach has been taken.

1.2. Data collection and method statement

Reflecting the integrity and coherence of the project, a consistent methodology was used across all sites. This will facilitate inter-site comparisons and the investigation of landscape developments. Where necessary, however, sampling strategies were matched to individual archaeological requirements to enhance data recovery and cost effectiveness.

For each main data set the principal strategies and methodologies used have been briefly described, with particular reference to data collection strategies, i.e. sampling. Where particular strategies have been applied to a single project, e.g. dry-sieving at Village Farm, this has been explained in more detail within the site section.

1.2.1 Fieldwork

Structural

All sites had been evaluated prior to full excavation employing appropriate techniques. Excavation and recording proceeded in accordance with guidelines laid out in the *BCAS Procedures Manual*. All sites were stripped of topsoil using earthmoving machinery, wherever possible as part of a single stage process. Where ground conditions interrupted soil removalremoval, as at Peartree Farm, or where restricted space led to stacking problems, as at Eastcotts, the process was carried out over two or more stages. Topsoil was generally removed directly down to a level at which undisturbed natural or archaeological deposits could be recognised. Where recent alluvial or colluvial deposits were evident, as at Harrowden, Eastcotts and Octagon Farm, these were investigated for surface signs of human activity before being removed from underlying archaeological deposits.

Site specific planning grids were laid out across all sites, these subsequently being tied into the National Grid to provide overall location. Individual feature and area plans are currently undergoing digitisation to assemble an AUTOCAD database.

Sampling strategies outlined within the original Project Designs were followed during excavation, providing a minimal sample to ascertain: (a) the structural sequence; (b) information on the form,

structure and internal sequence of features; (c) dating evidence; and (d) environmental data. If form, dating and environmental data could not be obtained from section excavation investigating the structural sequence then further sections were dug to obtain a viable sample. As excavation proceeded it was occasionally necessary to vary this overall strategy. Certain features or groups of features demanded more extensive investigation (e.g. the kiln at Eastcotts) while others, such as isolated post-holes at Village Farm, were often only planned with a sample of the total number excavated.

Excavated contexts were recorded on pro-formae recording sheets, by plan and section drawing and by photograph. The basic data has been entered onto a computerised database (Microsoft ACCESS©).

Non ceramic artefacts

Non ceramic artefacts were collected on site in accordance with the sampling policies detailed in the original Project Designs and outlined above. Recorded finds were numbered individually, located by context and two dimensional co-ordinate.

Metal detectors were used during topsoil stripping on all sites and subsequently as excavation proceeded. The majority of metal finds were located *in-situ* by this method, although no record was kept as to method of retrieval, detected or otherwise, and so this cannot be quantified. Registered finds and non ceramic bulk finds in general were retrieved during hand excavation on the majority of sites or during dry-sieving where this was employed (e.g. Village Farm). All excavated material was collected and retained for assessment and later analysis.

Ceramic artefacts

Ceramic artefacts were collected on site in accordance with the sampling policies detailed in the original Project Designs and outlined above. Pottery and ceramic building material were treated as a bulk finds and located by context number. No accurate record of volume of deposits sampled during excavation was kept although crude assessments of original total population can be assembled from an analysis of plan information. All excavated material was collected and retained for assessment and analysis.

Human bone

Nearly all the human bone was retrieved from funerary contexts (a single long bone at Eastcotts may have been in a secondary or disturbed context). Invariably this involved 100% excavation in accordance with the *BCAS Procedures Manual*. All material has been retained for assessment and analysis.

Where soil samples were taken within grave fills special care was taken during flotation to retrieve bone fragments and these have been bagged separately with the hand excavated material.

Animal bone

This was treated as a bulk find (see above) and located by context. Dry sieving was used at Village Farm, and all soil samples were wet sieved onto a 0.5mm mesh and examined for small mammal, bird, fish and amphibian bones.

Macro/microscopic plant remains and invertebrate remains

During the series of excavations, extensive sampling was undertaken on all eight sites for charred plant remains. A total of 384 samples, each of about 10 litres of sediment, was taken. Hand-picked samples, in total 36, were taken of charcoal. These samples were floated onto a 0.5mm mesh and dried. Waterlogged deposits were only encountered at Eastcotts. A total of 18 samples each of about 10 litres were taken from potentially waterlogged deposits. No samples were taken specifically for molluscan analysis.

A proportion of the dry flots was sorted at x 10 magnification at St Mary's Archaeology Centre, Bedford. Charred seeds, charred chaff, charcoal and mollusc shells were picked out. Where samples contained very high concentrations of seeds or chaff, charcoal, mollusc shells and extraneous debris were instead picked out from the flot. Sub-samples of about 2 litres from the potentially waterlogged samples were subjected to paraffin flotation onto a 0.3mm mesh at St Mary's Archaeology Centre. The flots were sorted in water at x 10 magnification. Waterlogged macroscopic plant remains were picked out from those samples with low concentrations of remains and stored in ethanol.

1.2.2 Assessment

Structural

The primary objective has been to produce a provisional phasing for each site in order to provide an outline chronological and spatial framework within which assessment of the main data sets can take place. The main thrust of the process has been towards assigning contexts to a hierarchy of groups, determined as far as possible by stratigraphic relationships and integrating pottery spot dates where necessary. The most explicit expression of this process is in the **phased database** where all contexts are contained first within an associational group, then a landscape group, then a phase (this third stage was only necessary at Pcartree Farm and Eastcotts) and finally a period. A definition of these groupings and notes on their formation can be found in Volume 5, *The Updated Project Design*, Volume 5. Within Volume 2, (*The Evidence*) the sections detailing the archaeological sequence of each site have been organised in a traditional format; chronologically by period, and within that by phase, each major landscape group being discussed in turn. In general Landscape groups are referred to as numbers prefixed by L e.g. (L5), associational groups as numbers prefixed by A e.g. (A23) and contexts as simple unprefixed numbers, sometimes identified as a fill or cut, e.g. (fill 235) or (234).

Each site has been integrated into an overall bypass phasing scheme. Briefly this has involved identifying all the periods of activity represented as follows;

- Period 1 Natural glacial and alluvial deposits
- Period 2 Early prehistoric
- Period 3 Neolithic
- Period 4 Late Neolithic/early Bronze Age
- Period 5 Bronze Age
- Period 6 Late Bronze Age/early Iron Age
- Period 7 Iron Age
- Period 8 Late Iron Age/early Romano-British *circa 1st century BC/AD*
- Period 9 Romano-British *circa late 1st to 4th century*
- Period 10 Late Romano-British/early Saxon *circa 5th century*
- Period 11 Saxon *circa 5th to 10th century*
- Period 12 Saxo-Norman *circa 10th to 11th century*
- Period 13 Medieval *circa 12th to 15th century*
- Period 14 Post Medieval to Modern *circa 16th century to present*

No single site had evidence for activity throughout all the above periods, although most sites were occupied or in use episodically through a number of periods.

Several contexts remain unphased due to a lack of stratigraphic or spatial relationships and an absence of datable material. These have been placed in Period 15 to allow a quantification of any artefacts or ecofacts that may allow future integration into the phasing scheme outlined above.

Non ceramic artefacts

All the non ceramic finds have been quantified and provisionally identified.

Each registered find has a record card which lists simple name, context number, material, condition, dimensions and/or weight and, if known, date. Following preliminary identification using the Bedfordshire Artefact Typology (BAT), each artefact was assigned to a functional category. This information has been entered on a registered finds database (using dBASE IV but now transferred to Microsoft ACCESS), along with X-ray plate numbers and UCL (University College London) laboratory numbers. Additionally, all have a scale drawing on the record card. Where necessary artefacts were retained by the conservator for investigative conservation.

The bulk artefacts were identified by material and type and listed by context and quantified (weight or numbers as appropriate). Slag type, for example fuel ash, cinder, ferrous smithing, was identified by eye and weighed. This information was entered on to a computerised non-ceramic bulk artefacts database.

The artefact databases have been linked to the structural database enabling analysis of artefacts by period, context/feature, associational and landscape groups and object type.

A number of external specialists contributed to the assessment;

Area of Expertise	Specialist
Conservation	Adrian Tribe
Petrology	David Williams
Coin identification	Peter Guest
Timber ID	Rowena Gale
Vessel Glass	Hilary Cool
Leatherwork	Quita Mould

Their findings have been integrated into this document and their reports form part of the site archive held at St Mary's Archaeology Centre.

Flint

The assessment of the flint assemblage is based upon a database comprising quantification by context, provisional identification and spot dates determined from distinctive manufacturing characteristics (including soft versus hard hammer, flakes versus blades, thickness of butt) and an assessment of flint quality. Identification was monitored by Robin Holgate of Luton Museum. Registered flint artefacts have been catalogued on a record card, with details recorded of location, context, condition, dimensions and parallels/date, if known. This information has been entered onto a computer database.

Ceramics

The pottery was recorded by fabric type, as defined in the Bedfordshire Ceramic Type Series, and form. With the exception of a single new Iron Age fabric type and one Roman type, all other fabric types are known from previous work in the county. Quantification was by sherd count. This data was entered onto a computer database to facilitate data manipulation. The pottery will be further quantified by rim percentage and weight at the analysis stage, in accordance with the recommendations of

English Heritage in *The current State of Romano-British Pottery Studies* (Fulford and Huddlestone 1991, 52).

The building material was recorded by fabric and form. Quantification was by sherd count and weight. Any abrasion present was noted; in addition tile form (*tegula, imbrex* etc.) and type of roof fastening (flange, peg hole etc.) were recorded for the tile; thickness was recorded for the brick, and the presence of surfaces and impressions were recorded for the daub/fired clay.

Human bone

The human bone was assessed by Terry Jackman. Assessment was based on an examination of the paper record, drawings, photographs, and a scan and weigh of the bone. Observations were made on condition and the potential for measurement and the results integrated with the provisional phasing data.

Animal bone

The animal bone was assessed by Tony Roberts. Both bulk and sieved samples were scanned for species, indications of age, butchery, pathology and potential for measurement. For each site a database recording these observations was compiled and integrated with the provisional phasing data.

Macro/microscopic plant remains and invertebrate remains

The macroscopic plant and invertebrate remains were assessed by Dr. Mark Robinson at the University Museum, Oxford. The sorted charred seeds and chaff along with the partly sorted richer dry flots were scanned at up to x 50 magnification under a binocular microscope. The charred seeds and chaff observed were identified and an estimate made of their abundance. The scanning of the partly sorted flots inevitably results in an under-estimate of the abundance, or even presence, of smaller seeds and chaff items. It does, however, serve to characterise the assemblages. Potentially identifiable remains were assessed for 53 samples. Summary results are tabulated by site, each table gives a breakdown into numerical groups of the abundance of remains in each sample by period. The tables also show the abundance of selected plant remains for each period both in total and for the sample in which they were most abundant.

Charcoal from the flots and hand-picked samples was broken transversely and examined at up to x 50 magnification. While this is an appropriate means for the identification of the ring-porous taxa (*Fraxinus, Quercus* and *Ulmus*) and the record of *Rhamnus catharticus* ought to be reliable, the other identifications, which are of diffuse porous species, must be regarded as tentative. Charcoal was assessed from 76 flots and the 36 hand-picked samples. Summary results are tabulated by site, each table gives the number of samples in which the taxon is present by period.

Bulk flotation is not a reliable means for the extraction of mollusc shells but the shells from the flots can still give some useful information. The presence of shells was noted for 22 of the flots assessed and they are discussed as appropriate under the various sites.

Four of the samples from Eastcotts, taken for waterlogged macroscopic remains, were found to contain useful material (Samples 44, 45, 46 and 191). Additionally, one of the flots from a sample taken for charred material (Sample 85) was found to contain poorly preserved waterlogged seeds. Remains were very abundant and well preserved in an unsorted Sample 191. Half of Sample 191 was subsequently sorted and the remains extracted were assessed along with the other four samples. The remains were scanned at up to x 50 magnification under a binocular microscope. Plant and insect remains were identified and estimates were made of their abundance.

1.2.3 Storage and curation

Structural

The site context records and other paper records for each site have been fully indexed and stored in numerical order within lever arch files. Site drawings are stored within vertical plan tanks. Black and white and colour prints have been attached to record cards and filed with the context records, negatives are filed separately in order of film number. Colour transparencies have been stored in plastic wallets within the unit storage facility. Although integrated into the unit archiving system the structural record has so far only been archived to an interim level to allow access for analysis. Full archiving will take place prior to deposition with the receiving museum. Security copying of the material has been timetabled.

Non ceramics

The metallic material has been stored within self sealing, perforated and labelled plastic bags. The bags are in turn kept within air tight polyethylene boxes. The humidity levels within the container is controlled by the inclusion of silica gel and will be regularly monitored.

The remaining non ceramic material is in stable condition and is stored by context in sealed, labelled plastic bags which are in turn held within sturdy cardboard boxes.

Upon completion of the investigative conservation, the material will be appropriately packaged to ensure, as far as is possible, its long-term preservation. The material will be deposited in Bedford Museum after completion of analysis. The following points should be noted:

- the metalwork: the relative humidity (RH) within the air tight polyethylene boxes in which this material is stored must be regularly monitored. An RH indicator card will be placed in every box and as soon as the RH rises above 20% for iron objects or 35% for the other metal finds, the silica gel must be removed, regenerated and replaced.
- the non-metal finds: these items should be stored in as stable an environment as possible, preferably at an RH of 55% (±5%) and a temperature of 15-20°C.

Flint

The lithic assemblage is environmentally stable and potential for long term storage is good. The flint has been marked, and all the material is stored, according to category, and by context, within self sealing, labelled plastic bags. The bags are stored in context order, within labelled cardboard boxes. Suitable arrangements for transfer and accessioning to Bedford Museum, on completion of publication, have been made.

Pottery and Building materials

The ceramics are environmentally stable and have been stored in labelled cardboard boxes by site and context. All sherds and fragments have been individually marked. The boxes are stored in context order. Suitable arrangements for transfer and accessioning to Bedford Museum, on complet on of publication, have been made.

Human and animal bone

The bone is stored by context within labelled cardboard boxes and requires a stable environment to ensure environmental stability. None of the bone has yet been marked individually. Suitable

arrangements for transfer and accessioning to Bedford Museum, on completion of publication, have been made.

Environmental Samples

These are currently stored as residues and sorted samples. Those samples that have undergone assessment are stores at the University Museum Oxford, the remainder at St Mary's Archaeology Centre.

2. THE EVIDENCE

2.1 PEARTREE FARM

2.1.1 STRUCTURAL EVIDENCE

Summary (figs. 2and 3)

Although a multi-period site with remains from the Neolithic through to later medieval periods, the evidence at Peartree Farm largely dates to the Romano-British Period; probably representing the site of a small farmstead, occupied by a single family group from the early second century AD, possibly into the fifth century. The earliest period of activity relates to tree clearance during the Neolithic, tree throw holes having been identified, some containing Neolithic ceramics. The land had certainly been cleared by the later Iron Age and parts of a ditch system marking the site of fields or stock enclosures was excavated. Only very fragmentary remains of habitative occupation were recovered but the settlement site may not have been far away. The Roman farm may not have been established until the second century AD and there is no evidence for any continuity from the Iron Age. The settlement focus was poorly preserved and difficult to identify but concentrations of pits, post-holes and gullies suggest it occupied the NW part of the site, surrounded by in-field enclosures. The layout of the farm remained largely static throughout most of Roman period although three phases of development can be seen, the first two relatively minor amendments and additions to the system, the third representing a major change, smaller enclosures cutting across the earlier system. This third phase may herald the decline of the settlement in the later Roman period, two isolated inhumations also date to this time and there is evidence for sub-Roman/early Saxon activity into the fifth century. The resolution of these later phases remains a key task within analysis. There is no evidence for Middle or later Saxon activity, nor for any settlement during the medieval period when the site lay within the open fields of Elstow.

Background to the project

The site lay at the western end of the Bypass, to the north-west of the modern Peartree Farm, at TL 047467, approximately 2.5km to the south of Bedford town centre within the parish of Elstow. Although generally flat at around 31m. aOD the site was located on a low gravel ridge, part of the developing first gravel terrace, defined to the north by the Elstow Brook, and to the south by an un-named tributary stream. Medieval ridge and furrow suggest a long history of cultivation continuing into the modern period.

The crop marks at Peartree Farm cover approximately 3ha and are part of a complex of settlement and landscape features visible on aerial photographs in the Elstow area. Excavation has previously been undertaken to the north at Elstow Abbey (Baker 1971 and more recently Fell 1995), at another 'Peartree Farm' site (Woodward 1977), and 500m to the east at Village Farm (this volume).

The crop marks (HER 1625) provided an indication of the archaeological potential of the site comprising a trackway with roadside ditches and a complex of rectilinear boundaries representing large enclosures or fields. Within the bend of the trackway the pattern of cropmarks was more dense, suggesting a farmstead; pottery and other artefacts recovered from the surface over a number of years had indicated a Roman date.

During 1992 three trenches were excavated as part of the Bypass evaluation. A Late Iron Age/Romano-British date for occupation was confirmed, with pottery production suggested from kiln fragments.

Full excavation took place in two phases, separated by a period of poor weather, the first between late October and Christmas of 1993, and the second during February and the early part of March 1994. An area of approximately 2.7ha was investigated. Further work took place between October and December 1994 as part of the watching brief during construction. This phase of work allowed observation to be made to east and west of the site, Iron Age boundaries coming to light to the west.

Method statement

Excavation was carried out in accordance with guidelines laid out in *Bedfordshire County Archaeology Services' Procedures Manual*. Topsoil was removed mechanically, at first this was undertaken in dry conditions, but the weather soon deteriorated with well above average rainfall. This led to problems of compaction and lamination of the topsoil/subsoil structure, especially and perhaps predictably within the area of greatest archaeological complexity. Allied to a high water table this resulted in serious difficulties in the excavation and recording of the settlement core of the site. Many of the deeper features remained unexcavated below about 1m., and in places it was impossible to obtain conclusive evidence for stratigraphic relationships due to the wet conditions.

A two-pronged excavation sampling policy was operated. Across the settlement core of the site, that part adjacent to the trackway in the area of densest crop-mark evidence, 40% of each recognised feature was to be excavated, across the rest of the site, assumed to be out-field areas, this fraction was to be reduced to 20%. In reality this system had to be amended as progress slowed due to the conditions. Sections were excavated to elucidate relationships, to obtain dating and environmental evidence and to characterise the overall form of features. Further excavation, dependent on resources, addressed outstanding problems.

Factual data

The following represents a tabulated breakdown of the quantity and type of site structural records. The structural evidence is also presented in the form of a detailed descriptive narrative, organised by Period.

Quantification of material

Table 1 Quantity of site structural records

Record type	Number
Contexts	1974
Site drawings	90 A1 multi context plans/section sheets
Photographs	1152 prints/transparencies

Table 2 Quantity of feature types

Feature type	Number	% Total
Ditches and gullies	796	57
Layers	17	1
Pits	194	14
Structural contexts	396	28
Total	**1403**	

The structural remains can be characterised as 'truncated', the result of ploughing from at least the later medieval period up to the present day. The vast majority of feature types that remained for

investigation were either pits or ditches (81% of the total), only 17 layer contexts were identified. As a result of truncation the quality of survival was only moderate. Few structural features were identified other than post-holes, with no certain building plans recovered. Although very little vertical stratigraphy survived other than within negative features, spatial relationships were relatively abundant and clearly defined. This has enabled a secure sequence to be established.

Evidence by Period

Table 3 Summary of provisional phasing

PERIOD	CONTEXTS No. / %		LANDSCAPE GROUPS	DESCRIPTION
Period 3 Neolithic	248	13	1, 2, 16	Tree Clearance/settlement
Period 7 Iron Age	70	3	3	Boundaries/settlement?
Period 9 Romano-British	1125	57	12, 13, 15	Settlement
Phase 1			4, 5, 6, 7, 10	Settlement
Phase 2			8	Settlement
Phase 3			9, 11, 14	Settlement
Period 10 Late Roman/Early Saxon	22	1	20	Settlement?
Period 13 Medieval	196	10	18	Cultivation
Period 14 Post medieval to Modern	59	3	19	Cultivation
Period 15 Unphasesd groups	241	12.	17	

PERIOD 3 (fig.4)

Tree Clearance (Neolithic)

Over one hundred features interpreted as tree throw holes were excavated or plotted. These were concentrated to the eastern end of the site, mainly as a result of enhanced visibility against the gravel in that area, and it is reasonable to assume that the coverage was more extensive but unrecognised.

A large proportion of these tree throws were not excavated due to time restraints, and hence remain undated. A limited number however, selected at random across the site, were sampled with a number found to contain either burnt root material or Neolithic ceramics. The evidence suggests at least some human influence in clearance.

A single tree-throw (C1356) containd a significant assemblage of Neolithic ceramics and lithics, enough to suggest domestic activity. The ephemeral nature of the evidence is consistent with Neoloithic settlement features on other Bypass sites, at Manor Farm and Bumpy Lane.

PERIOD 7 The Iron Age (fig.4)

Clearance appears to have been complete by the Late Iron Age when rectilinear boundaries, probably marking fields, were driven across the site. Scattered settlement evidence was recovered, including four-post structures, to suggest activity peripheral to a nearby occupation site.

Boundaries

Boundaries (A1) and (A12), outline two sides of a large enclosure, presumably a field. They were laid out at an angle of 40° to the later Roman fields of Period 9 (see below), the ditches measuring between 0.75-1.23m. across and 0.3-0.4m. deep. Pottery suggests a late Iron Age date for their construction, although small quantities of first century AD material may indicate that the fields may have remained in use through the early part of the Roman period. A small rectangular enclosure 20 x 15m. with inturned entrance may have been used for stock.

Settlement

Contemporary with the boundaries were three 'four post structures', (A13-15), and two isolated pits. These features were concentrated towards the eastern end of the site and so suggest that any settlement may lie in that direction beyond the limits of the excavation.

PERIOD 9 Romano-British (late 1st/2nd - 4th century) (fig.3)

The small amount of first century Roman material recovered, (2.7% of dated contexts and much of this likely to be residual) suggests that the enclosures established during the Iron Age may have persisted into at least the late first century AD. It is possible that the Romano-British farmstead was not founded until the early second century. Three phases of development spanning approximately the second to fourth centuries can be seen, these largely relating to the changes in the form and layout of enclosures.

Phase 1 (fig.5)

Phase 1 represents the laying out of the major ditches, boundaries and enclosures familiar from the aerial photographs. The main elements of this system comprise a ditched droveway running N-S, a settlement area immediately to the east of this, with fields/enclosures beyond.

Early ditches

A small number of ditches, predating the main system described below, appear to indicate the earliest form of that system, although in general they appear to share the same alignments and do not indicate a radically different layout.

The Droveway

Two parallel ditches were visible upon the air photo. plots, these zig-zagging through the landscape in a generally NE-SW alignment. Clearly the ditches define the route of a drove or trackway, possibly linking up with another area of cropmarks to the NE (Woodward 1977) and therefore part of a more extensive network of communication.

Within the excavated area some 70m. of the trackway was exposed; no surfacing survived but the drainage ditches were sectioned at regular intervals. An examination of the fills suggests that the ditches were cleaned out and re-defined on a number of occasions, although a coherent sequence throughout their lengths could not be seen, suggesting a piecemeal approach to re-cutting. Detailed analysis of the overall sequence will address such problems as how the trackway related to the enclosure ditches. This was too involved for the assessment stage, although a general contemporaneity can be demonstrated, and it also seems clear that the droveway ditches in their latest form were still open after the enclosure ditches had silted up.

Fields/Enclosures

(Landscape group 5)

Two large ditch defined enclosures were identified, these being placed to the east of the trackway and separated by a wide corridor open at its eastern end.

The northern enclosure, (A4), delimited an area at least 140m. by 120m. within the angle of the trackway as it turned first to the east and then north again. The enclosure itself was sub-divided by N-S and E-W ditches into at least three separate units. The main settlement focus may possibly have been contained within the western unit, immediately adjacent to the trackway.

The enclosure to the south, (A16), was situated mainly outside of the road corridor, with only its NE part uncovered during the excavation. No internal sub-divisions were identified with little indication of settlement or other activities.

Modifications

(Landscape group 7)

Once established, several modifications were made to the system described above, this involved limited recutting of the main enclosure ditches, with additions such as (A25) and (A33/34). The latter, a pair of parallel ditches entering the site from the north, may mark the line of a trackway.

Settlement

(Landscape group 10)

The western part of Enclosure (A4) has, from the very beginning of the project, been the focus of investigation. The assumption has been that the farm compound, the settlement element of the site, was located here. This assumption was based on the sheer density of crop marks, some of which appeared to form a sub-circular enclosure characteristic of a compound boundary. Pits and ditches certainly do concentrate in this area, in stark contrast to other parts of the site to the east that were probably open yard areas or fields, but most of these date to later phases (largely 2 and 3). It is very difficult to identify any features that might indicate settlement contemporary with Phase 1. During this Phase settlement may have been located to the north, just off site, and this may be supported by the ditch and gully features of (L10), the only possible settlement features that can be stratigraphically tied in.

Phase 2 (fig.6)

This phase was characterised by the setting out of small irregular ditched enclosures within the NW part of the large enclosure (A4). Although some of these features cut those of Phase 1, they also generally respect the Phase 1 framework and it can assumed that most of the major elements of that system are still in use. An example of this are the ditches (A75), which while cutting the upper fills of the Phase 1 eastern trackside ditch still follow the established alignment and indeed merely appear to be creating a new entrance into the 'settlement focus' from the trackway.

Phase 3 (fig.7)

A more radical re-organisation of the site appears to have taken place during this phase, new enclosures making redundant large sections of the Phase 1 and 2 system

Enclosures

(Landscape group 9)

Up to six square or rectangular enclosures were formed across the western part of the Phase 1 enclosure (A4), in some cases these cut directly across the silted ditches of the earlier system and clearly imply that parts of that system were no longer in use.

The northern enclosure (A1) was somewhat different from those to the south-west. The ditch defining the enclosure had very steep sides with a U- shaped base suggestive of a palisade trench (slight evidence was recovered for posts within the ditch). Only the southern part of the enclosure was excavated, its northern side was however visible as a crop mark and it was clearly square in overall plan with rounded corners. An entrance was observed on its southern side, two fairly large stone packed post holes, both showing evidence of having been re-cut, probably indicating a gate. No evidence for internal structures were found.

A number of short gullies cut through the eastern most ditches of (L9), these are in turn cut by an adult inhumation (A84). This was unaccompanied by any grave goods, its late date secured on stratigraphic grounds. Although provisionally phased to Period 9 the inhumation could be later and date to Period 10.

(Landscape groups 11 and 14)

Four approximately parallel NNW-SSE ditches (L11), appear to have been added to the northern edge of the (L9) enclosures, all continue to the north beyond the limits of excavation. An E-W post-built boundary (L14) may be even later but still respects the enclosures (L9). This boundary clearly replaces an earlier Phase 1 ditched boundary and so suggests that elements of that system were also still in use into the early part of Phase 3.

Period 9 Settlement features (Fig.5)
Although it has been possible to construct the above three phase sequence to describe the development of the enclosures, the majority of pits , post holes etc. cannot as yet be integrated. This will occur during full analysis when spatial, stratigraphic relationships and the dating can be fully considered. Three major groups of features should be noted at this stage:

- *(Landscape group 12)*
  These comprise a scatter of pits and short lengths of gully along the northern edge of the site.

- *(Landscape group 13)*
  Two groups of features are represented here, (A37) in the SW corner of the Phase 1 enclosure (A4), and (A36) immediately to the south in the corridor between (A4) and the southern enclosure (A16).

  The first group (A37), comprises three pits, two of which appear earlier than the latest re-cut of the trackway ditch, and a possible structure, surviving only as a clay surface (A83). An infant burial (C950) had been inserted into this surface.

  Group (A36) comprises two clay and limestone-lined tanks, both possibly used for some form of crop-processing. Large quantities of carbonised Spelt Wheat and chaff were deposited within the backfill of the larger tank suggesting that threshing and possibly drying had taken place in an adjacent area.

- *(Landscape group 15)*
  A final group of pits clearly cut through the boundaries of the Phase 1 system but could belong to either Phase 2 or 3. In the main these were large quarry type cuts, their position along boundaries suggesting the open areas were still in use although the location of one, well within the trackway, may indicate that this was no longer open.

PERIOD 10 Late Roman/Early Saxon (fig.7)

Some or all of the Period 9 Phase 3 features may date to Period 10 but only five pits, all cutting the silted up boundaries of the Roman farmstead, contained pottery dating to the fifth century or Early Saxon period. Generally, the late pottery was recovered from upper fills, with lower fills and possibly the constructional phases of the pits dating to Period 9.

This may not indicate substantial settlement or activity, although perhaps it does represent activities peripheral and associated with the Early Saxon settlement just to the east at Village Farm. However, as indicated above, the exact components of this period have yet to be closely defined and the possibility of being able to identify sub-Roman or Early Saxon use of the site is intriguing.

PERIOD 13 Medieval

A regular pattern of medieval cultivation furrows was recorded across the whole site. These were spaced at 8-10m. intervals and oriented NNW-SSE. The 1746 Estate map (CRO:XI/6/1) shows this area to be part of the open-fields (specifically the 'Mother Field') of Elstow village.

PERIOD 15 Unphased features

Due to time restraints a number of features were left unexcavated and hence remain undated. Added to this group are also a number of excavated features which remain stratigraphically and spatially isolated.

2.1.2 REGISTERED AND NON-CERAMIC BULK ARTEFACTS

Factual data

Quantity

The excavation at Pearuce Farm produced the following quantities of artefacts;

Table 4 Artefact quantities

Type of material	Quantity
Registered finds	201
Nails	36
Flint	83
Slag	735g
Burnt stone	4487g

Provenance

The assemblage spans the Mesolithic to the post-medieval period. Typologically datable artefacts (154 (77%) registered artefacts and 48 (58%) flints) were present in the following quantities;

Table 5 Datable artefacts by Period and Quantity

Period	Quantity
Mesolithic/early Neolithic	19 flints
Late Neolithic/early Bronze Age	29 flints; 2 saddle querns
Romano-British	134 registered artefacts
Saxon	1 registered artefact
Medieval/post-medieval	17 registered artefacts

Quantities of registered and non-ceramic bulk artefacts by feature type are presented below;

Table 6 Quantities of artefacts by feature type

Feature Type	Registered Artefacts	%	Nails	%	Flint	%	Slag	%	Burnt stone	%
Natural interface	1	0.0			36	43.5				
Ditch	101	50.0	11	30.6	13	15.7	272.7g	37.1	3372g	75.2
Layer	4	2.0	1	2.8			> 1g	0.1		
Pit	33	16.5	16	44.4	8	9.6	461.9g	62.8	757g	16.9
Rubbish pit	5	2.5	2	5.6	1	1.2			87g	1.9
Quarry pit	2	1.0			1	1.2			271g	6.0
Structural cut	3	1.5	1	2.8	9	10.8				
Grave	1	0.5								
Land drain	4	2.0	1	2.8						
Furrow	10	5.0			7	8.4				
External cultivation	26	13.0	4	11.0	8	9.6				
Unstratified	11	5.5								
TOTALS	201	100%	36	100%	83	100%	735g	100%	4487g	100%

Quantities of registered and non-ceramic bulk artefacts by period are presented in Table 7. An alphabetical listing of simple name classes, and their quantities, present at Peartree is presented in Table 13. The occurrence of simple name classes by functional category and period are presented in Tables 14-25.

Table 7 Artefacts by Period

Period	Registered Artefacts	%	Nails	%	Flint	%	Slag	%	Burnt stone	%
3	1	0.5			36	43.5				
7	1	0.5			11	13.2				
9	123	61.2	27	75.0	14	16.9	291g	39.6	4039g	90.0
10	22	10.9	4	11.1	7	8.4	444g	60.4	448g	10.0
13	10	5.0			7	8.4				
14	4	2.0	1							
15	3	1.5								
Unstrat	37	18.4	4	11.1	8	9.6				
TOTAL	**201**	100	**36**	100	**83**	100	**735g**	100	**4487g**	100

The main focus of activity at Peartree occurred in Period 9. Landscape groups within this period have been allocated to one of three phases, with the exception of groups 12, 13 and 15 where closer dating than the Roman period was not possible at the assessment stage. The sub-divisions, relevant landscape groups and registered artefact assemblage is presented in Table 8.

Table 8 Period 9 phases and landscape groups

Period/ Phase	Dating	Landscape group	Registered artefacts
9.0	2nd-4th c.	12	bracelet (2); balance (1); knife (1); lead vessel patch (1); strip(1)
9.0	2nd-4th c.	13	bracelet (1); hobnail (1); vessel glass (2); millstone (1); ring (1); lead scrap (1); button (1)
9.0	2nd-4th c.	15	millstone (1); pin (1); ring (1); whetstone (1); worked bone (1); strip (1)
9.1	2nd-3rd c.	4	bracelet (1); coin (260-268)
9.1	2nd-3rd c.	5	vessel glass (74); T-clamp (1); rotary quern (1); chisel (1); sheet (1)
9.1	2nd-3rd c.	6	ligula (1); lead vessel (1); lead vessel repair (1); coins (364-375 x2; 388-402)
9.1	2nd-3rd c.	7	finger ring (1); sheet (1); vessel glass (2); coins (347-348; 375-378)
9.1	2nd-3rd c.	10	strip (1)
9.3	4th-e 5th c.	9	bracelet (1); vessel glass (1); staple (1); worked bone (1); ferrule (1); coin (270-74)
9.3	4th-e 5th c.	14	vessel glass (3); coin (388-402)

Generally the artefact assemblage displays few signs of intrusive activity. A single context (724) in Landscape group 16, Period 1, yielded a blue, square-sectioned bead commonly dated to the third to fourth centuries (Guido 1978, 96), while context 548 (A47, L13) Period 9 produced a button and ceramic sherd of post-medieval date. The mid to late fourth century coinage from L6 and L7 of Period 9.1 (see Table 8) suggest intrusive activity. It should be noted however that although the cuts of these features have been phased within 9.1, the features themselves are likely to have continued in use into Period 9.3, the artefacts reflecting the point at which the features went out of use. Refinement of phasing at the analysis stage will resolve this discrepancy between cuts and fills. Period 13, context 1547 A80 L1, yielded a second button and ceramic sherd of post-medieval date, similarly indicated that the furrows may have continued to be formed into the later period.

There is a greater degree of residuality evident amongst both the registered and bulk assemblages. Of the 75 flints from phased contexts, 39 come from contexts phased to Periods 7-13 and are therefore residual. The Mesolithic assemblage from Period 3 is also residual, occurring in contexts containing

late Neolithic/early Bronze Age flint and ceramics. The late Neolithic/early Bronze Age assemblage from Period 3 however is, with one exception (1 flake, context 504), undisturbed, occurring with ceramics of the same date range. Residual elements are also evident in Period 10, for example the fills of pits 880 and 2087 produced vessel glass of late first to early third centuries and coins of late third century date along with examples of the mid to late fourth century. The plough furrows of period 13 likewise yielded two late fourth century coins.

Range and Variety

The sampling policy at Pearrce can be summed up as follows; all pits and postholes were 50% sampled, linear features were examined for structural associations, dating and environmental evidence and on average a 20% sample of the volume was excavated. No sieving took place. A metal detector was used to scan newly stripped areas of the excavation. Sorting of soil samples accounted for 6 registered artefacts, 5 flints, less than 1g of slag and c 5g of burnt stones.

The use of a metal detector will have ensured retrieval of metalwork from the upper fills of features, although it may have biased the overall composition of the artefact assemblage in favour of metalwork (see Table 9). The large percentage of glass recovered is mainly attributable to the fills of one ditch (1276 A4) which contained 87 glass vessel sherds (74 registered artefacts), 87% of the glass assemblage.

Table 9 Quantity of artefact by material

Material	Quantity of registered artefacts	Percentage
Iron	20	10%
Copper Alloy	55	27.3%
Lead/Lead Alloy	22	10.9%
Glass	89	44.3%
Stone	10	5%
Bone	4	2%
Ceramic	1	0.5%
TOTAL	**201**	**100%**

Amongst the 87 registered artefacts of vessel glass (100 sherds in total) a number of forms were recognised. These are presented below by Period and Landscape group.

Table 10 Vessel Glass forms by Period and Landscape Group

Period	Landscape Group	No. sherds	Identifiable forms	Date range of forms
9.0	13	2	prismatic bottle	late 1st - early 3rd
9.1	5	87	square bottle (Isings form 50)	late 1st - mid 2nd
			tubular rimmed bowl (Isings form 44)	late 1st - mid 2nd
			conical jug (Isings form 55)	late 1st - mid 2nd
			colourless segmented wheelcut bowl	late 1st - mid 2nd
			globular jar or jug (Isings forms 67c or 52)	late 2nd
			colourless wheelcut beaker	late 2nd
			colourless cylindrical cup (Isings form 85b)	late 2nd
9.1	7	2	cylindrical cup	late 2nd - early 3rd
9.3	9	1	prismatic bottle	late 1st - early 3rd
9.3	14	3	cup	mid - late 4th

10	20	3	prismatic bottle	late 1st - early 3rd
13	18	1	form unidentifiable but of potash glass	medieval
us		1	bottle	post-medieval

All the registered and bulk non-ceramic artefacts have been assigned to 54 simple name or class groups (see Table 13). These in turn have been allocated to functional categories and the artefacts and their respective quantities in each category by Period are set out in Tables 14 - 25.

The lithic assemblage by simple name and period is presented in Table 24. Table 11 presents the phased assemblage (75 flints) by Period with the date range noted where discernible. The flint quality encountered was variable, suggesting most if not all the raw material derived locally from redeposited river gravels. The colour ranged from pale grey to dark grey and light brown. Several pieces, ten in Period 1, were patinated and significantly these tended to display Mesolithic manufacturing techniques.

Table 11 Lithic assemblage by Period and typological date range

Period	Date Range	Forms and Quantities
3	Mesolithic/early Neolithic	blade (1); flakes (4); cutting tools (4); microdenticulate (1)
3	Late Neolithic/early Bronze Age	chisel arrowhead (1); flakes (6)
3	Undiagnostic	flakes (19)
7	Mesolithic/early Neolithic	blade (1); cutting tool (1); flake (1)
7	Late Neolithic/early Bronze Age	chisel arrowhead (1); flakes (7)
9	Mesolithic/early Neolithic	cutting tools (2)
9	Late Neolithic/early Bronze Age	flakes (8); core (1)
9	Undiagnostic	flakes (3)
10	Mesolithic/early Neolithic	blade (1)
10	Late Neolithic/early Bronze Age	flakes (3)
10	Undiagnostic	flakes (2); core rejuvenation flake (1)
13	Mesolithic/early Bronze Age	blades (2); flake (1)
13	Late Neolithic/early Bronze Age	flakes (2)
13	Undiagnostic	flakes (2)

Condition

The following quantities of material were submitted to the Conservator for x-radiography and assessment:

Table 12 Artefacts submitted to the Conservator, by material

Material type	Quantities
Iron registered artefacts	18
Iron bulk artefacts (nails)	16
Copper alloy registered artefacts	23
Lead registered artefacts	4
TOTAL	61

The condition of these finds was assessed by visual examination with the aid of a stereo microscope and by x-radiography, the latter carried out using a *Faxitron* x-ray cabinet with *Kodak Industrex CX* and *DuPont NDT75* x-ray film (UCL X-RAY Nos EH0160-4, EH0169). Full details are given on the Assessment Sheets held at St Mary's Archaeology Centre.

Iron:
Most of these items were in fair to good condition, with just a small proportion showing signs of more extensive mineralisation, cracking and flaking. Several bore traces of carbonised wood among the soil and corrosion products covering them, but traces of possible mineral-preserved organic material were present on only one item (RF 97 T-clamp, Context 1274, wood).

Copper Alloy:
The 23 finds received for assessment included 18 coins. Generally these items were in fair condition, with surface patinas at least partially visible on most. The coins generally bore worn surface detail, although some were much clearer, with x-radiography proving very useful in revealing the extent of surviving detail.

Lead:
These finds were in fair to poor condition, with cracking and crumbling apparent on three of the four items. One, a small stud, was found to bear moulded surface decoration (RF 46, Context 200).

Although not examined by the Conservator, the remaining registered finds were believed to be stable and in fair to good condition.

Glass :
With the exception of one sherd of medieval potash glass, the glass assemblage is chemically stable and is in a good state of preservation.

Flint:
Overall the flint is in fair to good condition. The degree of post-depositional damage, including snapped flakes and abraded edges, increased in the later Periods. The residual Mesolithic assemblage has a higher degree of patination and a number of the blades were snapped.

Registered and non-ceramic bulk artefacts by functional category and period

Table 13 Peartree Registered and non-ceramic bulk artefacts Simple name list

Simple name	Quantity	Simple name	Quantity
badge	1	loomweight	1
balance	1	millstone	2
bead	2	nails	36
bracelet	6	offcut	3
brooch	1	pin	1
buckle	1	pivot	1
bullet (musketball)	1	quern - rotary	4
bung (lead vessel repair)	3	quern - saddle	2
burnt stone	4487g	ring	4
button	6	rod	1
chisel	1	rumbler bell	1
coin	23	scrap (Pb)	6
disc	3	sheet	7
ferrule	1	slag	735g
finger ring	1	staple	1
flint arrowhead	2	strapfitting	2
flint blade	5	strip	5
flint core	2	stud	4
flint core rejuvenation flake	1	T-clamp	1
flint cutting tool	8	terminal	1
flint flake	61	token	1
flint microdenticulate	1	tweezers	1

flint scraper	3	vessel (glass)	87 (100 sherds)
hammerstone	1	vessel (lead)	2
hobnail	2	wedge (Fe)	1
knife	1	whetstone	1
ligula	1	worked bone	3

Table 14 Buildings and Services

Period/ Simple name	1	7	9	10	13	14	15	Unstrat
Roofing lead								1

Table 15 Fasteners and Fittings

Period/ Simple name	1	7	9	10	13	14	15	Unstrat
Nails			27	4		1		4
Pivot								1
Staple			1					
Stud				1				3
T-clamp			1					

Table 16 Household Utensils and Furnishings

Period/ Simple name	1	7	9	10	13	14	15	Unstrat
Millstone			2					
Rotary quern			1	3				
Vessel glass			82 (95 sherds)	3	1			1
Vessel metal			1		1			
Vessel patch (Pb)			2					1

Table 17 Crafts and Industry

Period/ Simple name	1	7	9	10	13	14	15	Unstrat
Chisel			1					
Loomweight				1				
Lead scrap/waste			1	2	2			1
offcuts				2	1			
Smithing slag (fe)			273.1g	428g				
Cinder				16.1g				
Fuel ash			17.8g					
Burnt stone*			4039g	448g				
Worked antler/bone			2	1				

* burnt stone is presumed to indicate a hearth which may be either domestic or industrial in nature. This will be determined, by distributions, in the analysis stage.

Table 18 Multi-purpose blades and sharpeners

Period/ Simple name	1	7	9	10	13	14	15	Unstrat
Knife			1					
Whetstone			1					

Table 19 Trade and Commerce

Period/ Simple name	1	7	9	10	13	14	15	Unstrat
Balance			1					
Coin			8	4	2	2		7
Token								1

Table 20 Animal Trappings and Transportation

Period/ Simple name	1	7	9	10	13	14	15	Unstrat
Horseshoe								1
Rumbler bell								1

Table 21 Weaponry

Period/ Simple name	1	7	9	10	13	14	15	Unstrat
Badge (military)								1
Bullet (musketball)								1

Table 22 Personal Adornment and Dress

Period/ Simple name	1	7	9	10	13	14	15	Unstrat
Bead	1			1				
Bracelet			5			1		
Brooch								1
Buckle								1
Button			1*		1			4
Finger ring			1					
Hobnails			1	1				
Pin			1					
Strapfitting					1			1

* intrusive

Table 23 Toiletry and Surgical Implements

Period/ Simple name	1	7	9	10	13	14	15	Unstrat
Tweezers				1				
Ligula			1					

Table 24 Prehistoric

Period/ Simple name	1	7	9	10	13	14	15	Unstrat
Arrowhead (chisel)	1	1						
Blade	1	1		1	2			
Core			1					1
Core rejuven. flake				1				
Cutting tool	4	1	2					1
Flakes	29	8	11	5	5			3
Hammerstone							1	
Microdenticulate	1							
Saddle quern							2	
Scraper								3

Table 25 Wide-ranging uses or unidentified objects

Period/ Simple name	1	7	9	10	13	14	15	Unstrat
Disc					1			2
Ferrule			1					
Ring		1	2	1				
Rod								1
Sheet			2					5
Strip			3	1				1
Terminal								1
Wedge						1		

2.1.3 CERAMICS

Factual data

Quantification of material

Pottery

The pottery was recorded by fabric type and form; quantification was by sherd count. The information was computerised to facilitate data manipulation. A total of 4668 sherds was recorded. This figure is broken down by fabric type in section 1.3.

The material from the topsoil and other unstratified pottery has not been quantified. A scan to note sherds of intrinsic interest or new fabric or form types will be sufficient.

Building material

The building material was recorded by fabric type and form, and quantified by fragment count and weight. The assemblage makes up 218 fragments, comprising tile, brick and daub/fired clay.

Provenance

Pottery

Table 26 Quantity of pottery from different feature types

Context type	Sherd count	% TOTAL
Ditches	2890	61.91
Pits	1399	29.97
Furrows	113	2.42
Layers	93	1.99
Natural features	73	1.57
Structural cuts	61	1.31
Ploughsoil	16	0.34
Graves	14	0.30
Land drain	8	0.17
Unknown	1	0.02
TOTAL	**4668**	**100**

Table 26 shows the relative quantities of pottery from the different types of feature on site. Almost all the pottery, 91.1%, comes from pits and ditches. These cut features are usually regarded as the least susceptible to contamination, at least in their lowest fills. This will provide the site with a number of closely dated pottery groups. One context in particular (1274) will be significant to both the dating of the site and its regional and national context (see volume I, section 2.1).

Phasing and date range

Period 9 has been subdivided into three phases as follows:

- Phase 1 2428 sherds
- Phase 2 121 sherds
- Phase 3 404 sherds
- Other 694 sherds

The bulk of the building material dated to the Roman period occurs in period 9, with only slight residuality and intrusion. The daub/fired clay also occurs in quantity in period 9 and is likely to date to this period.

Range and variety

Pottery

Type Series

The type series is listed below. New types or those that have not been published previously are marked with an asterisk(*).

EARLY PREHISTORIC		*TOTAL*	*51*
FE		Neolithic/Bronze Age	51
IRON AGE		*TOTAL*	*102*
FL	*	Early-middle Iron Age	77
F06		Late Iron Age 'Belgic' type	25
ROMAN		*TOTAL*	*4426*
R		Miscellaneous Roman	34
R01		Samian	519
R02		Mica-gilded	4
R03A		Fine white ware	27
R03B		Gritty white ware	473
R05A		Orange sandy	62
R05B		Fine orange	2
R06		Grey ware	1321
R07		Black sandy	158
R10		Buff gritty	12
R11		Oxford colour coat	78
R11F		Oxford mortaria	37
R12A		Nene Valley mortaria	17
R12B		Nene Valley colour coat	236
R13		Shelly	1401
R14		Red-brown harsh	7
R19		Amphora	13
R22A		Hadham oxidised	3
R31	*	Coarse white ware	12
R32		Lead glazed	1
R33		Verulamium mortaria	1
R35		Grog tempered	8
POST-ROMAN		*TOTAL*	*83*
A		Early-mid Saxon	71
E02		Late medieval oxidised	1
P		Post-medieval	11
MISC		Miscellaneous unknown	*TOTAL* *5*

Early Prehistoric

A total of 51 sherds of Neolithic/Bronze Age date were recovered. Fabrics are grog and/or shelly wares and have voids where inclusions have fallen out or been leached out. Surfaces are red-brown or buff-brown in colour with reduced, dark grey or black cores and surface patches. Three rim sherds were found, one with incised decoration. A single body sherd of Beaker pottery was found, thin and well made and less abraded than the other early prehistoric sherds. All contexts with early prehistoric pottery were uncontaminated by later pottery.

Iron Age

A single new fabric type was identified; all the Iron Age types, however, have been grouped together for purposes of assessment. A total of 102 sherds was recovered from the site, 77 of which were assigned to the Pre-'Belgic' Iron Age tradition, and 25 of which were assigned to the late Iron Age 'Belgic' tradition. The term 'Belgic' is used here to define a pottery tradition as defined by Thompson (1991); it has no cultural connotations.

The pre 'Belgic' pottery comprises 13 sherds that are residual in later Roman contexts; 31 sherds assigned to the early-middle Iron Age, and 32 sherds assigned to the middle-late Iron Age. There is no doubt some overlap between this latter group and the 'Belgic' assemblage, but the extent to which the native pottery tradition continued in use alongside the 'Belgic' tradition of ceramics will be examined at the analysis stage. Only two rims were found, both simple everted rims, one in a mid-late Iron Age shelly fabric, the other in an early Iron Age flint tempered fabric.

The late Iron Age 'Belgic' pottery comprises mainly single undiagnostic sherds in abraded grog-tempered fabrics. These fabrics range from fine to coarse, but with coarse grog predominating. Three contexts produced nothing but late Iron Age pottery, but even here the fabrics are limited to grog-tempered and shell-tempered wares, and the sherds are small and abraded. A single residual sherd is diagnostic of form, a small fragment of everted rim, probably a jar.

Roman

The Roman pottery forms the bulk of the ceramic assemblage, comprising 4426 sherds. Twenty five different forms could be distinguished from the rims (tables 30-31). More sherds will be allocated to a form, if only to a broad class, at the analysis stage; the totals given below should therefore be regarded as a minimum.

Table 30 Number of kitchen vessel forms

Kitchen vessel forms	No. of sherds
cordoned jars	8
triangular rim jar	32
everted rim jar	44
rectangular rim jar	26
storage jar	12
under cut rim jar	16
lid seated jar	26
necked jar	11
Verulamium type jar	7
carinated jar	1
amphora	10
mortaria	18
Total	**211**

Table 31 Number of tableware forms

Tableware forms	No. of sherds
poppy head beaker	6
folded beaker	6
beaker	4
bead rim dish	19
plain rim dish	16
flanged rim dish	16
reed rim dish	8
carinated bowl	8
rectangular rim bowl	3
platter	2
flagon	10
lid	4
castor box	6
Total	**108**
unrecognised form	1

A preliminary survey of the forms indicates a predominance of jars, 57.19%, primarily used for cooking and storage. Other kitchen and storage vessels, such as amphorae and mortaria, make up 8.75%. Tablewares make up 33.75%. There is a single unrecognised form, enough of which survives to draw up a full profile and determine its function at the analysis stage.

The quantity of imports on the site is relatively low. With the exception of the samian vessels and the amphorae, no other continental imports were found. The sources of most of the pottery are local or regional. The preponderance of Verulamium, Oxford and Nene Valley wares fits into the pattern of Roman rural sites in the county.

Post Roman

A small quantity, 83 sherds, of post-Roman pottery was found, comprising Saxon, medieval and post-medieval pottery. Seventy one sherds are of Saxon date. Of these, three were found in ploughsoil, and two were intrusive in period 9 contexts. The rest were found with residual Roman pottery. Few forms could be distinguished; only three rims were found, and these are from crudely hand made, slightly everted jars.

The one late medieval body sherd was found in a furrow. The post-medieval pottery was mainly found in furrows although four tiny fragments were found in period 9 ditches and are intrusive. A single rim sherd was found, from an internally glazed, lid-seated jar.

Evidence of use

Little evidence of use was noted on the ceramic assemblage, with the exception of sooting, mainly on the bodies of jars. These were probably used for cooking. Few residues were recorded; those that survived were all off-white in colour and found inside bases. Wear marks are present on the rims of lid-seated vessels, indicating long or constant use. Few ceramic lids were found; it is likely that other materials, such as wood, were used but do not survive.

Context 1274, a ditch terminal, contained a large assemblage of pottery, 1401 sherds in total, dating to the late 2nd century. The vessels are unabraded and in substantially complete, if fragmentary, condition. Of these, seven are stamped samian vessels. Fabric types R03A and R03B are a major part of this context group, consisting of 436 sherds. One of the jars in fabric type R03B is a copy of a metal vessel, down to the rivets attaching the handle to the body. Such assemblages, usually pit groups, are known from other sites, among them Towcester (Lambrick 1980), Alcester (Cracknell and Mahoney 1994) and Fellmongers (Price 1987). All are dated to the second half of the 2nd century; all contain

almost complete vessels, and all comprise a large proportion of samian vessels. The non-ceramic characteristics of these groups are discussed in volume 1, section 2.1.

Building material

Tile

The Roman tile makes up 28.7% of the total assemblage. Three fabrics were defined: sand, sand and grog, and shell. All these fabric types are known from other sites in the county, e.g. Sandy (BCAS in prep.). Most of the tile comprises roofing material. The two fragments of box flue, in addition to the *tegulae* and *imbrices*, may indicate a substantial building in the vicinity even though no structural evidence for such a building was found on site.

Table 32 Quantities of different tile forms

Tile	No of fragments
Tegula	22
Imbrex	3
Box flue	2
Roman unidentified	4
Med/P-M roof tile	77
TOTAL	**108**

Brick/floor tile

The Roman assemblage of brick/floor tile makes up 67.9% of the total. The brick and floor tile have been grouped together because of the difficulty in determining their function on form alone. Three fabrics were defined: sand, sand and grog, and shell. Only one fragment is in the shelly fabric. Both pottery and building material were manufactured at Harrold, north Beds. (Brown 1994), and this is a likely source for the Peartree Farm material.

Table 33 Quantities of brick/floor tile

Brick/floor tile	No of fragments
Roman brick	15
Roman unidentified	4
Med/P-M brick	9
TOTAL	**28**

Daub/fired clay

The daub/fired clay numbered 82 fragments. Surfaces survive on 23 pieces; wattle impressions can be seen on 3 pieces, and 6 pieces have finger impressions. Thirteen fragments of possible hearth lining were recovered from a single context (733).

Condition

The pottery and the building material is in good condition, coming primarily from cut features, and showing little sign of abrasion. No further treatment is necessary.

2.1.4 HUMAN BONE

Factual data

Quantification, provenance and range of material

Two inhumations were recovered. Both were from within contexts dating to the late Roman Period, 9.4. The first, Inhumation 1 (C950), was an infant burial, cut into or contained within what may have been the clay floor of a small rectangular building (A37). The second , Inhumation 2 (A84), an adult, was cut through pits and gullies in turn cutting part of a late Roman enclosure system (L9). The grave cut of the latter was notable for its anthropogenic shape. Neither inhumation was accompanied by surviving grave goods, nor were there any indications of coffins, shrouds, or other paraphernalia.

2.1.5 ANIMAL BONE

Factual data

Quantification and provenance

Twenty four boxes of bone were recovered by hand excavation. Sixty two soil samples were found to contain small bone fragments or micro fauna.

Table 34 Number of contexts containing bone by period

Period	No. of contexts
0	1
1	1
7	5
9	197
10	10
13	8
14	1
15	8

Range and variety

Most of the faunal remains at Peartree Farm date to the Roman period, Period 9. There are a few specimens from periods 7 and 10 but probably too few to repay analysis. Period 9 has been sub-divided into three phases, coming in the main from pits ditches and fills of features such as tanks (A36). Hand recovered bones came from horse cattle pig Sheep/goat, dog, red deer and hare. The sieved samples produced evidence of rodents, amphibians and small birds. Preliminary examination suggests the predominance of cattle.

Condition

A good number of the bones can provide useful measurements, and information on age at death is available from cattle, pig and sheep/goat mandibles.

2.1.6 MACROSCOPIC PLANT AND INVERTEBRATE REMAINS

Factual data

Quantification, provenance and range of material

Quercus (oak) charcoal was recovered from some Neolithic and possible Neolithic tree- throw features (Table 2), suggesting that these features could have been related to the clearance of oak woodland. The earliest evidence for cultivated plants, however is from an Iron Age pit, (Table 35), which contained a large quantity of charred *Triticum spelta* (spelt wheat) glumes, a somewhat smaller quantity of spelt grain and little else (Sample 85, Context 1040). While such an assemblage is entirely plausible for an Iron Age context, its similarity to some of the Roman assemblages from the site (e.g. Sample 76) and the absence of charred crop remains from the other Iron Age features on the site, which does not seem to have been an Iron Age settlement, casts some doubts on the date of the material.

Some of the Roman features on the site contained high concentrations of charred cereal processing waste. Samples 64, 76, 80 and 81, from deposits in and related to A36, a tank-like feature, all contain high quantities of spelt glumes, about a tenth the quantity of spelt grain and relatively few weed seeds. This suggests that the material represents de-husking debris from relatively clean spelt spikelets. The occurrence of disarticulated embryos and the state of the grain in Sample 81 suggests that the remains could have resulted from the rubbing and cleaning of malted grain. Possibly there was a corn drier situated near this part of the site. The charred weed seeds include *Bromus* sp. (brome grass), *Agrostemma githago* (corn-cockle), *Rumex* sp. (dock) and *Avena* sp. (oats), all relatively large seeds which tend to stay with the grain during the early stages of crop cleaning. (It is assumed that oats is more likely to be a weed than a crop at this date). The only useful assemblage of molluscs is from Sample 67, from the re-cut of Ditch A36. The occurrence of *Anisus leucostoma* suggests it held stagnant water while the presence of *Vallonia costata* and *V. excentrica* suggests dry, open conditions on the site.

The late Roman / early Saxon flots are very sparse in cereal remains. However, the occurrence of spelt wheat suggests that the contexts are likely to be Roman unless the grain is residual.

Table 35 Charred Seeds and Chaff from Peartree Farm

No. of items within samples by Period	Iron Age	Roman	Late Roman / Early Saxon
1-10	-	1	3
11-100	-	-	-
101-1000	-	2	-
1000+	1	2	-
Total samples	1	5	3
Species by Period			
Triticum spelta spelt wheat	+++	+++	+
T. spelta spelt wheat - glumes	++++	++++	-
Hordeum vulgare six-row barley	-	-	+
Avena sp. oats	+	++	+
Arable weeds	+	(+)++	+

seeds unless stated. + 1-10 items, ++ 11-100 items, +++ 101-1000, ++++ 1000+
++ total for sample in which most abundant, (+)++ total for period

Table 36 Charcoal from Peartree Farm

		?Neolithic	Iron Age	Roman	Late Roman / Early Saxon
No. flots		2	1	3	4
No. hand-picked		1	1	2	1
Total samples		3	2	5	5
Alnus / Corylus tp.	alder/hazel	-	-	-	1
Quercus sp.	oak	3	2	4	1
cf. Pomoideae	hawthorn etc	-	-	3	4
cf. *Prunus* tp.	sloe etc	-	-	1	-

2.2 VILLAGE FARM

2.2.1 STRUCTURAL EVIDENCE

Summary (fig.8)

Excavations at Village Farm were initially targeted towards recording the ring ditches visible on aerial photographs. These were probably of late Neolithic/Early Bronze Age date and appear to have remained features in the landscape at least in to the Iron Age. Iron Age settlement was located just to the north of the rings and comprised pits and post-built structures; no buildings were identified. No Roman activity was recorded. Two possible sunken feature buildings and a pit group testify to Early Saxon settlement just to the east of the ring ditches. Middle Saxon evidence is lacking although the sequence is picked up once again during the Saxo-Norman period, a partly enclosed farmstead with post-built buildings occupying the site (this is now known to be part of a much more extensive settlement, see Appendix 2). The area continued to be used for settlement into the fifteenth century, a well, bread oven, and possible furnace having been discovered.

Background to the excavation

The excavations at Village Farm lay some 500m to the east of those at Peartree Farm at TL 053468, approximately 2.5km to the south of Bedford town centre within the parish of Elstow. They were located on the same gravel ridge, at around 30m. aOD. The land was generally level, although it dropped away markedly beyond the limits of excavation into the small valley of the stream marking the southern limit of the ridge. Prior to development the site had been under arable cultivation and had been subject to intensive ploughing.

Excavation at Village Farm was undertaken between April and June 1994 with the watching brief continuing, intermittently, until October 1994. Excavation ran concurrently with work at Manor and Bunyan's Farms, 1km to the east.

One of the major objectives of the project was to record the ring ditches. Although clearly visible on aerial photographs their precise location on the ground was uncertain. Access for evaluation had been denied until compulsory purchase orders were served and initial plotting suggested that the road corridor might pass just to the north and cause little or no damage. A provisional project design had been drawn up so that evaluation could take place as soon as access could be arranged. A geophysical survey was carried out in December 1993 suggesting scattered anomalies were located across the area with one of the ring-ditches within the road corridor. An area approximately 30 x 50m, was then opened up confirming that both rings were threatened. Trial trenches were located across the remaining part of the route to assess the nature and extent of any further remains. Settlement and boundary features were located within both the open area and the immediately adjacent trial trenches.

Immediately to the south within OS land parcels 5600 and 8500, evaluation and full excavation ahead of proposed gravel extraction indicated archaeological activity continuing as far as 250m south of the Village Farm site (Phillips and Shepherd 1994, and this volume appendix 1)

Method statement

Excavation was carried out in accordance with *Bedfordshire County Archaeology Services' Procedures Manual*. Work was undertaken in predominantly dry conditions and the site was well

drained. Topsoil was removed by a mechanical excavator, after which hand excavation commenced. As a result of the prehistoric nature of the site a programme of dry-sieving was maintained, initially based on a 50% sample by volume, of all features, although resources later necessitated that this be reduced to 10%.

Factual data

The following represents a tabulated breakdown of the quantity and type of site structural records. The structural evidence is also presented in the form of a detailed descriptive narrative, organised by Period.

Quantification of material

Table 37 Quantity of site structural records

Record type	Number
Contexts	2204
Site drawings	57 A1 multi context plans/section sheets
Photographs	864 prints/transparencies

Table 38 Quantity of feature types

Feature type	Number	% Total
Ditches and gullies	146	16
Layers	8	1
Pits	132	14
Structural contexts	527	57
Others	113	12
Total	**926**	

The structural remains can be characterised as 'truncated', having been subject to ploughing from at least the later medieval period up to the present day. The vast majority of feature types that remained for investigation were either pits or ditches or structural features (87% of the total), only 8 layer contexts were identified. The structural features were almost exclusively post holes and whereas some of these could be seen to be part of post-built structures (e.g. the Saxo-Norman buildings) the majority remained isolated, spatially and stratigraphically, and constitute a large portion of the unphased material (unphased contexts amount to approximately 30% of the total excavated sample). Surprisingly on site occupied through so many periods (even though settlement appears to have been episodic), there were relatively few spatial relationships with which to establish a secure structural chronology. Activity within different periods appears to have shifted across the site through time, seldom occupying the same space. Pottery spot dates have been relied on to a great extent in constructing the provisional phasing, and this accounts for the large number of unphased features, many contained no datable material.

Evidence by period

Table 39 Phasing Summary

PERIOD	CONTEXTS No.	/%	LANDSCAPE GROUP	DESCRIPTION
Period 1: Natural glacial and alluvial deposits	143	6	14, 20, 27	
Period 4: Late Neolithic/Early Bronze Age	120	5	1	Ring-ditches and boundary

Period 7: Iron Age	446	20	2, 3, 16, 18, 24, 26	Settlement
Period 11: Saxon	72	3	13	Settlement
Period 12: Saxo-Norman	287	13	6, 7, 11, 23	Settlement
Period 13: Medieval	356	16	4, 5, 8, 9, 12, 15	Settlement
Period 14: Post Med to Mod	5		17	Cultivation
Period 15: Unphased groups	638	30	19, 21, 22, 25	

PERIOD 1

Tree Clearance

A collection of irregularly shaped features, interpreted as tree throws, were recorded. None of these contained datable material or formed part of a stratigraphic sequence.

PERIOD 4 Late Neolithic/Early Bronze Age (fig.9)

Two ring ditches were located on the southern side of the site. Later ploughing had removed any mound material.

Ring ditch (A5)

This measured approximately 15m in diameter with a ditch 2m. wide and 1m. deep. Within the fills a clear break could be seen between primary silting of more minerogenic material and secondary filling of a more humic nature, the two phases were separated by a possible stabilisation horizon. This horizon coincided with a break in the cultural record: the primary fills were largely absent of finds other than flint, the upper fills were associated with bone, lithics and ceramics of Iron Age date.

Ring ditch (A56)

This measured approximately 35m in diameter with a ditch 3m. wide and 1.2m. deep, much more substantial than (A5). The ditch fills may have been substantially disturbed as a result of animal burrows and root action, although a similar sequence of primary and secondary deposits could be identified, with again Iron Age material coming from the upper fills (as with ring ditch (A5), the fills have been split between Periods 4 and 7 as a result of this).

Ditch (A46) (fig.10)

Towards the eastern end of the site a single linear ditch, approximately 50m. in length, was recorded as being cut by the later medieval field/enclosure boundaries. No other features were found in a similar stratigraphic position or oriented to a similar alignment. Most striking were the fills, noted on excavation as being "very different from surrounding features" in their leached-out quality. Although no datable material was recovered this last characteristic suggests a prehistoric date.

PERIOD 7 Iron Age (fig. 9)

The site of the ring ditches may have retained some ritual significance into the Iron Age; two isolated cremations may indicate this. The great majority of features, however, may indicate settlement with storage pits and four-post structures having been identified.

Ring ditches

Both ditches were open during the Iron Age and received contemporary cultural material into their upper fills. The fills of (A5) produced an assemblage of bone and pottery of Early or Middle Iron Age date with nine contexts producing flint and bone only. The same pattern is true of the larger ring ditch (A56), although extensive animal and root disturbance had taken place and, unlike ditch (A5), no clear break in the deposits was visible. Nevertheless, a concentration of flint and Iron Age pottery was observed in the upper fills. Notable finds included a flint convex end scraper, of late Neolithic or early Bronze Age date (RF17) and presumably residual, and a Roman kiln bar. The bar, together with a small amount of Roman pottery suggests the ditch of the larger ring remained open even into Period 9. The root and animal disturbance suggests that the barrow mound may have become overgrown and further protected from denudation. If, as the ditch diameter suggests, it had been a large mound then it may have remained a feature in the landscape for some time, requiring substantial effort to level it.

Pit alignment

Immediately to the east of the larger ring ditch (A56), a N/S oriented alignment of pits and large post holes was located, (A19). This extended for at least 40m and may have continued beyond the southern edge of the excavation, although the alignment clearly ended before the northern limit of the site. The alignment comprised thirty individual features. These were not laid out end to end but in rough pairings creating the overall impression of a double alignment. Few relationships were identified between the separate pits, and so the alignment's origin as a single or multi phase feature remains obscure.

The alignment appears to run tangentially from the NE edge of ring (A56), a single pit (A200) apparently cutting the upper fills, although the definition of the ditch was confusing at this point and the relationship remains uncertain. The spatial relationship is nevertheless significant and provides further indication that the ring ditches, and by inference the mounds, might still have been visible at this time.

A definitive interpretation of the pit alignment is not possible at this stage; further analysis is needed on the form and spatial relationships of the features. At a very simple level, it may represent a line of storage pits, these ranged along, or themselves forming, a boundary. Parallels for this exist at sites in the Upper Thames Valley, for example at Butlers Field, Lechlade (Miles and Palmer 1986) and another example has recently been published from Milton Keynes (Williams 1993), found in association with an Iron Age enclosure similar to (A56). Alternatively, the alignment may have had some ritual significance, and this might be indicated by its association with the still upstanding (A56). This interpretation might be supported by the location of cremation (A20) on the western edge of the alignment. A number of the pits appear to have held timber uprights, this could equally support a boundary or ritual interpretation.

Cremations

Three possible human cremations were identified, the first (A20) on the western edge of the pit alignment and a second (A78) approximately 10m. to the north of ring-ditch (A5). Both of these were contained within small pits and pottery of Iron Age date was recovered from the backfill. The third cremation (C2512/3) (fig.10) lay 105m to the east of the larger ring in an area otherwise devoid of Iron Age remains. Dated by pottery sherds the cremated bone was accompanied by the in-situ burnt skeleton of a dog and by three cow ribs, presumably a joint of meat. The first two cremations may imply continued use of the barrow site as a focus for sepulchral and ritual activity. The third more elaborate cremation may not be contemporary although its relative distance from the ring-ditches need not rule out association.

Settlement

Post-built structures and alignments

Five 'four-post structures' were identified (e.g. A3); a group of three within the area of Period 11 occupation are not well dated and may in fact relate to that later activity. The majority of post-built structures were sited to the west of the pit alignment. (A9) may represent two further four-posters or an eight-post structure (A8) is possibly incomplete and may mark the site of a six-post structure. In addition, at least two short linear post alignments were also recorded, (A25 and A94). These were located to the east of the pit alignment and were parallel, 2m apart, and aligned east to west. It is possible that they formed fence lines, but interpretation is hindered by their location adjacent to the eastern limit of excavation.

Pit groups

To the west of the main pit alignment, a complex of small pits and post holes have been grouped together as landscape group (L16). In addition there is a scatter of Iron Age features, (L24), extending across the site. Neither of these groups can be convincingly interpreted as parts of structures/alignments but they do appear to indicate settlement activity of Iron Age date.

PERIOD 11 Saxon (fig.10)

Settlement

Sunken Feature Buildings and Pits

Evidence for Saxon activity took the form of scattered pits and buildings concentrated to the east of the Iron Age features. Two, (A17) and (A16), appear to be Sunken Feature Buildings (SFB's). The first, (A17) comprised a shallow (c.200mm.), rectangular scoop 3.8 x 2.5m., aligned east-west, with post holes, located centrally, in what were presumably the gable ends. The fills contained an assemblage of pottery and loom weights of early Saxon type. A burnt piece of timber was also located within these fills and was sampled for possible C14 analysis.

A slightly larger, but otherwise similar, cut (A16), was situated just to the east. This had the same general characteristics as (A17), although the terminal posts were not as well defined.

The other Saxon features were less diagnostic. Pits (A64) and (A65) were situated in the eastern side of the site. They were irregular, shallow features, containing small quantities of Saxon material. Feature (A33) was a large, irregular steep sided pit, containing Saxon material and may perhaps be best interpreted as a quarry pit, as might (A96).

PERIOD 12 Saxo-Norman (fig. 10)

The main focus for activity during this period lay within the central part of the excavated area; a collection of post-built buildings with associated pits, possibly marking the site of a compound and defined by a ditched boundary to the west. A scatter of pits and post-holes, including a single structure, indicate activity to the west and east beyond the compound.

Boundaries

Although many of the later medieval boundaries contained pottery of Saxo-Norman date, (L6) was the only boundary securely dated to this period. A curving discontinuous ditch running the width of the site, its form was complicated by two short lengths of gully, and linear spreads which together suggest a ditched trackway rather than a single boundary. If this boundary/trackway can be considered the western limit of the Saxo-Norman farmstead then the eastern boundary may have been fossilised in a similar curving ditch, part of the later medieval field system. This would explain the form of that ditch when all others within that system were rectilinear.

Settlement

Buildings

(Landscape group 7)

Four buildings were recognised. Most substantial was an east-west aligned building 8 x 4m. (A28), with a possible entrance midway along its' east side. Building (A27) was similar in character, although smaller at 4 x 2m. and may have been a subsidiary structure to (A28). To the south Buildings (A29) and (A54) may have formed a similar pairing. Together the two sets of structures may represent a single farmstead, with buildings arranged around a central yard area.

Further traces of structures, in the form of post alignments (A30) and (A121), to the east of building (A28) may have been fence lines/boundaries or possibly the fragmentary remains of further buildings.

A single isolated structure (A86) was located outside to the west of the compound. Post-built and measuring 10 x 5m. this was again poorly dated. Unlikely on form to earlier than the Saxon period it could nevertheless run into the twelfth/thirteenth century, contemporary with many of the features in this part of the site.

Pits

Within the compound, on its northern side and scattered around Buildings (A27) and (A28) were ten pits, all in the region of 1m. in diameter. No obvious function has yet been identified. A significantly larger pit (A36), may originally have been a quarry.

Scattered, isolated features dating to this period were located throughout the site.

PERIOD 13 Medieval (fig.10)

Later medieval activity concentrates to the east and west of the Saxo-Norman occupation. To the east regular strip-like enclosures were formed and within the south-east corner evidence for industrial activity was recovered; this continued east as observed in the watching brief. To the west more irregular enclosures were laid out with settlement activity recorded along the northern edge of the site. The spot dates for this period cover the eleventh to fourteenth centuries, a timber-lined well (A10) having filled up by the fifteenth century.

Boundaries

To the east two systems of enclosure can be postulated, the strip fields (L9) and a possible earlier system (L8). The earlier system comprised discontinuous ditches forming an isolated rectangular enclosure: this dated no earlier than the twelfth/thirteenth century. The few, and rather uncertain, stratigraphic relationships available suggest this system was replaced by the strip enclosures: these were organised along a major NE-SW axis with the ditch fills collecting into the thirteenth/fourteenth century. The curving easternmost element of this system appears rather incongruous compared with the die-straight aspect of the other ditches, and this may reflect an earlier boundary, possibly that to the Saxo-Norman farmstead compound.

Although no material later than the fourteenth century was recovered from the (L9) ditches the enclosures appear to have continued in use into the eighteenth century, the boundaries clearly visible on the Estate Map of 1746 (CRO:XI/6/I). This also raises the possibility that the enclosures are in fact quite late or long-lived, the pottery recovered being residual.

A further group of linear ditches, (L5), is situated at the western end of the site. These are far more irregular in layout and form a more complex pattern of activity than those to the east. Again the possibility exists for an earlier isolated enclosure, although no relationships exist to confirm this and the disposition of ditches might merely reflect a more haphazard contemporary layout. A similar range of twelfth, thirteenth and fourteenth century dates was recovered.

Settlement

(Landscape group 4).

Located within the SE corner of the site were two hearths (A50), both similar bowl-shaped features, one associated with evidence for metalworking. The lining of hearth 2955 was sampled for archaeomagnetic dating and gave a date of 1140-1230 AD (AJC-119). During the watching brief a further hearth (A228) was located 20m to the east. The relationship of these features and the activities they represent to the boundaries of (L9) is uncertain. Two isolated pit were also recorded in the NE corner.

(Landscape group 15)

A second group of features indicating settlement were concentrated along the northern edge of the site in the area of the boundaries (L5). These comprised a number of pits and post holes and in particular a possible bread oven (A100) and a well (A10). The oven was sampled for archaeomagnetic dating purposes and gave a date of AD 1060-1120 (AJC-118) derived from the lining.

(Landscape group 12)

A group of three pits (L12) indicate a third focus of activity within the area of Saxo-Norman settlement. The pits were rectangular, c.3m long with well defined edges and flat bases. All three contained material of medieval date- notably an 'Ave Maria' brooch, dating to the thirteenth to fourteenth centuries from (C1852).

PERIOD 15 Unphased groups

A large number of the features recorded at Village Farm were effectively isolated, possessing no stratigraphic or physical relationships and containing no datable material. In most cases these were without doubt archaeological in origin, largely pits and post holes, and indicative of activity and

indeed structures. It has however been difficult to integrate these features into the provisional phasing and they await integration during full analysis.

2.2.2 REGISTERED AND NON CERAMIC BULK ARTEFACTS

Factual data

Quantification of material

Registered finds, recorded on site numbered 76 artefacts. Of this material four pieces were of flint (these will be discussed along with the bulk flint in a separate section) and eighteen were ceramic; these also will be discussed separately. The non-ceramic bulk finds assemblage (excluding flint) comprised slag (7082 g), burnt stone (3284 g), non local stone (232 g), fourteen fragments of plaster, one stone roofing tile and twenty-five iron nails.

Provenance

The registered and non-ceramic bulk finds range in date from the Iron Age to the post-medieval period. Typologically datable artefacts are present in the following quantities;

Date	Quantity
Roman	1 registered artefact
Saxon	2 registered artefacts
medieval	12 registered artefacts
post-medieval/modern	4 registered artefacts

Registered find 48 was one of eleven lava fragments, nine from period 13, one from period 12 and one unphased, to be recovered and the only example to retain a deeply grooved grinding surface identifying it as Roman. Lava querns, from the Mayen quarries in Germany or possibly also from the Auvergne region of France were imported throughout Roman period and again from the middle Saxon to the later middle ages. Without surviving details of form, such as the grinding surface, it is impossible to date the lava fragments typologically. It however seems likely that some fragments, at least, judging by their battered state, are residual.

Easily identifiable residual elements, (discounting the flint) are present only in period 13 in the form of Rf 25 (Seax knife blade) and Rf 48 (lava quern fragment). The majority of registered finds derived from features attributed to period 13 and the presence of residual pieces is not unusual considering the long sequence of occupation or peripheral activity evident on the site.

Phasing and date range

The non-ceramic artefacts recovered from hand-excavated features and metal detected/surface finds are presented by period and associational group in table 40.

Table 40 Registered finds (excluding flint and ceramic).

Registered Find No	Period	Associational Group No	Context type	Description
12	7	R 226	fill of ring ditch	bone object
20	7	I 202	fill of ring ditch	Ca sheet
24	7	I 150	isolated feature, hearth?	saddle quern
49,50,51,52	7	I 202	fill of ring ditch	Fe object
40	11	I 33	isolated feature fill	Fe object and slag
64	11	B 17	fill of SFB 1	bone needle
19	12	U 23	undiagnostic	lava quern
1	13	D 1	fill of ditch	Fe horseshoe
2	13	D 1	fill of ditch	Ca mount
11	13	D 1	fill of ditch	Fe staple

5	13	D 1	fill of ditch	Ca strapend
3	13	D 6	fill of ditch	Pb panweight
30,31,36,37	13	D 38	fill of ditch	lava quern
25	13	D 52	fill of ditch	Fe knife, 'seax' type
38	13	D 52	fill of ditch	lava quern
41,65	13	P 53	fill of pit	lava quern
81	13	P 59	fill of pit	Ca pin
68	13	P59	fill of pit	mod. glass (intrusive)
29	13	P 59	fill of pit	Ca brooch
48,60	13	S 10	fill of structure (well)	lava quern
44	13	S 10	fill of structure (well)	Fe knife with bone handle
45	13	S 10	fill of structure (well)	Fe knife blade
47	13	S 10	fill of structure (well)	Ca lacetag
72	13	S 10	fill of structure (well)	whetstone
78	13	S10	fill of structure (well)	iron chain
76	13	S 10	fill of structure (well)	Fe lock barrel
79	13	S10	fill of structure (well)	Ca pin
77	13	S 10	fill of structure (well)	Fe strip
6	13	U 169	undiagnostic	quern fragment
69	13	U 169	undiagnostic	Fe fragment
26	14	A 206	topsoil	cast Ca object
13	14	A 206	topsoil	Pb weight
67	14	A 206	topsoil	Fe object
66	14	A 206	topsoil	Pb shot
59	14	A 206	topsoil	Fe rake prong (rod)
75	14	A 206	topsoil	Pb strip
71	14	A 206	topsoil	Ca sheet
63	14	A 206	topsoil	Fe horseshoe
62	14	A 206	topsoil	Ca belt fitting
4	14	A 206	topsoil	Pb spindlewhorl
6	14	I 122	isolated feature fill	lava quern
10	15	P 70	fill of pit	Ca pin
82	15	P 114	fill of pit	Ca sheet
	15	-	-	Pb spindlewhorl
18	15	-	-	lava quern

The non ceramic bulk finds, recovered from hand excavated features are presented by phase and associational group in table 41.

Table 41 Excavated non-ceramic bulk finds.

Period	Associational group	Fe nails	Non-local stone	Stone roofing tile	Burnt stone	Plaster/ mortar	Metalworking debris
4	R56				136g		
4	D201				70g		
4	C78		2g				
7	P 19		22g		7g		
7	I92				18g		
7	I 202		1g				70g
7	I142				857g		
12	I85						24g
12	I 36		43g		182g		
12	P 114		164g		218g		<1g
13	P59	2			1318g		32g
13	D44	1					
13	D 38	1	1	1			
13	D 45						5g

13	D101	1					
13	I80	8				103g	
13	I100				115g		
13	I806	1					
13	P76	1					
13	P125	1					
13	S10	4			258g	401g	
13	S50				105g		6822g
15	P139	1					1g
15	A206	1					127g
15	-	3					
TOTAL		**25**	**232g**	**1**	**3284g**	**504g**	**7082g**

Range and variety

The majority of registered finds derived from hand excavated features. Additionally, extensive use of the metal detector, both over the area of excavation and the stripped topsoil accounted for a large proportion of metallic artefacts. Whilst this policy resulted in the recovery of a full range of metalwork it may have also resulted in some bias.

Twenty-four different forms of registered artefact (discounting the flint and ceramic material) were recovered. These have been allocated simple names and are presented below in Table 42. Functional categories have been assigned to them according to the Bedfordshire Artefact Typology.

Table 42 Registered artefacts by function.

Simple Name	Fastenings	House-hold	Craft and industry	Multi-purpose tools	Trade and commerce	Personal	Animal trappings	Multi-functional
staple	1							
lock	1							
chain	1							
querns		14						
vessel glass		1 intrusive						
needle			1					
spindle-whorls			2					
whetstone				1				
knives				3				
panweight					1			
pins						3		
mount						1		
strapend						1		
belt fitting						1		
lacetag						1		
brooch						1		
horseshoes							2	
rod								1
sheet								3
strip								2
Misc. objs.								11

Table 43 Industrial residues (smithing)

Period	Associational group	Fe slag	Fuel ash slag
7	I202	70g	
11	P59	32g	
12	I185	9g+hammer-scale	
12	P114		<1g
15	P139	1g	
15	A206	127g	

Table 44 Industrial residues (smelting)

Period	Associational group	Tap slag	Furnace lining	Furnace bowl
12	I85	? 15g		
13	S50	1053g	514g	5255g
13	D45		5g	

Condition

The condition of the non ceramic finds varied according to the material. All the ironwork and one copper-alloy artefact (Rf. 29) was selected by the Non-Ceramic Finds Manager for examination by the Conservator. The condition of the metalwork was assessed by visual examination with the aid of a sterco microscope and x-radiography. Four iron artefacts and the single copper-alloy were selected to undergo investigative conservation to assist with identification, illustration or construction.

The iron artefacts and the ferrous slag were in fair to poor condition, partially covered in soil and brown, dark brown and some orange-brown corrosion products. Mineral-preserved wood and/or vegetable matter were present on six of the registered finds and two nails.

Distortion, by corrosion was less apparent in the remaining metalwork. The copper alloy brooch (Rf. 29) was in fairly poor condition and displayed light green, dark green and patchy purple-red discoloration.

2.2.3 FLINT

Factual data

Quantification

A total assemblage offour registered flint artefacts and c.225 bulk finds, comprising flint tools, cores and debitage was recovered from Village Farm.

Provenance

The majority of flint from Village Farm was recovered from excavated features, only three pieces or 1.3 % derived from topsoil stripped from the excavated area (context no. 1016) or were allocated this number due to uncertainty of their origin. The two ring ditches together yielded 97 pieces, or 42.35% of the total assemblage.

Phasing and date range

Table 45 Quantification of flint by Landscape group and period

Period	Landscape Groups	Quantity	% of total
1: natural glacial/alluvial	L20	6	2.62%
4: late Neo./ early BA	L1	5	2.18%
7: Iron Age	L2, L3, L16, L24, L26	163	71.17%
11: Saxon	L13	10	4.36%
12: Saxo-Norman	L6, L7, L11, L23	15	6.55%
13 Medieval	L4, L5, L8, L9, L12, L22	20	8.73%
14: Post-Med./ modern	L17	4	1.77%
Unphased	L19	6	2.62%
Total		**229**	**100%**

Provisional assessment indicates that the recovered flint assemblage ranges in date from the Mesolithic to the early Iron Age. Twenty-seven pieces displayed characteristics of manufacture and flint quality suggestive of Mesolithic or earlier Neolithic date and 184 pieces showed characteristics appropriate for the later Neolithic through to the early Iron Age. The remaining fourteen pieces were too fragmentary to be datable.

The majority of worked flint from Village Farm is likely to be residual. The material from the two ring ditches will be discussed separately because of the possibility of 'in situ' flintwork.

Smaller Ring Ditch

Approximately 50% of the smaller ring ditch in plan was revealed by the initial topsoil strip. It was sectioned at intervals in such a way that approximately 70-80% of the revealed extent was fully excavated. In addition 50% of the excavated ditch material was dry-sieved using a 50mm mesh. The small assemblage recovered included thirteen pieces of struck flint. None of the material derived from the primary fills, associated with the construction of the monument. Ten pieces, date to the Mesolithic or earlier Neolithic. The remainder, including a crude flake core are broadly datable to the later Neolithic or later.

Larger Ring Ditch

A smaller proportion, perhaps 30-40%, of the second ring ditch was revealed by the excavation. It was, however considerably larger than the first both in terms of the projected overall circumference and the depth and width of the ditch. A slightly smaller sample was excavated, compared with the smaller ring ditch, although a much greater volume of material was removed. As a consequence of the increased volume of spoil, the sieved sample was cut to approximately 20%.

In common with the smaller ring-ditch, the contexts associated with the larger were allocated to two periods. The sterility of the earlier phased fills seen in the smaller ring ditch was mirrored in the larger, with only two undiagnostic pieces, deriving from period 4 fills.

Three tools, and large quantity of debitage (c.81 pieces) were recovered from the upper fills of the larger ring ditch (tables 45-46). The debitage was, generally of a very similar nature with hard hammer struck flakes and rough cores predominating and some pieces clearly deriving from the same nodule. The manufacturing techniques seen on this material is suggestive of a late Neolithic or later date, although two blades and a soft hammer struck flake may be Mesolithic or earlier Neolithic. The flint itself was uniformly dark grey and most pieces bore traces of fairly thick buff coloured cortex.

The extreme scarcity of flint debitage or tools from the primary ring ditch fills would appear to suggest limited activity prior to and at the time of the ring-ditches' construction or a situation where domestic activity is divorced from the ritual element.. The large quantity of flint debitage recovered from the humic upper fills of the larger ring-ditch almost certainly relates to the secondary use of the monument, associated with the early Iron Age settlement. The extremely crude appearance of the bulk of this material makes it likely that it is closely contemporary with the Iron Age pottery found in association.

Range and Variety

A scan of the flint assemblage indicates that the majority (198 pieces / 88%) comprise debitage or burnt pieces. Of the remaining material, nineteen pieces were cores and eight displayed secondary working in the form of partial or continuous retouch and are here classed as tools (table 46).

Table 46 Tools by associational group and period

Tools Rf. No.	context type	period	type	date
8	ring ditch fill	7	'chisel' type transverse arrowhead	late Neolithic
9	pit fill	7	convex end scraper	late Neolithic/early Bronze Age
16	ring ditch fill	7	convex end scraper	late Neolithic/early Bronze Age
70	topsoil	14	ovate	Neolithic/early Bronze Age
-	pit fill	7	retouched flake	late Neolithic/early Bronze Age
-	ring ditch fill	7	thumbnail scraper	early Bronze Age
-	structure	12	retouched flake	late Neolithic/early Bronze Age
-	pit fill	13	concave scraper/ notched flake	late Neolithic/early Bronze Age

The quality of the flint encountered was variable, with some pieces being worked despite flaws and calcareous inclusions. The flint ranged in colour from pale grey to mid brownish grey and black. Cortex survived on 168 pieces (74.7%) this ranged in colour and thickness but generally was thinned

and abraded. The variable quality of the flint , and the abrasion present on the cortex strongly suggests that most, if not all of the raw material was obtained locally from river deposited gravels.

Condition

The condition of the flint assemblage was generally good, with few pieces other than those recovered from the topsoil showing signs of extensive post depositional damage. The material from the larger ring ditch was particularly notable for the sharpness of the flint edges, a good indicator of primary deposition. A very small proportion of the assemblage showed signs of patination. Significantly, those that did are datable to the Mesolithic or earlier Neolithic.

2.2.4 CERAMICS

Factual data

Quantification of material

Pottery

The Village Farm pottery assemblage was recorded by fabric type and form. Quantification was by sherd and vessel count. This was entered on to computer to facilitate manipulation of the data. A total of 2404 sherds was recorded representing 1779 vessels.

All quantitative statements made in this assessment, are based on sherd count.

Building Material and Miscellaneous Fired Clay

A total of 157 fragments of flat roof tile, 224 fragments of daub or fired clay, 2 fragments of ridge tile and a single fragment of brick was recorded. In addition single intrusive examples of kiln bar and clay pipe stem were recovered.

Provenance

Pottery

Table 47 Quantity of pottery, by sherd, from varying feature types

Context type	sherds	% TOTAL
Pits	1152	47.8%
Structural	738	30.8%
Linear ditches/furrows	213	8.95%
Ring ditches	128	5.33%
Hearths	72	2.99%
Quarry pits	49	2.05%
Cremations	11	.45%
External cultivation (topsoil)	15	.62%
Natural features (intrusive)	18	.75%
Layers	2	.01%
Tree-throw holes	6	.25%
TOTAL	**2404**	**100%**

The distribution of pottery, reflects, the nature of the archaeology at Village Farm (table 47). Intact vertical stratigraphy was almost entirely lacking and ditches were few in number and generally of small dimensions. Pits and structural cuts predominate and correspondingly, 85.6% of the pottery derives from these features. Risk of contamination is lowest in cut features such as pits and ditches, particularly in their primary fills. Contamination is generally low at Village Farm, due mainly to limited incidence of intercutting features.

Levels of abrasion were recorded, however they cannot be seen as a reliable guide to the extent of residuality. The proportion of different fabrics and the ratio of sherds to vessels and sherd weight are of more help in defining residuality.

Building materials and miscellaneous fired clay

Table 48 Quantities of building material and fired clay from different feature types

Context type	Roof tile	Brick	Daub/fired clay	Kiln bar	Mould fragment	Clay pipe	TOTAL
Pits	113	1	64			1	178
Structural	42		47				89
Ditches	4		19	1			24
Hearths			85		1		86
Layers			9				9
TOTAL	**159**	**1**	**224**	**1**	**1**	**1**	**386**

As with the pottery, the other ceramic material derives predominantly from pits (46.1%). The fills of large pit or well 2724 (part of associational group 80) accounted for 70% of all brick and tile. A total of 112 fragments from 54 separate flat roof tiles were recovered from this feature.

Phasing and date range

Table 49 Quantities of pottery, by sherd (within phase. 66 sherds from unphased contexts and 8 undiagnostic sherds have been omitted)

Pottery group	Period 1	Period 3	Period 4	Period 7	Period 11	Period 12	Period 13	Period 14	TOTAL
Iron Age	14	4	26	1185	9	12	17	7	**1274**
Roman	-	-	-	2	2	1	3	2	**10**
Saxon	2	-	-	-	120	10	15	1	**148**
Saxo-Norman	-	1	-	3	-	282	29	3	**318**
Medieval	2	1	-	-	-	2	571	1	**577**
Post med.	-	-	-	-	-	-	2	1	**3**
TOTAL	**18**	**6**	**26**	**1190**	**131**	**307**	**637**	**15**	**2330**

The pottery assemblage dates from the early Iron Age to the post-medieval period. All phases, subsequent to the Iron Age, display incidence of residuality and this rises gradually with each successive phase. Intrusion, in small numbers of sherds, occurs fairly consistently throughout the represented periods and is only absent in the Saxon phase. Such small scale intrusion can be explained by animal and root action.

Twenty-six sherds of pottery were recovered from lower fills of the ring-ditches which have been attributed to period 4. All the recovered material is of Iron Age date and as such is intrusive. The intrusion is explicable, in this instance by the extensive animal disturbance encountered in the area of the ring-ditches.

Three landscape groups could not be attributed to a particular period. Feature fills and layers belonging to these groups yielded sixty-two sherds of pottery of Iron Age, Saxon, Saxo-Norman and medieval date.

Building material and miscellaneous fired clay

Table 50 Quantification of building material and fired clay by period

Category	Period 7	Period 11	Period 12	Period 13	Unphased	TOTAL
Daub/fired clay	57	18	75	31	41	222
Brick				1		1
Roof tile				156	4	160
Kiln bar	1					1
Mould frag.		1				1
Clay pipe	1					1
TOTAL	59	19	75	188	45	386

The distribution of building material through time shows a predominance of tile in period 13. The large quantity of daub in period 12 results from the concentration of this material in a single structure, interpreted as an oven superstructure.

Range and variety

Pottery Type Series

Fabric types marked with one asterisk are known types, but new to the Bedfordshire Type Series; those marked with two asterisks are completely new types.

EARLY-MIDDLE IRON AGE			*TOTAL 1245*
F01A	Coarse flint		91
F01B	Fine flint		23
F02	Grog and flint		8
F03	Grog and Sand		45
F16	Coarse shelly		219
F17	Grog		46
F18	Shell and sand		37
F19	Sand and organic		3
F20	Calcareous inclusions		32
F22	Grog and organic		4
F23	Grog, shell and sand		2
F27	Shell and grog		2
F28	Fine sand		130
F29	Coarse sand		187
F30	Sand and calcareous inclusions		263
F32	Sand and Flint		23
F	Sand and white inclusions	**	110
F	Sand and gold mica	**	2
F	Coarse shell and sand	**	8
F	Grog and calcareous inclusions	**	5
F	Coarse sand and flint	**	5
LATE IRON AGE			*TOTAL 45*
F04	Grog and organic		1
F06A	Fine grog		3
F06C	Coarse grog		2
F07	Shelly		31
F08	Grog and shell		1
F09	Sand and grog		7
ROMAN			*TOTAL 10*
R01	Samian		1

R06	Greyware		3
R11	Oxford		1
R12	Nene Valley colour coat		1
R13	Shelly		2
R	Misc. sandy		2
SAXON			*TOTAL 149*
A01	Organic and mica		3
A06	Sandy		4
A11	Maxey type		4
A16	Coarse sand		50
A18	Fine sand		20
A19	Quartz and organic		8
A23	Sandstone		22
A25	Sand and calcareous		5
A	Coarse sand and mica	**	4
A	Sand, calcareous and gold mica	*	1
A	Sand and gold mica	**	3
A	Organic	**	1
A	Red quartz	**	16
A	Sand and organic	**	2
A	Coarse quartz	**	5
A	White mica and sandstone	**	1
SAXO-NORMAN			*TOTAL 357*
B01	St Neots type ware		355
C12	Stamford ware		2
MEDIEVAL			*TOTAL 579*
B07	Shelly		110
C01	Early medieval sandy		51
C04	Sandy		21
C05	Sandy reduced		40
C10	Potterspury		107
C11	Brill/Boarstal		2
C59a	Sandy reduced		13
C60	Herts greyware		4
E01	Late medieval reduced		133
E02	Orange gritty		88
P12	Cistercian ware		4
-	Misc. medieval		8
POST MEDIEVAL			*TOTAL 7*
P07	Brill/Boarstal		2
P	Creamware		1
UNDIAGNOSTIC			*TOTAL 12*
-	Misc. sandy		8

Few vessels could be reconstructed to full profile. The forms of 125 vessels, 7.02% of the total assemblage, could however be distinguished from distinctive rim or base sherds. The majority of pottery consists of unrecognisable body or base sherds. Some distinctive body sherds, such as those bearing stamped decoration, dating from the Saxon period, or glazed medieval sherds can be strongly linked with a particular vessel form, in this case, urns and jugs respectively. However, not all stamp decorated vessels were urns, or glazed vessels, jugs. Consequently, these body sherds have been recorded as coming from unrecognised vessels.

Table 51 Vessel forms by chronological grouping

Form	Iron Age	Roman	Saxon	Saxo-Norman	Medieval	TOTAL
jars/cooking pots	46		6	19	15	86
bowls		1		11	9	21
jugs				1	9	10
carinated forms	3					3
cisterns					2	2
spouted pitcher				1		1
crucible					1	1
platter		1				1
TOTAL	**49**	**2**	**6**	**32**	**36**	**125**

Table 52 Types of Decoration

Date	Forms of decoration	Total of decorated vessels	% of vessel assemblage
Iron Age	finger indented, scored/grooved	25	<3%
Saxon	finger indented, grooved, stamped	6	5%
Saxo-Norm.	finger indented	3	1%
Med.	incised; thumbed base angles; applied strips	4	1%

Table 53 Pottery Imports

Provenance group	Pottery code	Pottery type	No of sherds
Continental imports	R01	Samian	1
		Total	*1*
National imports	R11	Oxford orange	1
	R12	NVCC	1
	C12	Stamford	2
	P12	Cistercian	4
		Total	8
Regional imports (from neighbouring county)	C60	Herts greyware	4
	C11	Brill/Boarstal	2
	C10	Potterspury	107
	P11	Brill/Boarstal	2
		Total	*115*

Iron Age

The Iron Age pottery assemblage comprises 1290 sherds, representing, over half of the pottery recovered from Village Farm (53.66%). Early-middle Iron Age fabrics dominate, with only a small quantity of fabric types characteristic of the late Iron Age. The presence of carinated forms and porous or 'corky' fabrics might imply a late Bronze Age residual element in the assemblage, although this material may continue into the early Iron Age.

The majority of Iron Age fabric types encountered at Village Farm are known from other sites in the county. However, five new types, using combinations of tempers, have been identified. These are marked ** in the type series.

Forty-nine early-middle Iron Age vessels with recognisable rim forms were identified. Three sherds derived from carinated vessels, either bowls or jars, and forty-six from jars, displaying a variety of different rim characteristics (table 54).

Table 54 Iron Age vessel forms

Forms Iron Age	Quantity (vessels)
upright-rimmed jars	18
rectangular/flattened rimmed jars	12
everted rimmed jars	9
simple/rounded rimmed jars	5
inturned rimmed jars	2
TOTAL	46

The forms represented in the Iron Age sample are typical of the region, with upright rimmed jars being a common feature at sites such as Stagsden, north Beds. (BCAS in prep), and Puddlehill, south Beds. (Matthews and Warren 1992). Rectangular/flattened rimmed jars similar to the Village Farm examples have been found at the Iron Age settlement site at Salford, mid Beds. (BCAS in prep), and Warren Villas, mid Beds.

Decoration, in the form of scoring, and more commonly, finger indenting on the rim or in a single line below the rim, occurred on twenty-five vessels (table 52). The apparently random incised decoration or 'twig brushing' on the Iron Age vessels is as much as a functional device as it is decorative, and was probably designed to roughen the pot's surface to facilitate handling.

All the Iron Age pottery from Village Farm is likely to have been made locally.

Roman

Ten sherds of Roman pottery were found at Village Farm. This material amounts to less than 1% of the total assemblage and was evenly distributed throughout the phases as residual or intrusive elements.

Two sherds from the residual Roman assemblage were of recognisable form: a greyware bowl and samian platter/bowl (form Drag 18/31). Continental and national imports make up 30% of this group (table 53).

Saxon

Saxon pottery from all phases amounted to 149 sherds or 6.2% of the total assemblage. Included here, are sixteen sherds of sandy fabric which are probably of Saxon manufacture. The uncertainty arising because to the similarity of Saxon and Iron Age fabric types. The Saxon assemblage contained six rim sherds, all of which probably derive from jars or urns

Six Saxon vessels bear decoration executed in a variety of ways (table 52).The use of pre-formed stamps to decorate pottery only occurs in the Saxon assemblage. Three vessels are decorated in this way: two carry impressions of five or seven armed 'stars', and a third displays a more most elaborate scheme, with star and ring motifs, within triangular zones defined by grooves. The vessel falls into Myres' group of enclosed zone decoration, which may, be further subdivided into his 'stamped chevron group'. The style is likely to have developed in Eastern England in the sixth century (Myres 1977).

All the Saxon pottery from Village Farm is likely to have been made locally.

Saxo-Norman

The Saxo-Norman pottery makes up 14.85% of the assemblage, 357 sherds.

Wheel-thrown shelly St Neots type pottery dominates this group. A number of sub-divisions have been defined on the variation of sorting and fineness of temper (Baker *et al* 1979, 165-167). These sub-

groups also appear at Stratton (near Biggleswade) and analysis may determine if this variation is chronologically significant.

Jars and bowls make up the bulk of the recognisable forms in this chronological group (table 51). Single examples of a jug and of a 'spouted pitcher' in St Neots type ware were also identified. Little decoration was noted on the Saxo Norman pottery: The handles of the spouted pitcher and the jug bore finger indentations across their upper surfaces and a bowl was finger indented along its carination.

The bulk of the Saxo-Norman pottery, including the St Neots type was probably produced within the county. The small quantity of Stamford ware recovered, reflects both its high status and the distance from the kilns (table 53).

Medieval
Pottery datable to this period comprises 581 sherds or 24.16% of the total assemblage.

All the fabric types belonging to the medieval period are known from other sites in the county. The assemblage spans the period from the 12th to the 15th centuries and includes two good groups of 15th century material, containing a wide variety of diagnostic fabric types. Decoration is limited to thumbing or slashing at the base angles of jugs, slashing or stabbing of jug handles and a single instance of applied strips.

The range of forms from a medieval site can in some cases prove to be an indicator of status. There is usually a contrast between the limited number of forms found on a peasant site, compared to the wide variety encountered on high status manorial or monastic sites. The quantity of medieval pottery found at Village Farm, however, is not sufficient to do more than hint at the status of the site.

National and regional imports account for over 20% of the medieval assemblage (table 53).

Post medieval to modern
Three sherds date to this period, representing less than 1% of the assemblage. The material is either intrusive or from topsoil. No forms or decoration was evident.

Building materials
Tile
Four fabric types can be distinguished, primarily by main inclusion. The incidence of the fabric types is given below.

Table 55 Tile fabric types

Fabric Type	No of fragments
Sandy	117
Gault	13
Sand with calcareous inclusions	12
shelly	1

Peg holes survived on ten tile fragments. In all cases the holes were round or oval with the diameter larger on one surface (from where the hole was pierced). The tiles generally displayed smoothed upper surfaces and were rough and sandy underneath.

Brick
The single fragment of brick was made from a hard fired sandy fabric. It retained no diagnostic features.

Daub/Fired clay
Five fabric types could be identified in the following quantities;

Table 56 Fired clay fabric types

Fabric type	No of fragments
Sandy	159
Sand/organic	51
Grog/sand	4
Calc./flint	7
Organic/flint	3
TOTAL	*224*

Piecemeal deposition of the daub and fired clay is suggested by the fragmentary nature and poor condition of most of the material (table 56). Few pieces showed clear wattle impressions or surviving surfaces. An exception to this was the material from associational group 228, which comprised 70 fragments, in a orange sandy fabric, the larger fragments of which retained smoothed surfaces and bore finger impressions, curved surfaces and thick circular wattle impressions. This material, phased to period 12, probably derived from the domed superstructure of an oven.

Kiln bar A single fragment of a kiln bar was recovered from the upper fills of the larger ring ditch. The sand/organic fabric and the form are consistent with Romano British manufacture and the fragment has much in common with kiln bars from Eastcotts. It is likely that this piece is intrusive.

Mould Fragment A single sherd of a hard fired sandy fabric from period 6 may be from a mould. The remaining surfaces however, retain no details.

Clay pipe A small fragment of stem was the only find of this type to be recovered.

Evidence for use of the pottery
Evidence for use in the Village Farm pottery assemblage is confined to surface sooting and internal residues. Ten vessels, comprising one Saxon and nine of medieval date, display external sooting, whilst internal sooting is limited to two vessels of a St Neots type. Internal residues were noted on four vessels: three are of Iron Age date and the fourth a 15th century cistern. The residues which adhered to base sherds of Iron Age date took the form of a relatively thick carbonised layer. In contrast the residue in the medieval vessel is harder and off-white in colour. The types of substances contained within these vessels may be revealed by residue analysis.

External sooting of vessels may be seen as evidence of heating above a fire. The majority of the sooted sherds are of medieval date. This may either result from a higher degree of surface abrasion on the Iron Age and Saxon pottery, causing traces of sooting to be lost in the ground or during washing, or the possibility that these vessels were used to heat their contents not over a hearth, but by the use of heated stones.

Condition

Pottery
The condition of the pottery from Village Farm was generally good, with 110 sherds, 4.53% of the assemblage displaying various degrees of abrasion. This would appear to be most pronounced in the Iron Age pottery assemblage, this is explicable by the inferior firing of prehistoric pots compared to later ceramics.

Recognisable forms account for 7.02% of the vessel assemblage, suggesting a high degree of fragmentation, prior to deposition.

2.2.5 THE CERAMIC REGISTERED FINDS

Factual data

Quantification

A total of eighteen ceramic registered finds were recorded during the excavation. These comprised fragments from seventeen separate artefacts, of which, fifteen have been identified as loomweights and two as spindlewhorls.

Provenance

All the ceramic registered finds derive from sample excavated features (see table 57, below). It should be noted that Sunken Featured Building 1 (B 17) was fully excavated whereas most pits and post-holes, including those containing the remaining ceramic registered finds were half sectioned.

Table 57 Ceramic registered finds

Registered Find No	Period	Context type	Associational group No	type	Fabric
7	7	fill of pit	P 26	spindlewhorl fragment	F16
14	11	fill of SFB 1	B 17	annular loomweight	C
15	11	fill of SFB 1	B 17	annular loomweight	C
17	11	fill of SFB 1	B 17	annular loomweight	C
21	11	fill of SFB 1	B 17	annular loomweight	C
22	11	fill of SFB 1	B 17	annular loomweight	C
23	11	fill of SFB 1	B 17	annular loomweight	C
27	7	fill of pit	P 2	spindlewhorl fragment	F28
32	11	fill of pit	P 146	pyramidal loomweight	B
53	11	fill of SFB 1	B 17	annular loomweight	C
54	11	fill of SFB 1	B 17	annular loomweight	C
55	11	fill of SFB 1	B 17	annular loomweight	C
56	11	fill of SFB 1	B 17	annular loomweight	C
57	11	fill of SFB 1	B 17	annular loomweight	C
58	11	fill of SFB 1	B 17	annular loomweight	C
61	11	fill of SFB 1	B 17	squared? loomweight	D
73*	7	fill of pit	P 72	pyramidal? loomweight	A
74*	7	fill of pit	P 72	pyramidal? loomweight	A

*Rfs 73 and 74 are fragments from the same object, cross-contexted

A provisional assessment of the registered ceramic assemblage indicates that it may be split into two distinct groups;

- A small Iron Age group (P7), consisting of fragments of two loomweights and two spindlewhorls.
- An Anglo-Saxon group (P11), comprising fragments of fourteen loomweights.

Range and Variety

Fabrics

Spindlewhorls

Two fabrics are discernible by visual examination. These compare with pottery fabrics F16, shelly and F26, fine sand.

Loomweights

Four fabrics can be discerned by visual examination, aided by a magnifying lens, they have been denoted fabrics A to D.

Fabric A

Fine to medium quartz sand with occasional fine grog and coarse quartz. Pale orange surfaces with red-brown core. Hard fired.

Fabric B

Fine to medium quartz sand with occasional coarse quartz, medium grog, and larger stones, also some voids indicating the presence of vegetable matter. Surfaces are pale orange and core is dark grey to black. Hard fired.

Fabric C

Fine to medium quartz sand with occasional larger stones and vegetable matter. Pale orange-red surfaces, usually with grey or black core. Hard Fired

Fabric D

Fine to medium sand with occasional larger stones, vegetable matter and snail shell. Reddish brown surfaces and pale grey core. Probably low fired from unprepared clay.

Forms

Spindlewhorls

The two spindlewhorls were recovered in fragmentary condition and their forms cannot be reconstructed with any certainty.

Loomweights

Three loomweight forms are recognisable:

Pyramidal

Loomweights of this type are well known from the Roman period, but are also found on Iron Age sites (Wild 1970, 63). A single, near complete example was recovered in eight fragments from pit 2916. It was formed from fabric B, measured 150mm from base to apex, 100mm at the base, 80mm across the upper part and it weighed 1341g. Seven joining fragments of fired clay fabric A, with smoothed curving edges, from adjacent pits/postholes 1599 and 1051 almost certainly represent a second pyramidal loomweight, or possibly a contemporary triangular form.

Annular

Parts of twelve annular loomweights were recovered. Of these six were complete enough for their external and internal dimensions to be calculated (see table 58). The best preserved example was 40-50% complete and weighed 377g. All the loomweights of this form were circular or sub circular in section. Annular loomweight forms are the earliest of three related types known in the Anglo-Saxon period (Dunning *et al* 1959, 24-5); as such they are unlikely to date any later than the seventh century.

Table 58 Annular loomweights, comparative diameters

Registered Find No	External Diameter.	Internal Diameter
14	150mm	60mm
15	140mm	80mm
17	150mm	70mm
21	160mm	60mm
22	150mm	70mm
58	150mm	60mm

'Squared'

One example of this unusual form was recovered, made from fabric D. Although in six fragments it is almost complete and its full dimensions can be reconstructed. It was approximately 120mm square

and weighed 534g. The suspension hole, which was positioned off the centreline measured approximately 450mm in diameter. The form shows some affinities with Dunning's intermediate form, in that the internal diameter is considerably smaller than the annular types. The squared form, however, is unusual and its association with 'conventional' annular types makes it unlikely that it belongs to the later intermediate tradition. Instead it may represent a crudely or hurriedly fashioned annular type or else it may have been made for a specialised but otherwise unknown function.

Condition

The condition of the registered ceramic material is variable. None of the material was recovered complete and although in the main hard fired, many pieces suffered additional damage on recovery, due mainly to its bulkiness. All pieces with the exception of the near complete pyramidal form (Rf. 32), were slightly abraded.

2.2.6 HUMAN BONE

Factual Data

Quantification and provenance of material

Three possible human cremations were identified, the first (A20) on the western edge of the pit alignment and a second (A78) approximately 10m. to the north of ring-ditch (A5). Both of these were contained within small pits and pottery of Iron Age date was recovered from the backfill. The third cremation (C2512/3) lay 105m to the east of the larger ring in an area otherwise devoid of Iron Age remains. Dated by pottery sherds the cremated bone was accompanied by the in-situ burnt skeleton of a dog and by three cow ribs, presumably a joint of meat.

2.2.7 ANIMAL BONE

Factual data

Quantification and provenance of material

Ten boxes of bone were recovered from hand excavation. Forty soil samples contained bone fragments or micro fauna.

Table 59 Number of contexts containing animal bone by period

Period	No. of contexts
1	4
4	7
7	46
11	26
12	25
13	54
15	16

Range and variety

Village Farm produced interesting animal bones from a variety of periods. A goat skull came from period 4 fills of the ring ditch (A56). Badger bones recovered from the same context may result from later burrowing. A large group of bones came from period 7 with domestic and wild species represented including horse, cattle, sheep/goat, pig, dog, hare, rabbit, goose and bird. An almost complete dog skeleton accompanied a human cremation.

The Saxon and Saxo-Norman periods (11 and 12) produced reasonable quantities of bone from settlement areas with a marked increase in the medieval period. The majority of the medieval material came from enclosure boundaries (L5) and pit groups (L12) and (L15).

The sieved samples contain rodent, mole and a great quantity of amphibian bones.

2.2.8 MACROSCOPIC PLANT AND INVERTEBRATE REMAINS

Factual data

Quantification, provenance and range of material

Much *Quercus* (oak) charcoal was recovered from a possible Neolithic tree-throw hole, (Sample 47), (Table 61). In this instance, some of the charcoal was root material. Oak charcoal was also present in the late Neolithic / early Bronze Age ring ditches. The occurrence of the molluscs *Pupilla muscorum* and *Vallonia excentrica* in the ring ditches suggests dry, open conditions. The only crop remain is a single grain of naked *Hordeum* sp. (barley), (Table 60), a very plausible cereal for this period. Crop remains are also very sparse from the Iron Age pits with the only identifiable cereal being a single grain of free-threshing *Triticum* sp. (wheat). Although a possible find for the Iron Age, it is not the most usual wheat for this period and given the medieval activity on the site, it is possible that it is intrusive.

Crop remains were not recovered from the Saxon features on the site although they contained a range of charcoal including *Fraxinus excelsior* (ash). In contrast, the Saxo-Norman samples, from a couple of pits and a boundary ditch, yielded crop processing remains, mostly grain of *Hordeum vulgare* (six-row hulled barley) and free-threshing *Triticum* sp. (wheat) but *Avena* sp. (oats) is also present. The crop weeds from this period include *Vicia / Lathyrus* sp. (vetch, tare etc.) and *Galium aparine* (goosegrass). There is much charcoal from some of these contexts, particularly *Quercus* sp. (oak).

The medieval charred assemblages follow the pattern shown by the previous period. The richest samples are from two hearths, A50 and A228. The grain from them includes a much higher proportion of oats, but free-threshing wheat and six-row hulled barley remain important. There are also sparse seeds of other characteristically medieval crops including *Secale cereale* (rye) and *Vicia faba* (field bean). *Vicia / Lathyrus* sp. are the most numerous weed seeds. Charred chaff remains were not observed, and it might be thought that the assemblages represent cleaned grain that was being parched to harden it prior to hand milling. However, Sample 71 from Heath A228 includes pellets of silica ash which contain numerous macroscopic awn fragments of wheat in the form of welded phytoliths. This suggests that much chaff had also been included in the fire and that the predominance of grain was the result of selective charring. There is much charcoal from the medieval hearths, particularly *Quercus* sp. (oak) but there is also some *Ulmus* sp. (elm).

Table 60 Charred Seeds and Chaff from Village Farm

No. of samples by Period	Late Neolithic / Early Bronze Age	Iron Age	Saxo - Norman	Medieval
No. of samples with 1-10 items	1	1	-	-
11-100	-	-	2	1
101-1000	-	-	1	2
Total samples	1	1	3	3
Species by Period				
Triticum sp. free-threshing wheat	-	+	+++	+++
Secale cereale rye	-	-	-	+
Hordeum vulgare six-row hulled barley	-	-	+++	(+)++
Hordeum sp. naked barley	+	-	-	-
Avena sp. oats	-	-	++	+++
Vicia faba field bean	-	-	-	+
cf. *Pisum* / *Vicia sativa* pea / cultivated vetch	-	-	-	+
Arable weeds	-	-	++	++++

+ 1-10 items, ++ 11-100 items, +++ 101-1000, ++++ 1000+

Table 61 Charcoal from Village Farm

Sample Type		Neolithic	Late Neolithic / Bronze Age	Iron Age	Saxon	Saxo-Norman	Medieval
No. flots		1	2	1	-	4	3
No. hand-picked		-	-	1	5	2	2
Total samples		1	2	2	5	6	5
No. samples with charcoal							
Alnus / *Corylus* tp.	alder/hazel	-	-	-	-	1	-
Fraxinus excelsior	ash	-	-	-	1	1	-
Quercus sp.	oak	1	2	2	-	3	4
cf. Pomoideae	hawthorn etc	-	-	-	1	-	1
cf. *Prunus* tp.	sloe etc	-	-	1	1	1	-
Ulmus sp.	elm	-	-	-	-	-	1

2.3 BUNYAN'S FARM

2.3.1 STRUCTURAL EVIDENCE

Summary (fig.11)

Excavations at Bunyan's Farm were limited to the area of the drainage runs to either side of the main road corridor. A single pit of late Bronze Age/early Iron Age date was recorded and parts of a droveway of landscape boundary, possibly of Iron Age date.

Background to the excavation

The excavations at Bunyan's Farm were located 2.5km to the south of Bedford town centre at TL 0610 4730 within the Parish of Elstow. Immediately to the west lay the excavations at Manor Farm, and approximately 1km. to the east those at Village Farm. The site lay on a low ridge of the first gravel terrace, (at 27m.OD), south of the River Great Ouse between and two small tributary streams, the first, the Elstow Brook being some 200m to the north, the second, an unnamed stream, 200m to the south. The land had been under arable cultivation for some time and had been subject to intensive ploughing.

Excavation at Bunyan's Farm was undertaken during April and early May 1994 and proceeded in parallel with that at the adjacent Manor Farm. For practical purposes the two sites were considered a single project at this stage although for phasing purposes they have been separated.

The projected line of the road passed just to the south of a series of crop marks (HER 1626) their form interpreted as of Iron Age/Romano-British date. These consisted of a rectangular enclosure, 100m. x 70m. across, internally sub-divided and associated with smaller external enclosures to the north, and linear boundaries to the south, possibly a trackway. This complex either preceded or post-dated a simpler system of rectilinear boundaries, possibly representing field-ditches. Beyond this, two ring ditches, one immediately south of the enclosures, the other 160m to the east were also clearly identified.

Evaluation, comprising four trial trenches, took place in 1992 (Dawson 1993a), the results having been integrated into this report. Geophysical survey was also undertaken to the east and west to determine the limits of the site. These investigations, in tandem with the crop-mark evidence, indicate the presence of extensive and complex archaeological remains. Initial proposals for full excavation were replaced by a scheme designed to minimise ground disturbance involving the building of a protective embankment over the site. Under this revised scheme archaeological excavations were limited to the line of the roadside drainage ditches.

Method statement

Although preservation of the major part of the site had been proposed, ground disturbance was still to take place along the line of the roadside drainage ditches and these were the focus for our investigation. Two parallel trenches were opened up, 50m. apart, both 5m. wide and 260m. and 270m. long (trench 1 (south) and trench 2 (north) respectively) totalling 0.26ha. Trench 2 continued, without a break, into Manor Farm's trench 2.

Fieldwork was carried out in accordance with the *Bedfordshire County Archaeology Se vice's Procedures Manual*. Work was undertaken in predominantly dry conditions. Topsoil was removed by a mechanical excavator, after which hand excavation proceeded. There was no programmed collection of material from within the topsoil. 50% of all features (archaeological and non archaeological) were investigated in trench 1, and 20% in trench 2. This reflects our increasing ability, as the excavation progressed, to differentiate between features of archaeological and non-archaeological origin.

Factual data

Quantification of material

Table 62 Quantity of site structural records

Record type	Number
Contexts	198
Site drawings	13
Photographs	198

Table 63 Quantification of feature types

Feature type	Number	% Total
Ditches and gullies	28	15
Layers	1	
Pits	6	3
Structural contexts	2	1
Natural	155	81
Total	**192**	

The majority of features excavated at Bunyan's Farm (81% by feature type) have been interpreted as nat ral in origin. All plough truncated with no horizontal stratigraphy surviving. The sequence outlined below relies heavily on pottery spot-dates and spatial integration with adjacent crop marks.

Evidence by Period

Table 64 Summary of provisional phasing

PERIOD	CONTEXT No. / %		LANDSCAPE GROUPS	DESCRIPTION
Period 1 Natural glacial and alluvial deposits	90	45	6, 7, 9, 10,	
Period 6 Late Bronze Age/Early Iron Age	32	16	1, 3	Landscape boundaries and scattered settlement
Period 14 Post medieval to Modern	6	3	11	Cultivation
Period 15 Unphased features	70	35	4, 5, 8	

PERIOD 1

Paleochannel

(Landscape Group 6)

Clearly marked as a d rk linear stain on the aerial photographs, the channel was indicated on site by a change from the natural gravel to a yellowish-brown silty clay. It measured up to 50m. wide and ran north-west to south-east across the two trenches. It was not excavated. The major crop marks appear

to respect the site of the palaeochannel, the ring ditches being positioned to either side and the major enclosure to the west. This suggests it may still have carried water, even if only seasonally, into at least the Bronze Age and possibly into the Roman period.

Tree clearance

A number of tree throw holes were identified. On other Ouse Valley sites, e.g. Peartree Farm, clearance can be provisionally dated by ceramics to the Neolithic. While only Iron Age material was recovered from this group, and this might be residual, the majority of features were undated and might represent an early clearance phase.

PERIOD 6 Late Bronze-Age/Early Iron Age (fig.12)

Settlement evidence

(Landscape Group 2)

Two features were identified that may indicate settlement of late Bronze Age /Early Iron Age date. Pit (A3), containing a good group of datable material, was located at the western end of trench 1, and contained fired clay, daub (some with wattle impressions) and Late Bronze Age/Early Iron Age pottery. There did not appear to have been any in situ burning in the pit, although a scatter of burnt material was found to the immediate south-east of this pit, and undiagnostic fired clay fragments were found on the surface of ditch fill (222) to the west (see L1 above).

PERIOD 7 Iron Age (early to middle)

Boundaries

(Landscape Groups 1, 3)

Both trenches were located to the south of the main crop-mark enclosure and observations confirmed the position of elements recognised from aerial photographs. Two sections through a double ditch/boundary, possibly a narrow trackway running south from the main enclosure, were excavated (L1). Two sherds of Early Iron Age pottery were found in the western ditch fill, (217), with fired clay in the eastern ditch fill (222). 100m to the east an undated ditch on a similar alignment, (A19), but unassociated with crop-mark evidence, may also be part of this system.

Identified within the main trenches and within the evaluation trenches were parts of the crop-mark field system (L3), pre or post dating the main enclosure. No dating evidence was recovered.

One other feature (A9) of possible early Iron Age date was also identified, although the small amounts of material recovered and its uncertain form suggests the material may be residual.

PERIOD 15 Unphased features (fig.13)

he relative paucity of cultural material and the difficulties of feature recognition within narrow trenches has lead to a great deal of uncertainty when attempting to understand the origin of the majority of features observed. This is reflected in the large number of undiagnostic and unphased features, none of them associated with closely datable material, and all apparently irregular in form.

2.3.2 REGISTERED AND NON CERAMIC BULK ARTEFACTS

Factual data

Quantification of material

The non ceramic assemblage from Bunyan's Farm comprised seven pieces of worked flint, and one iron nail. Of the flint, two pieces display secondary working, and are here classified as 'tools', three are debitage and two are burnt but otherwise unworked.

Provenance

Of the non ceramic assemblage, only the flint is typologically datable with any degree of certainty. Provisional identifications of the Bunyan's Farm flint suggest that one piece displayed characteristics of manufacture and flint quality suggestive of Mesolithic or earlier Neolithic date and five pieces showed characteristics appropriate for the later Neolithic through Bronze Age (table 65).

The Bunyan's Farm lithic assemblage is likely to be residual or intrusive. Two flints were recovered from the topsoil, and the remainder from natural ground disturbance 'fills' (table 65).

Table 65 Non ceramic material provenance and dating

context number	context type	associational group	period	description	date
100	topsoil	26	14	1 flint scraper 1 flake	late Neolithic/Bronze Age
132	tree bowl	24	1	1 blade	Mesolithic/early Neolithic
163	subsoil	23	1	cinder < 1g	-
208	hedge line	8	1	1 utilised flake	late Neolithic/Bronze Age
208	hedge line	8	1	1 Fe. nail	-
210	tree bowl	23	1	1 flake 2 burnt flint	late Neolithic/Bronze Age

Range and variety

Table 65 illustrates the range of non ceramic material encountered. The restricted nature of the sample and the apparent residuality of the flint makes any comment of limited value. However the correlation in date range to the later Neolithic/Bronze Age with four of the five datable pieces might suggest an increase in activity in this broad period.

The quality of flint recovered from Bunyan's Farm was good. It ranged in colour from brownish grey to black. One item, the Mesolithic or early Neolithic blade from context 132 was (significantly, as it is the earliest piece) patinated to a paler blotchy grey colour. Relatively thick and unworn cortex survived on three pieces, perhaps indicating a possible source from local subsoil gravels.

Condition

One non ceramic artefact, an iron nail from context 208, was submitted by the Artefacts Manager to the conservator (A Tribe) for visual assessment and x-radiography. The nail was in poor condition, in two fragments, thickly covered in soil incorporating some small stones and the usual orange-brown and dark grey corrosion products. The x-radiograph showed that mineralisation was extensive.

The flint from Bunyan's Farm was recovered in relatively complete and recognisable condition. All pieces, however had suffered some post-depositional damage in the form of edge damage and all had the burnished appearance typically seen on flint which has been exposed in the ploughsoil.

2.3.3 CERAMICS

Factual data

Quantification of material

Pottery

The Bunyan's Farm pottery assemblage was recorded by fabric type and form. Quantification was by sherd and vessel count. A total of 65 sherds was recorded, representing a minimum of 19 vessels.

All quantitative statements and tables in this report are based on the sherd count.

Building Material

The building material was quantified by sherd count and weight. A total of 871 fragments weighing 12734g was recovered, comprising 1 fragment of flat roof tile, 3 fragments of fired clay, and 867 fragments of daub.

Provenance

Pottery

Table 66 below, shows the relative quantities of pottery recovered from the varying feature classes encountered at Bunyan's Farm. The figures are expressed as a sherd count and as a percentage of the total.

Table 66 Quantification of pottery by feature type

Context type	sherds	% TOTAL
Pits	44	67.69%
Ditches	2	3.07%
Tree disturbance/natural features	8	12.32%
Topsoil/subsoil	11	16.92%
TOTAL	**65**	**100%**

The distribution of pottery as illustrated by table 1 reflects the limited nature and extent of the archaeology at Bunyan's Farm. Intact horizontal stratigraphy was entirely lacking and cut features yielding ceramic material restricted to a single pit and ditch. These are features which are normally regarded as the least susceptible to contamination, particularly in their primary and lower fills. The absence at Bunyan's Farm of intercutting ditches or other features has further reduced the risk of contamination.

Table 67 Quantification of pottery, by sherd, within phase

Pottery Group	Period 1	Period 6	Period 14 (topsoil)	Period 15 (unphased)	TOTAL
Late Bronze Age/early Iron Age		45			45
Early Iron Age		6	2	2	10
Medieval				1	1
Post-medieval			2		2
Misc. sandy			5		5
Misc.	2				2
TOTAL	**2**	**51**	**9**	**3**	**65**

The pottery assemblage shows a wide date range, from the late Bronze Age/early Iron Age to the post-medieval periods. However, pottery recovered from cut features as opposed to natural deposits or disturbed layers is confined to a single phase, period 6. Residuality or intrusion cannot be demonstrated in this period.

Building Material

Table 68 Quantification of building material by feature type

Context type	Tile	Daub	Fired clay	TOTAL
Pits		867		867
Ditches			2	2
Topsoil	1			1
TOTAL	**1**	**867**	**2**	**870**

Table 68 shows the quantities of building material recovered from different feature types on site. It should be noted that both the daub and the fired clay derived from single features.

Table 69: Quantification of building material by phase

Category	Period 6	Period 14
Roof tile		1
Daub	867	
Fired clay	2	
TOTAL	**869**	**1**

The large quantity of daub from a single feature phased to period 6 and its recovery in large unabraded sherds is strongly suggestive of deposition as a single event, following the destruction or demolition of a structure.

Range and variety

Type Series

The type series is listed below in chronological order.

LATE BRONZE AGE/EARLY IRON AGE		*TOTAL 45*
F26	Carinated forms	43
-	Sand/calcareous inclusions	41
-	Sandy	1
EARLY IRON AGE		*TOTAL 10*
F28	Fine sandy	2
F29	Coarse sandy	2
F30	Sand/calcareous inclusions	2
F16	Coarse shelly	4
MEDIEVAL		*TOTAL 1*
E01	Late medieval reduced	1
POST MEDIEVAL		*TOTAL 2*
P01	Glazed earthenware	2
MISCELLANEOUS		*TOTAL 7*

R06 or E01?	Grey ware	5
-	Misc. fragments	2

Late Bronze Age/Early Iron Age

Late Bronze Age/early Iron Age pottery from Bunyan's Farm comprises 45 sherds or 69.23% of the total assemblage and makes up the largest chronological grouping from the site. The material from pit (A3) from which all but one sherd was recovered, consisted of well made, burnished, fairly thin-walled sherds. Pottery of corresponding type was first recognised at Salford Quarry (BCAS in prep) where it was often found in sharply carinated forms. At least four vessels dating to this period were identified. One vessel form was recognisable as an upright r mmed jar. The three vessels from (A3) all bore decoration in the form of grooves, and in one case grooves and notches.

Early Iron Age

Pottery of this date amounts to 10 sherds, 15.38% of the total assemblage. All the fabric types represented are known from other sites in the county including Village Farm and all are likely to have been produced locally. No forms could be identified and no sherds bore any decoration.

Medieval

A single sherd of late medieval reduced pottery was recovered from Bunyan's Farm. A further five sherds of miscellaneous grey ware sherds probably date to this period. This material represents 9.23% of the total assemblage. Three rim sherds were recovered and all are consistent with jar or cooking vessel forms.

Post-medieval

Two sherds of externally glazed post-medieval pottery of unknown form were recovered, representing 3.07% of the total assemblage.

Evidence of use throughout the phases

No physical evidence for use of the pottery was recorded. The lack of evidence probably results from the limited size of the sample and also the possibility that the finely decorated material from associational group 3, which makes up the bulk of the *in situ* pottery, may never have been used in a way that would leave any such evidence.

Building Materials and Miscellaneous Fired Clay

Roof tile

A single small fragment of flat roof tile was recovered. The sandy fabric and the thickness are consistent with late medieval or post-medieval date.

Daub

All 867 fragments of daub recovered from Bunyan's Farm derive from associational group 3. This material included large fragments, many preserving smoothed surfaces and clear impressions of wattles. Although the sand and organic fabric is not in itself significant in terms of date, the unabraded condition of the daub suggests that it is contemporary with the associated late Bronze Age/early Iron Age pottery.

The wattle impressions which survived on 225 fragments vary in diameter from 5-16mm. Five fragments also bear a much larger concave impressions, probably from posts. The majority of fragments have at least one surface remaining and one piece which formed a right angle must have come from a corner. Two fragments preserved squared timber impressions and a single piece had an angular 'notch'. It is possible that these marks may have been made when the daub was smoothed over, whilst wet, perhaps by a wooden stave.

It has been noted above that the large quantity of daub recovered from the single pit is suggestive of a demolition or destruction deposit. The hard, fired appearance of the daub makes it likely that the structure which this deposit represents, was destroyed by fire. This is further indicated by the sooting present around some of the wattle impressions.

Fired Clay

Three small and abraded fragments of miscellaneous fired clay were recovered. Two fragments were of a grog/sand fabric and one, a sandy fabric. None of this material bore any diagnostic features.

Condition

Pottery

The condition of the pottery is fairly poor, with twenty-three sherds or 35.38% of the total assemblage showing varying degrees of abrasion.

Recognisable forms account for 6.15% of the assemblage, suggesting a high degree of fragmentation as a whole.

2.3.4 ANIMAL BONE

Factual data

Bunyan's Farm yielded only ungulate tooth fragments and a small piece of burnt bone. No further analysis is necessary.

2.3.5 MACROSCOPIC PLANT AND INVERTEBRATE REMAINS

Factual data

A few fragments of charcoal, including cf. *Prunus* tp. (sloe etc.), and an unidentifiable cereal grain were recovered from possible Neolithic tree-throw pits (Tables 70 and 71). A few fragments of *Corylus avellana* (hazel) nut shell fragments and a *Hordeum* sp. (barley) grain were recovered from a late Bronze Age / early Iron Age pit. Such remains would be more usual from a settlement of Neolithic date.

The limited sample size renders it impossible to address any of the original site specific project aims although the material does have potential when viewed alongside that from other bypass sites (this is addressed in section 3)

Quantification and provenance of material

Table 70 Charred Seeds and Chaff from Bunyan's Farm

No. of samples by Period	Neolithic	Late Bronze Age / Early Iron Age
1-10 items	1	3
Total samples	1	3
Species by Period		
Hordeum sp. barley	-	+
Cereal indet.	+	-
Corylus avellana hazel nut shell frags.	-	+
Arable weeds	-	+
Non-arable weeds	+	-

+ 1-10 items, ++ 11-100 items, +++ 101-1000, ++++ 1000+

Table 71 Charcoal from Bunyan's Farm

Type of sample		?Neolithic	Late Bronze Age / Iron Age	Unphased
No. flots		2	3	2
No. hand-picked		1	1	
Total samples		3	4	2
No. samples with charcoal				
Alnus / Corylus tp.	alder/hazel		3	
Quercus sp.	oak		2	
cf. *Prunus* tp.	sloe etc.	1		

2.4 MANOR FARM

2.4.1 STRUCTURAL EVIDENCE

Summary (fig 11)

A single pit of Neolithic/Early Bronze Age date was recorded and parts of a field system dating to the Iron Age, were investigated. Only a very limited amount of Roman period remains were identified but evidence for Middle Saxon settlement, in the form of large pits, possibly associated with post-hole structures was recovered.

Background to the excavation

The excavations at Manor Farm were located 2.5km to the south of Bedford town centre at TL 06504740 within the parish of Elstow. Sited immediately east were the excavations at Bunyan's' Farm. The site lay on level ground (at 27m.o.d.) on a low ridge of the first gravel terrace, to the south of the River Great Ouse between two small tributary streams, the first, the Elstow Brook being some 100m to the north, the second, an unnamed stream, 200m to the south. The land had been under arable cultivation for some time and had been subject to intensive ploughing.

Excavation at Manor Farm was undertaken during April and early May 1994. Fieldwork proceeded in parallel with that at the adjacent Bunyan's Farm excavations and for practical purposes the two were considered a single project although for during provisional phasing they have been separated.

The Manor Farm trenches passed across the southern edge of a series of five north west-south-east oriented linear crop marks (HER 1625), probably part of a field system and including to the north smaller sub-circular enclosures; which were interpreted on form as of Iron Age/Romano-British date.

Evaluation, comprising fieldwalking, trial trenching and Geophysical survey was also undertaken to the east and west to determine the limits of the site (Dawson 1993). These investigations, in tandem with the crop-mark evidence, indicated the presence of extensive and complex archaeological remains. Initial proposals for full excavation were replaced by a scheme designed to minimise ground disturbance involving the building of a protective embankment. Under this revised scheme archaeological excavations were to be limited to the line of the roadside drainage ditches.

Method statement

Although preservation of the major part of the site had been proposed, ground disturbance was still to take place along the line of the roadside drainage ditches and these were the focus for investigation. Two parallel trenches were opened up, 50m. apart, each 5m. wide and 450m. in length (trench 1 to the south and trench 2 to the north), totalling 0.45ha. Trench 2 continued, without a break, into Bunyan's' Farm trench 2.

Fieldwork was carried out by experienced excavators, in accordance with the *Bedfordshire County Archaeology Service's Procedures Manual*. Work was undertaken in predominantly dry conditions. Topsoil was removed by mechanical excavator, after which hand excavation proceeded. There was no programmed collection of material from within the topsoil. All archaeological features were investigated.

Factual data

Quantification of material

Table 72 Quantity of site structural records

Record type	Number
Contexts	293
Site drawings	10
Photographs	198

Table 73 Quantification of feature types

Feature type	Number	% Total
Ditches and gullies	59	20
Layers	7	2
Pits	50	17
Structural contexts	113	39
Natural	63	22
Total	**292**	

In contrast to Bunyan's Farm the excavated evidence at Manor Farm is dominated by features of archaeological origin rather than natural origin (only 22% by feature type). This is partly due to the enhanced confidence with which the excavation team was able to identify natural features, after exhaustively sampling them at Bunyan's Farm, but it also reflects the very real increase in the density of human activity.

The level of survival was similar to Bunyan's Farm.

Table 74 Summary of provisional phasing

PERIOD	CONTEXTS No.	/%	LANDSCAPE GROUPS	DESCRIPTION
Period 1 Natural glacial and alluvial deposits	52	18	7, 8, 10, 11	
Period 3/4 Neolithic/Early Bronze Age	3	1	3	
Period 7 Iron Age	65	22	1, 2,	Boundaries, settlement?
Period 9 Romano-British	3	1	4	?Cultivation
Period 11 Saxon	17	6	5	Settlement
Period 14 Post medieval to Modern	17	6	9	Cultivation
Period 15 Unphased groups	136	46	6	

PERIOD 1 Alluviation

At the eastern end of trench 2 a sequence of alluvial deposition probably associated with the nearby Elstow Brook was noted. The earliest deposits were cut into by one of the ditches of the earliest boundary system (L1) (see below), a second phase of deposition then sealing that ditch. No dateable material was associated with these deposits

PERIOD 3/4 Neolithic/Early Bronze Age (fig.14)

A single isolated pit (1007) was excavated and found to contain sherds of a single carinated vessel and lithics, probably of early prehistoric date. An almost complete vessel of this type may indicate purposeful deposition and overall the assemblage has similarities with that recovered from a pit (A50) at Eastcotts.

PERIOD 7 Iron Age (fig.14)

Boundaries and enclosures

During this period the major crop-mark enclosures appear to have been established and then to have been in continuous use throughout the Iron Age. There was no evidence for Iron Age settlement although this may have been situated just to the north of the Elstow Brook (crop marks have been noted on the site of the John Bunyan school).

An earlier system of E-W ditches, at approximately 45° to the later fully developed system, may be represented by the undated landscape group 1. A single observed relationship supports this chronology. The easternmost ditch of this system, close to the modern course of the Elstow Brook, cut a layer of alluvium and was then sealed by a second layer (see above).

The system of N-S and E-W ditches (L2), representing the fully developed enclosure system, was sampled at a number of points; a small amount pottery was recovered, predominantly of Early to Late Iron Age date. A number of undated ditches have been included on grounds of alignment and form.

PERIOD 9 Romano-British (fig.14)

Only a very small amount of Romano-British material was recovered, most of this residual, only one feature, a small pit (A30), perhaps representing activity. The evidence indicates a low-level of activity during the Roman period, with any settlement located some distance away.

PERIOD 11 Saxon (fig.14)

The majority of Period 11 artefacts and features were dated to the Middle Saxon period. This was primarily represented by three large pits. Within trench 1, two pits were obviously contemporary: their shapes in plan and their depths are almost identical, and they contained a remarkably similar pottery assemblage. These two pits may have been dug as wells or originally perhaps as quarries, they had been excavated down to below the level the present water table. once silted to around a third of their depth, they had been backfilled with material containing predominantly mid Saxon pottery (Maxey ware). Other finds included fragments of Niedermendig lava quern. A similar pit in trench 2, (A19), contained a smaller amount of pottery, but also descended to just below the water table. Nearby, a small pit (A26) has a similar date but no other obvious associations.

PERIOD 13-14 Medieval to Modern

Although no medieval features were discovered on site, slight traces of ridge and furrow survived as bumps in the farm track to the south of the excavated trenches. These were much more pronounced in Bumpy Lane (sic), which defined the eastern limit of the site and in the field beyond that to the east.

PERIOD 15 Unphased groups; (Period 3/4, 7 or 11)

In the absence of spatial and stratigraphic relationships many undated or poorly dated features, while undoubtedly being of archaeological origin, cannot be incorporated into the above phasing scheme. These have been placed in a single landscape group and probably date to either of the three main periods of activity. Consisting largely of isolated pits and post holes, some groupings may be of more significance.

Possible structures

Mid way along trench 2, the largest area of post holes (twenty four), if not the most coherent, has been interpreted as a possible structure (A12). One of the post-holes contained a single sherd that could date to either the Iron -Age or Saxon periods

To the south in trench 1, the possible right-angled arrangement (A14) may be the northern corner of a square or rectangular building.

In the eastern part of trench 1 the corner of a square or rectangular ditched feature was located, (A16). This may be the south-eastern corner of a more extensive ditch system. However, the ditch was cut by a post hole on its inner side, and a stake hole was recorded in the corner. Although incomplete (A16) resembles structures at Bumpy Lane and Eastcotts.

2.4.2 REGISTERED AND NON CERAMIC BULK ARTEFACTS

Factual data

Quantification

A total of eleven registered artefacts were recovered from Manor Farm. Non ceramic bulk finds comprised fourteen fragments of slag weighing 417g, two fragments of burnt stone and seventy-three struck or burnt flint pieces (a further seven were registered finds).

Provenance

Of the non ceramic assemblage only the flint is typologically datable with any certainty. This material will be discussed separately in the subsequent section.

The remaining registered and non ceramic bulk finds are presented below with details of provenance and phasing. The phasing has been allocated according to stratigraphical sequence and by association with other datable finds.

Table 75 Registered finds, provenance and phasing

Registered finds Sf. No	Associational group	period	context type	description
6	11	11	fill of pit	Iron strip/blade fragment
7	11	11	fill of pit	Mayen lava quern fragment
8	11	11	fill of pit	Mayen lava quern fragment
11	11	11	fill of pit	whetstone

Associational pit groups 11 and 19, (period 11) account for all the registered finds and the majority of the non ceramic bulk finds (excluding flint). These features are interpreted as 'water holes' or quarries although reuse as rubbish repositories also seems likely.

Table 76 Non ceramic bulk finds

Period	Associational group	Fe slag	Burnt stone	Fe. nail
7	9		23g	
11	11	64g	91g	
11	19	353g		
14	38			1

The fragmentary nature of the two imported Mayen lava quern fragments recovered from context 1095 unfortunately meant that their forms could not be recovered. They could equally be residual Roman, or as the phasing suggests, of mid/late Saxon date (Buckley and Major 1981, 75). The sooting noted on one of the fragments and the generally poor condition is suggestive of reuse possibly as hearth stones. It is however impossible to state how long after manufacture this reuse took place.

Range and Variety

The registered finds and the non ceramic bulk finds were, for the most part, hand collected from excavated features. In addition smaller fragments of slag were sorted from soil samples (11.5% of the non ceramic bulk finds were retrieved in this way).

As previously noted, the non ceramic assemblage comes almost exclusively from pits fills ascribed to period 11 (see tables 75 and 76). The recovery of ferrous slag, an iron blade or strip fragment and quantities of charcoal is best interpreted as evidence of small scale industrial activity, probably smithing. The sparse quantities involved however means this material may well be redeposited and that any interpretation is tentative.

Condition

Two artefacts, Rf.6 from context 1095 and nail from context 1110, both of iron, were submitted by the Artefacts Manager to the conservator (A Tribe) for x-radiography and visual assessment with the aid of a stereo microscope.

The two items, were in fair condition, thickly covered with soil incorporating a few small stones and the usual orange-brown and dark grey corrosion products.

The potential of these finds in helping to achieve the research objectives was assessed to be nil. Therefore no finds were selected to undergo investigative conservation.

2.4.3 FLINT

Factual data

Quantification

A total assemblage of eighty worked or burnt flint pieces, weighing 326.4g was recovered from Manor Farm.

Provenance

The majority of the flint from Manor Farm (98.5%) was recovered from feature fills, the remainder from topsoil.

Worked or struck flint material may be considered residual when associated finds date to a period beyond that when lithic technology had ceased to be in general use. Even where flint is the sole dating evidence recovered from a particular context there is a likelihood that it is residual if it shows signs of post-depositional damage and abrasion. Thirty-two pieces (40%) of the recovered assemblage were demonstrably residual, occurring with later ceramics or other datable artefacts. The remaining material, all from associational group 23 is unlikely to be residual and will be discussed separately.

Provisional dates and details of provenance are set out in tables 77 and 78.

Table 77 Flint tools by context

Tools Sf No	Associational group	Period	Context type	Tool type	Date range
-	5	7	fill of ditch	knife	Neolithic
3	23	7	fill of pit	leaf arrowhead	earlier Neolithic
-	23	7	fill of pit	arrowhead fragment	earlier Neolithic
2	23	7	fill of pit	scraper	Neolithic/ Bronze age
-	23	7	fill of pit	'crested' cutting blade	Mesolithic
1	45	14	topsoil	knife	late Neolithic/early Bronze Age
-	46	15(unph.)	tree root disturbance	utilised flake	Mesolithic/earlier Neolithic

Table 78 Flint debitage by context

Debitage/cores Context number	Context type	Period	Quantity and type	Approximate date
2	fill of ditch	7	7 debitage	late Neolithic/Bronze Age
4	fill of ditch	7	1 debitage	late Neolithic/Bronze Age
11	fill of pit	11	1core	late Neolithic/Bronze Age
12	fill of posth be	15(unph.)	1 core	late Neolithic/Bronze Age
19	fill of pit	11	3 debitage	1 × Mesolithic/early Neolithic 2 × late Neolithic/Bronze Age
23	fill of pit	7	44 debitage	Mesolithic/early Neolithic
24	fill of ditch	14	2 debitage	late Neolithic/Bronze Age

26	fill of pit	11	2 debitage	late Neolithic/Bronze Age
27	post hole fill or root disturbance	15(unph.)	3 debitage	late Neolithic/Bronze Age
29	fill of pit	7	2 debitage	1×Mesolithic/early Neolithic 1×late Neolithic/Bronze Age
31	natural feature?	1	1 debitage	Mesolithic/early Neolithic
46	pit fill or root disturbance	15(unph.)	2 core 4 debitage	3×Mesolithic/early Neolithic 3×late Neolithic/Bronze Age

Range and Variety

Tables 1 and 2 show the range of tools and debitage encountered. The residual material has little relevance in terms of a coherent group, but does serve to demonstrate flint working activity in the area from the Mesolithic through to the later Neolithic and Bronze Age.

The quality of the flint was generally good. It ranged in colour from mid grey to dark reddish brown and black. Four pieces, (notably those dating to the Mesolithic or early Neolithic, from possible tree bowl contexts) were patinated and of white or mottled grey appearance. Cortex, where it survives indicates that the majority ,at least of the flint was obtained from the local gravel deposits.

The material from associational group 23 is worthy of some further attention. It comprises forty-eight pieces, (see tables 77 and 78) of which thirty-seven were recovered on site and eleven sorted from soil samples. The recovery of unusually large quantities of flint, and more significantly, of very small flint debitage, is a good indication that the material was deposited at or close to the time of manufacture (the material from associational pit group 50 from the Eastcotts site, provides an earlier Neolithic parallel).

With two exceptions, where discolouration had resulted from contact with fire, the flint was of uniform dark grey colour and the quality good. Cortex survived on fourteen pieces, this was buff or off-white in colour and would suggest a limited number nodules being used.

The flint recovered from this pit has much in common with the Eastcotts pit assemblages, with blades and soft hammer struck flakes predominating and the flint quality high, suggesting a Mesolithic or earlier Neolithic date. Additionally, a leaf shaped arrowhead, a form characteristic of the early Neolithic, and a fragment of a second were recovered. In contrast to the pits at Eastcotts, associated pottery was recovered, however further work will be needed to confirm its identity.

Condition

In general the Manor Farm flint assemblage was in good condition with only a few pieces (principally those from topsoil or late feature fills) showing abrasion or post depositional damage.

2.4.4 CERAMICS

Factual data

Quantification

Pottery

The Manor Farm pottery assemblage was recorded by fabric type and form. Quantification was by sherd and vessel count. A total of 174 sherds was recorded, representing a minimum of 94 vessels.

All quantitative statements and tables in this report are based on the sherd count.

Building Material

The building material was quantified by sherd count and weight. A total of fourteen sherds weighing 556g was recovered, comprising seven fragments of brick, one of roof tile and ten of daub or fired clay.

Provenance

Pottery

Table 1 below, shows the relative quantities of pottery recovered from the varying feature classes encountered at Manor Farm. The figures are expressed as a sherd count and as a percentage of the total.

Table 79 Quantification of pottery by feature type

Context type	Sherds	% TOTAL
Pits	131	75.21%
Ditches	31	17.71%
Structural	4	2.29%
Tree disturbance	7	4.22%
Topsoil	1	.57%
TOTAL	**174**	**100%**

Due largely to the lack of intact horizontal stratigraphy on site, the bulk of the ceramic material derives from cut features, primarily pits and ditches (93.1%). These are features which are normally regarded as the least susceptible to contamination particularly in their primary and lower fills. The constant re-cutting and intercutting of boundary ditches and other features seen on urban sites and some rural sites is absent at Manor Farm; this factor further reduces the risk of contamination.

Phasing and date range

A single landscape group made up of a number of disparate, poorly dated features, is unphased and allocated to a miscellaneous period 15.

Table 80 Quantification of pottery, by sherd, within period

Pottery Group	Period 3/4	Period 7	Period 9	Period 11	Period 14 (topsoil)	Period 15 (unphased)	TOTAL
Early prehistoric	29						29
Early-middle Iron Age		55			1		56
Late Iron Age		6		2		4	12

Roman		1	1	11		2	15
Early Saxon				3	1		4
Mid Saxon				59	1		60
Post Med.-modern					3		3
Misc.		1				1	2
TOTAL		**63**	**1**	**75**	**6**	**3**	**174**

The pottery assemblage shows a wide date-range, from the early prehistoric to the Post-medieval periods. Residuality occurs to the greatest extent in period 11, (Saxon) indicated by the presence of Roman material.

Building Material

Table 81 Quantification of building material by feature type

Context type	Tile	Brick	Daub/fired clay	sherds	% total
Pits	1	2	9	12	66.7%
Ditches		5	1	6	33.3%
TOTAL	**1**	**7**	**10**	**18**	**100%**

Table 81 shows the quantities of building material recovered from different feature types on site. The small quantities involved and the fragmentary condition suggest piecemeal deposition and/or redeposition.

Table 82 Quantification of building material by phase

Category	Period 7	Period 9	Period 11	Period 14
Roof tile		1		
Brick	5		2	1
Fired clay	1	2	6	
TOTAL	**6**	**3**	**8**	**1**

The distribution of building material through time (table 82) shows no easily discernible concentrations of materials, but does reflect the pottery assemblage in terms of incidence by per period (table 80).

Range and variety

Type Series

The type series is listed below in chronological order. New fabrics types not previously published have been marked with a double asterisk (**).

EARLY PREHISTORIC		*TOTAL 29*
	Corky, leached	29
EARLY-MIDDLE IRON AGE		*TOTAL 48*
F07	Shelly	18
F28	Fine sand	13
F03.	Grog/sand	8
F18	Sand/shell	6
F29	Coarse sand	2

F17	Grog		1
LATER IRON AGE		*TOTAL*	*12*
F09	Sand/grog		7
F06A	Fine grog		4
F06B	Medium grog		1
ROMAN		*TOTAL*	*15*
R01	Samian		1
R05	Orange sandy		3
R06	Greyware		2
R06C	Fine greyware		5
R12B	Nene Valley Colour Coat		1
R	Misc. sandy		3
EARLY SAXON		*TOTAL*	*5*
A	Quartz/white mica	**	1
A	Red quartz	**	1
A	Quartz/gold mica	**	1
A18	Fine quartz		1
A06	Quartz		1
MIDDLE SAXON			*60*
A11	Maxey type		60
POST MEDIEVAL		*TOTAL*	*3*
P01	Glazed earthenware		1
P45	Willow pattern		1
P43	Pearlware		1
MISCELLANEOUS		*TOTAL*	*2*
-	Sand/gold mica		1
-	Sandy		1

Early Prehistoric

Some doubt exists over the identification of twenty-nine sherds of pottery, 16.66% of the total assemblage recovered from isolated pit (1007). The fabric is predominantly shelly or with calcareous inclusions and is very leached and corky in appearance. Both the single recoverable form, a carinated bowl, and the fabric share similarities with earlier Neolithic 'Grimston ware'. Further work at the analysis stage may confirm this identification. The pit is provisionally phased to periods 3/4 Neolithic/Early Bronze Age.

Iron Age

Sixty sherds of Iron Age pottery, 34.48% of the total assemblage were recovered from Manor Farm. Forty-eight sherds are characteristic of early-middle Iron Age date and the remaining twelve of the late Iron Age. In addition, two sherds listed in the type series as miscellaneous, could conceivably be of Iron Age or early Saxon date.

All the fabric types represented are known from other sites in the county and all are likely to have been produced locally.

Six Iron Age vessels with recognisable rim forms could be identified (table 83).

Table 83 Iron Age forms

Iron Age Forms	No of vessels
upright rimmed jars	2
rectangular/flattened rimmed jars	2
cordoned jars (later Iron Age)	2
TOTAL	6

The forms tabulated above are typical of the region, with upright rimmed jars being a common feature at sites such as Puddlehill (Matthews and Warren 1992); Stagsden, north Beds. (BCAS in prep), and Village Farm approximately 500m to the west. Rectangular/flattened rimmed jars and carinated forms, similar to the Manor Farm examples were also present at Village Farm and have been found at the Iron Age settlement site at Salford, mid Beds. (BCAS in prep). Later Iron Age 'Belgic' cordoned jar forms, have previously been recognised in the county at Ursula Taylor School, Clapham (Dawson 1988) and Norton Road, Stotfold (BCAS in prep.) (see also Simco, 1984, for a general survey).

Decoration in the Iron Age assemblage was limited to two instances of finger indenting on the rim and a single instance of vertical combing. The combing or 'twig brushing' of the Iron Age vessels is probably as much a functional device as it is decorative, designed to roughen the pot's surface to facilitate handling.

Roman

The Roman pottery makes up 8.62% of the assemblage, 15 sherds.

The bulk of this material is residual (13 sherds), and a single sherd is possibly intrusive in an Iron Age context. The pottery is fragmentary and the form of only one vessel, a greyware 'dog-dish,' could be reconstructed. One sherd of Nene Valley Colour Coat bore traces of painted decoration.

Saxon

Saxon pottery makes up the largest chronological grouping from Manor Farm. Of sixty-five sherds, 37.35% of the total assemblage dating to this period, five are characteristic of early Saxon date and sixty of middle Saxon.

Despite the small quantity of the early Saxon material recovered, the variety of fabric types represented is comparable to the Village Farm assemblage. Only one vessel form, an everted rimmed jar, could be reconstructed and 'decoration' was limited to a single instance of random fingernail stabbing on the body, which probably performed the same roughening function as the combing, noted in the Iron Age assemblage.

The pottery dated to the mid-Saxon period comprises entirely Maxey-type ware, an undecorated coarse shelly fabric. No vessels were recovered in complete condition, although nine vessel forms and a possible lid could be recognised. Jars with simple rounded rims were most commonly represented (5 vessels), closely followed by distinctive 'swallow nest' jars (4 vessels). Maxey-type pottery, including swallow nest forms is known elsewhere from the county at Stratton DMV, near Biggleswade and Elstow Abbey, Bedford (Dawson and Fell in prep.).

Post-medieval and modern

Three sherds of post-medieval pottery of 18th-19th century date were recovered.

Evidence of use of the pottery throughout the phases

Physical evidence of use on the pottery was restricted to two instances of internal residues. In both cases a thick black 'tarry' residue was noted, adhering to large base sherds of mid Saxon Maxey-type. The types of substances contained within these vessels may be revealed by residue analysis.

External sooting of vessels may be seen as evidence of heating above a fire. Sooting was noted on one sherd, again of Maxey type. However, as the sooting continued over the breaks of the sherd it is likely to relate to post breakage burning.

The paucity of evidence for use in the pottery assemblage results from the limited size of the sample. It is also possible that some vessels were used to heat their contents not over a hearth, but by the use of heated stones, a process that would leave no physical evidence.

Building Material

Brick/floor tile

Fragments of brick/floor tile were found in three contexts; five fragments of grog tempered fabric, a most certainly from the same brick are probably of later Iron Age date. The remaining brick fragments were harder fired and more substantial. A fragment of red-brown, fine sandy brick resembles a Roman brick/tile fabric from Sandy (BCAS in prep); owever, it was found together wit pottery dating to the 18th and 19th centuries and a post-medieval date cannot be ruled out. The remaining two brick fragments are of a sand and flint tempered fabric.

Roof tile

A single fragment of Roman '*imbrex*' in a grog and shell fabric was recovered. It is the only fragment of the building material which is diagnostic of form.

Daub/fired clay

Ten fragments of daub or fired clay were recovered and three fabric types are recognisable; sandy, organic and sand/organic. It is likely that the fabric types were used contemporaneously and, and have, in themselves no chronological significa ce.

Condition

Pottery

The condition of the pottery is genera ly good with only 25 sherds or 14.36% of the total assemblage, including the topsoil derived material showing varying degrees of abrasion.

Recognisable forms account for 20.2% of the assemblage, suggesting a high degree of fragmentation as a whole.

2.4.5 ANIMAL BONE

Factual data

Quantification of material

Manor Farm produced four boxes of bone. Six soil samples contained bone fragments or evidence of micro fauna.

Table 84 Contexts containing animal bone by period

Period	No. of contexts
7	2
9	1
11	12
14	1
15	5

Summary

The majority of bone came from the Saxon pits of period 11. The species present are horse, cattle, pig, sheep/goat, goose and chicken. Sieved samples have produced rodent, bird and amphibian bones. Larger bones also retrieved by sieving appear to have been through a dog.

Condition

Measuring and ageing data is available.

2.4.6 MACROSCOPIC PLANT AND INVERTEBRATE REMAINS

Factual data

A few fragments of charcoal, but no seeds, were found in a couple of Iron Age and Roman pits (Tables 85 and 86). The Iron Age boundary ditch A42 (Sample 308) contains numerous shells of the stagnant water snail *Anisus leucostoma* and also shells of two stagnant water species of *Lymnaea, L. truncatula* and *L. peregra*. Two Saxon pits were only slightly more productive of charred remains, yielding a free-threshing grain of *Triticum* sp. (wheat) and a grain of hulled *Hordeum* sp. (barley) (Table 8). These samples also contain charcoal, mostly *Quercus* sp. (oak) and cf. Pomoideae (hawthorn etc.).

Quantification of material

Table 85 Charred Seeds and Chaff from Manor Farm

No. of samples by period	Saxon	Unphased
1-10 items	3	-
11-100	-	1
Total samples	3	1
Species by Period		
Triticum sp. free-threshing wheat	-	+
Triticum sp. wheat	+	-
Hordeum sp. hulled barley	+	+
Arable weeds	+	+

+ 1-10 items

Table 86 Charcoal from Manor Farm

Type of Sample		Iron Age	Roman	Saxon	Unphased
No. flots		1	5	9	2
No. hand-picked		1	-	3	-
Total samples		2	5	12	2
No. samples with charcoal					
Alnus / Corylus tp.	alder/hazel	-	1	2	-
Quercus sp.	oak	-	-	7	2
cf. Pomoideae	hawthorn etc	1	1	5	-
cf. *Prunus* tp.	sloe etc.	1	-	-	-

2.5 BUMPY LANE

2.5.1 STRUCTURAL EVIDENCE

Summary (fig.15)

Two pits of Neolithic date indicate settlement. Scattered remains also point to settlement or peripheral activity from the late Bronze Age through the Iron Age. No structures or buildings were identified (although a number of possible hearths may indicate building sites). A sequence of enclosures, probably of Iron Age date, was also recorded, the earliest an isolated sub-circular feature, the latest linear in form and re-used during the Roman period. The continuity in boundary use is traceable into the medieval period when furrows were driven down the line of the Iron Age/Roman ditches.

Background to the Project

The excavations at Bumpy Lane were located approximately 3km. to the south of Bedford town centre at TL 070476, some 750m. to the east of the excavations at Manor Farm and 500m. to the west of those at Eastcotts. The site lay on a ridge of alluvial terrace (at approximately 28m. OD), south of River Great Ouse, north of the Elstow Brook. Although under pasture, the level, truncated aspect of these fields contrasted with the well preserved earthworks of Harrowden in the fields to the south, suggesting that a substantial amount of ploughing had taken place here.

During the initial stages of the Bypass project the area of Bumpy Lane had been designated a 'blank area', reflecting our lack of knowledge concerning its potential rather than absence of archaeological remains. This was one of several areas where access for evaluation was refused until the HA had taken possession of the land. Excavations to the south at Harrowden and to the east at Eastcotts suggested that Roman period remains might be expected and so geophysical survey was commissioned in December 1993. Trial trenching followed in April (Shepherd and Fell 1994). The results of this evaluative work suggested that boundary features of Roman date were concentrated to the eastern end of the site with scattered Neolithic settlement evidence to the west. The geophysical survey identified the southern part of a curving feature, estimated at 75m in diameter, and interpreted as a possible ring-ditch of Neolithic/Bronze Age date. Trial trenching confirmed its location but failed to provide a more precise date or function.

Excavation at Bumpy Lane was undertaken during May and June. To the west of the site the Bypass will be carried on a low embankment, giving out to the east where a cutting will take the carriageway beneath the existing A600. In the light of the assessment results, two areas were earmarked for full excavation; Area 1 to investigate the ring ditch, and Area 2 to investigate the prehistoric settlement evidence and Romano British boundaries.

Method statement

Fieldwork was carried out by experienced excavators, in accordance with the *Bedfordshire County Archaeology Service's Procedures Manual*. Work was undertaken in predominantly dry conditions, on a well drained site. Topsoil was removed by a Hitachi 360° tracked excavator fitted with a toothless ditching bucket. Topsoil was removed to the top of the natural alluvial sands and gravels or archaeological deposits, whichever was encountered first, after which hand excavation proceeded. There was no programmed collection of material from within the topsoil. All finds located were retained for analysis and relevant environmental samples taken. All major features were also recorded

and a sample of natural features investigated. On-site dry sieving of fills was carried out where appropriate this could not be employed for all features due to time constraints.

A further geophysical survey was carried out in an area 100m x 80m directly to the north of Area 1 to further examine the curving ditch (see fig.15). An area of approximately 10m wide, immediately adjacent to the trench, could not be surveyed due to the presence of a spoil heap.

Factual data

Quantification of material

Table 87 Quantity of site structural records

Record type	Number
Contexts	485
Site drawings	13
Photographs	180

Table 88 Quantification of feature types

Feature type	Number	% Total
Ditches and gullies	197	41
Layers	13	3
Pits	47	10
Structural contexts	138	29
Natural	57	11
Others	30	6
Total	**482**	

Evidence by Period

Table 89 Summary of provisional phasing

PERIOD	CONTEXTS No. / %		LANDSCAPE GROUPS	DESCRIPTION
Period 1 Tree Clearance	58	12	14	
Period 3 Neolithic	13	3	7	Settlement?
Period 6 Late Bronze Age/Early Iron Age	3	1	10	Settlement?
Period 7 Iron Age	267	55	1, 2, 4, 5, 8	Enclosures and settlement
Period 9 Romano-British	48	10	6	Enclosures
Period 13 Medieval	30	6	9	Cultivation
Period 14 Post medieval to Modern	7	1	15	Cultivation
Period 15 Unphased groups	54	11	11, 12	

PERIOD 1

Tree clearance

Six tree-throw holes were identified, none associated with either datable or burnt material.

PERIOD 3 Neolithic (fig.17)

The earliest firmly dated archaeological features were two pits, both located in Area 1. The first (C8317) was sub-circular, 2.4m across, 1.2m deep and with six fills, some of which contained pottery and flint of Neolithic date. The second (C8371) was elliptical in shape, 2.5m x 0.75m. It had a single fill that contained over one hundred and twenty pieces of struck flint.

Two isolated features are difficult to interpret in terms of their overall significance, either for settlement or ritual activity. It may be significant that at Eastcotts some 500m to the east, an inhumation and pit of Neolithic date were also recovered, their nature and their proximity to ring ditch crop marks strongly suggesting a ritual context. The remains at Bumpy Lane however could equally be indicative of settlement and recent work at Cassington, Oxon, has demonstrated the diffuse and fragile nature of Neolithic settlement activity within valley bottom environments (Hey 1992; 1993).

PERIOD 6 Late Bronze Age/Early Iron Age (fig.16)

Located on the southern edge of Area 1, a single feature, (L10), of possible late Bronze Age date was recorded. A short length of ditch or gully it was 4m x 0.5m and was poorly defined in plan, clearly running beyond the limits of excavation. The upper fill contained 31 sherds of pottery, probably all from a single vessel.

PERIOD 7 Iron Age (figs.16 and 17)

Within Area 1 a sequence of Iron Age enclosures and boundaries was identified. This began with the 'circular' enclosure (L1), cut by linear ditches (L2) which were finally replaced by post alignment (L3). These were associated with a scatter of settlement features, pits and post holes, some possibly marking the site of structures, although no recoverable building-plans survived. To the east within Area 2 the settlement scatter continued, including two possible hearths. The edge of an enclosure/field system was also recorded.

Enclosure ditch (Area 1)

(Landscape Group 1)

Located on the northern side of Area 1, a substantial curving ditch formed the southern boundary to an enclosure. The major part of the enclosure lay beyond the limits of excavation but was mapped by geophysical survey and seen to be horseshoe-shaped, measuring approximately 70m E-W and 50m N-S. The northern end appeared open, although it is possible that the ditch at this point had been destroyed (or masked) by agricultural activity. Where excavated the ditch was between 1.8m and 2.2m wide with sides sloping at 45° down to a narrow, flat base. To the south-west a 6m wide break marked the entrance. There was no sign of a bank, internal or external, although the area has been extensively ploughed, probably from the Roman period and it is unlikely that this would have survived. Internal post settings indicating a palisade were also absent. The ditch was excavated in fourteen segments and between four and eight fills were recorded in each. Iron Age pottery was recorded in the upper fills of six excavated sections as well as a few sherds that may be pre-Iron Age. Struck flint was found in the lower fills of a few segments and in the middle and upper fills of the majority of segments.

Other boundaries

Area 1

Two ditches (L2), running perpendicular to each, other formed the corner of a NE-SW aligned system. The western ditch was traced by geophysical survey 60m to the south and within the excavation it was seen to cut the curving enclosure ditch (L1).

Cutting across (L2) was a fence line (L3), consisting of an E-W alignment of eighteen post holes, spaced regularly 1m-1.5m apart. These were generally oval, up to 1.1m across, the alignment running from just SE of the Enclosure (L1) eastwards for 34m, probably continuing beyond the limits of excavation.

Area 2
Towards the eastern end of the site, close to Eastcotts and Harrowden, a system of rectilinear ditches, (L5), appear to have been established during the Iron Age. Four ditches formed a N-S/E-W aligned field system.

Settlement evidence
Area 1
Scattered across Area 1 were a number of pit or post-hole type features variously dated or undated, together probably indicating settlement of Iron-Age date. Included in this Landscape Group, (L4), are three possible structures; a four-poster (A6), a linear alignment (A9), and a possible circular structure (A10).

Area 2
These are concentrated to the west and central part of Area 2, towards the settlement features recognised within Area 1, (L4), and outside of the field system (L5). Most of the features, again pit and post-hole types, were isolated and scattered with no discernible pattern, although a four post structures (A12) and (A14), and two burnt features (A35, contexts 8226 and 8356), possibly hearths, were identified.

Discussion
The Iron Age remains at Bumpy Lane clearly indicate settlement. Although a sequence of enclosures/boundaries can be detected within Area 1 it is not possible at present to integrate any of the settlement evidence or the enclosures within Area 2 to the east. Activity may have been continuous or episodic through the Iron Age and so a number different arrangements may be present. The large circular or horseshoe shaped enclosure, the primary feature within Area 1, may in fact date to an earlier period, Iron Age pottery only being present in its upper fills, although it is perfectly consistent in form with other isolated Iron Age enclosures, often interpreted as stock enclosures (e.g. Furzton, Milton Keynes; Williams *et al.* forthcoming). Subsequent development of the linear boundaries and post-hole boundary may continue to respect the circular ditch which has implications for its use.

The settlement remains, while not being substantial and including no certain structures, are perhaps chara teristic of the type of evidence we should expect within a valley bottom environment. If stock rearing represented the major land-use, perhaps indicating a seasonal exploitation of the low-lying grassland, then temporary and ephemeral forms of settlement evidence would result, the major more permanent settlements still clinging to higher ground, either on dry islands within the floodplain or the valley sides. Alternatively the remains at Bumpy lane may either be peripheral to settlement to north or south of the Bypass corridor, or have been subject to such a level of truncation from ploughing during later periods that the nature of the evidence largely reflects the survival of deeper features.

PERIOD 9 Romano-British (fig.17)
Romano British activity is concentrated on the east side of Area 2 and consists of a field system and two pits. The main N-S Iron Age boundaries (L5), were recut during this period but the internal divisions were not, suggesting a broad continuation of land use. The eastern ditch was re ut at least four times with ditch terminals indicating an entrance to the enclosure, subsequently blocked.

A single cremation was also recorded within Area 1. Although undated by ceramics it is probably Roman on the grounds of the nails found in association.

Any assessment of the significance of these remains is impossible without taking into account the evidence from Harrowden and Eastcotts where more substantial signs of settlement were recovered.

PERIOD 13 Medieval (fig.17)

Ridge and furrow cultivation ran across the whole of Area 2, it was unrecognised during excavation within Area 1 although indicated by geophysical survey. The furrows run N-S on an exact alignment with the Iron-Age/Romano-British field system (L5)/(L6).

No doubt these fields were attached to the settlement at Harrowden (Wood 1985) and to the south the surviving earthworks include pockets of ridge and furrow. The major significance of the Bumpy Lane evidence lies in the concurrence of orientation between the furrows and the earlier boundaries. This could be explained simply in terms of drainage, this running down towards the Elstow brook, a straightforward topographical imperative respected from the Iron Age onwards. The exact agreement in both orientation and line suggests a measure of continuity can be posited, although topography may well have provided a rational for such conservatism.

PERIOD 15 Unphased groups

There were a number of undated features on the site. Where stratigraphic or spatial associations have permitted these have been integrated into groups (e.g. L4 and L8 above). Those remaining, (L12) in Area 2, might date to the Neolithic, Bronze age or Iron Age.

Thirteen possible pits, post holes and ditches from evaluation trenches 3 and 4 (L12) may have had an archaeological origin but were more likely naturally derived. These were not investigated further in the main excavation.

2.5.2 REGISTERED AND NON CERAMIC BULK ARTEFACTS

Factual data

Quantification of material

Twelve registered artefacts and two registered architectural fragments were recovered from Bumpy Lane. The non ceramic assemblage comprised 342 humanly worked or burnt flint pieces (of which five were registered) and eighty-one iron nails and fragments. Additionally, twenty-eight worked flint pieces, an iron nail shank fragment and a coin of William III were recovered from the evaluation.

Provenance

The registered and non-ceramic bulk finds range in date from the Mesolithic to the late seventeenth/early eighteenth century and includes:

- two microliths of Mesolithic date and a further thirty-seven cores and flint debitage of Mesolithic/early Neolithic date
- eleven tools and 276 cores and debitage dating to the later Neolithic/Bronze Age
- a small Roman assemblage (c. 7 artefacts) spanning the first to the fourth centuries
- a coin of William III c. 1695-1700

The flint assemblage will be discussed separately in the following section. The remaining non ceramic material is presented below (tables 90 and 91).

Table 90 Non ceramic registered finds

Sf. No.	Associational group	Context type	Period	Description	Date
1	-	unstrat.	-	iron knife, incomplete 'hogs-back' type	Flavian Roman, 1st C AD
2	-	unstrat.	-	CA coin, Constantine I	307-337 AD.
3	-	unstrat.	-	CA coin, Constantine II	337-340 AD.
5	20	fill of ditch	9	iron knife/shears blade, incomplete	earlier Roman, 1st-2nd C. AD.
6	20	fill of ditch	9	bone hairpin, unfinished and broken	earlier Roman 1st-2nd C. AD.
8	-	unstrat.	-	bone gaming piece	earlier Roman 1st-2nd C. AD.

Table 91: Non ceramic bulk finds

Context type	Associational group	Period	Description
topsoil	0	14	CA coin , farthing William III (1695-1700)
fill of furrow	13	13	iron nail shank × 1
topsoil	0	14	lead sheet × 1
fill of ditch	20	9	Iron nails ×2
fill of ditch	20	9	Iron nails × 2
fill of slot	31	9	Iron nail × 1
fill of ditch	21	9	Iron nails × 2
fill of pit	26	7	Iron nails × 73
fill of ditch	21	9	Iron hobnail × 1
unstrat.	-	-	limestone architectural fragments ×2

No intrusion or residuality is discernible in the non-ceramic assemblage. However registered finds 1,2,3,8 and two architectural fragments are recorded as unstratified, having been recovered, together with large quantities of Roman pottery from machine excavated spoil immediately adjacent to a series of intercutting ditches (associational groups 20-23). The relatively intact and unabraded condition of the pottery suggests that it almost certainly originated from the upper fills of one or more of these ditches, truncated by machining.

Range and variety

In common with the ceramic material, the larger part of the non ceramic assemblage was hand-collected. Additionally a metal detector was operated and its use, whilst undoubtedly improving the recovery rates of metalwork may also have biased the composition of the overall artefactual assemblage in its favour.

The Roman assemblage

Despite the uncertain provenance of most of the Roman assemblage, it forms the only coherent group of related artefacts (excluding flint) to be recovered from Bumpy Lane. The dating of the material (table 90) corresponds to that of the ceramic assemblage with early Roman (1st-2nd century) and later Roman (4th century) represented. The two Barnack type limestone architectural fragments are consistent in appearance with Roman paving material.

One further group is however worthy of additional comment. This is the collection of seventy-three iron nails recovered from a small pit 8170 (associational group 26). Although a small amount late Bronze Age/early Iron Age potterywas recovered in association the nails themselves are unlikelt to date to before the Roman period.

All the non ceramic material has been allocated functional categories according to Bedfordshire Artefacts Typology (BAT). This categorisation is displayed below (table 92).

Table 92: Functional categories

Categories	Quantities of Registered Finds	Quantities of Bulk Finds
2 Fasteners and Fittings	-	nails (81)
4 Crafts and Industry	1 r.	
5 Multi-Purpose Tools	2 r.	
6 Trade and Commerce	2 r.	1 pm.
8 Pastimes	1 r.	
12 Personal Adornment and Dress	1 r	

r.=Roman; pm.=post Medieval

Condition

Six bags of non ceramic bulk artefacts, comprising eighty one iron nails or fragments, and two registered finds, Rfs 1 and 5, also of iron were submitted by the artefacts manager to the conservator (A Tribe) for assessment. Although not examined by the Conservator, the remaining finds from the excavation were believed to be in fair to good condition.

The condition of these finds was assessed by visual examination with the aid of a stereo microscope and by x-radiography.

The two small finds were in fair condition, partially covered with soil and the usual brown, dark brown and orange-brown corrosion products. Some traces of mineral preserved organic material, possibly wood or plant matter, were present on one of the small finds. The x-radiograph of Sf. 1

appeared to show that the cutting edge of the blade was made from iron of a different composition than the rest of the knife.

Most of the iron nails were likewise covered in soil and the typical corrosion products. One preserved traces of wood or plant matter as mineral replaced impressions within the corrosion products.

The potential of these finds in helping to achieve the finds research objectives (see below) was assessed to be nil and therefore no finds were selected to undergo investigative conservation.

2.5.3 FLINT

Factual data

Quantification

A total assemblage of five registered flint artefacts and 309 bulk finds, comprising flint tools, debitage and burnt flint were recovered from the main excavation at Bumpy Lane, weighing, when combined 1599·7g. A further twenty-eight flint bulk finds, weighing 188.5 g were recovered from the evaluation making a total of 342 pieces weighing 1788·2g.

Provenance

The provisional assessment indicates that the recovered flint assemblage spans the Mesolithic to the Bronze Age (tables 93-94). Thirty-seven pieces display characteristics of manufacture and flint quality suggestive of Mesolithic or earlier Neolithic date and c. 271 pieces showed characteristics appropriate for the later Neolithic through to the Bronze Age. The remaining 34 pieces are too fragmentary to be datable.

The major part of the assemblage (86%) was recovered from hand excavated feature fills, and the remainder from topsoil. A total of sixty-six contexts contained quantities of flint, and of these sixty-two are phased. Details of phasing and associational groups are listed below in tables 93 and 94.

Table 93: Flint tools by period, and associational group

Period	Associational group	Group type	Description (Sf. No.)	Date
7	36	horseshoe enclosure	cutting blade	Mesolithic/early Neolithic
7	1	horseshoe enclosure	end scraper (Sf. 7)	late Neolithic/Bronze Age
7	1	horseshoe enclosure	knife	late Neolithic/early Bronze Age
7	36	horseshoe enclosu e	core/scraper (Sf. 10)	late Neolithic/Bronze Age
7	36	horseshoe enclosure	end scraper (Sf. 12)	late Neolithic/ Bronze Age
7	9	structure	geometric microlith (Sf. 9)	later Mesolithic
7	26	isolated features	geometric microlith	later Mesolithic
9	31	isolated features	piercer	late Neolithic/early Bronze Age
15	14	structure	end scraper (Sf. 11)	late Neolithic/Bronze Age
14	-	topsoil	'thumbnail' type scraper	early Bronze Age
14	-	topsoil	2 × 'thumbnail' type scrapers, 1× utilised flake	late Neolithic/early Bronze Age

Table 94: Flint cores/debitage by period and associational group

Period	Associational group	Group type	Quantity and description	Date
3	32	pit group	153 debitage	late Neolithic/Bronze Age
6	34	isolated features	2 debitage	1× Mesolithic: 1× undated
7	1	horseshoe enclosure	27 debitage	5 × Mesolithic/early Neolithic: 19 ×.late Neolithic/Bronze Age: 3 × undated
7	36	horseshoe enclosure	16 debitage	2 ×.Mesolithic/early Neolithic: 9 × late Neolithic/Bronze Age: 5 ×. undated
7	2	boundary	4 debitage	1× Mesolithic/early Neolithic:2×late Neolithic/Bronze Age:1× undated
7	4	boundary	6 debitage	5× late Neolithic/Bronze Age; 1× undated
7	5	boundary	4 debitage	4× late Neolithic/Bronze Age
7	7	pit group	33 debitage	11× Mesolithic/early Neolithic, 22× late Neolithic/Bronze Age
7	9	structure	2 debitage	2× late Neolithic/Bronze Age
7	16	boundary	1 debitage	undated
7	17	boundary	9 debitage	2× Mesolithic/early Neolithic; 6× late Neolithic/Bronze Age; 1× burnt
7	26	isolated features	2 debitage	2× late Neolithic/Bronze Age
7	27	isolated feature	2 debitage	1× Mesolithic/early Neolithic; 1 × undated
9	15	boundary	3 debitage	2× late Neolithic/Bronze Age; 1× undated
9	20	boundary	1 debitage	burnt, undated
9	21	boundary	7 debitage	4× late Neolithic/Bronze Age; 3× undated
9	31	isolated pits	3 debitage	1× Mesolithic/early Neolithic; 2× undated
13	13	furrows	8 debitage	6× late Neolithic; 2× undated
14	-	topsoil (evaluation)	7 debitage	2× Mesolithic/early Neolithic; 4× late Neolithic/Bronze Age; 1× undated
14	-	topsoil	38 debitage	10 × Mesolithic/early Neolithic; 18 × late Neolithic/Bronze Age; 10 × undated.
15	30	isolated features	1 debitage	late Neolithic/Bronze Age

Range and variety

A scan of the lithic assemblage indicates that thirteen pieces were tools, twenty-nine were cores and 300 were waste flakes/blades or burnt flint (tables 93-94). The quality of the flint quality encountered was variable, and most, if not all of the raw material derived locally, from re-deposited river gravels. Cortex survived on the majority of pieces, suggesting the utilisation of small, perhaps cobble sized nodules. It ranged in colour from white or pale grey to orange brown and generally showed signs of thinning or abrasion, a characteristic of alluvial action. The flint itself ranged in colour from pale grey to dark grey, brown and black.

The Mesolithic and Mesolithic or earlier Neolithic material represents a seemingly small (c. 37 pieces or 12.01%) but significant assemblage and may be linked with the larger group of similar date from the neighbouring Eastcotts site.

Three further groups, two from phase 1 and one from phase 2 are worthy of individual attention as they relate to specific aims and objectives as set out in the Bumpy Lane project design.

Pit Group L7

The twenty flint pieces from pit 8317 (associational group 32) were found together with quantities (c.31 sherds) of coarse flint tempered pottery of later Neolithic date. The feature was first examined during the evaluation stage when a t ial t cnch was placed to investigate a large anomaly located by geophysical survey. Twelve flint pieces and c.8 sherds were recovered at this stage. The pottery was recovered in fragmentary but unabraded condition and although no tools were recovered, the hard-hammer flake biased debitage is consistent with a late Neolithic date. That the material is 'in situ' is suggested by the presence of re-fitting pieces.

The second group, recovered from pit 8371 (associational group 32) comprises 121 fragments of debitage. It was not found with associated ceramic material and was dated by the manufactu ing technique only (table 94). No tools were identified and the assemblage consisted entirely of debitage, associated with tool production or ' oughing out'. It included rough cores, flakes and a few poorly controlled blades. It was clear from the cortex, which survived on the majority of pieces, and the flint itself that the entire assemblage derived from as few as four or possibly five nodules. A small proportion of the material refits, although it is impossible to reconstruct any tool types produced.

'Horseshoe enclosure' L1

The flint assemblage recovered from contexts associated with the 'horseshoe' enclosure consists of 48 pieces including 5 tools (tables 93 and 94). All the lithic material was recovered from seconda fills, in which late Bronze Age/early Iron Age pottery as also present. Neither may necessar ly relate directly to the feature's construction.

Condition

In general the Bumpy Lane flint assemblage was in good condition with only a few pieces (principally those from topsoil or late feature fills) showing abrasion or post depositional damage.

2.5.4 CERAMICS

Factual data

Quantification of material

Pottery
The Bumpy Lane pottery assemblage was recorded by fabric type and form. Quantification was by sherd and vessel count. A total of 603 sherds was recorded, representing a minimum of 523 vessels.

An additional 146 sherds of exclusively Roman pottery were recovered from machine excavated spoil. This material is classed as unstratified and will be of only limited use in the full analysis of the ceramics. It will be scanned, however, for fabric types or forms which do not occur in the stratified assemblage.

All quantitative statements and tables in this report are based on the sherd count.

Building Material
The building material was quantified by sherd count and weight. A total of 43 sherds weighing 2709g was recovered, comprising c.41 fragments of roof tile and c.2 of daub or fired clay.

Provenance

Pottery
Table 1 shows the relative quantities of pottery recovered from the varying feature classes encountered at Bumpy Lane. The figures are expressed as a sherd count and as a percentage of the total.

Table 95: Quantity of pottery from different feature types

Context type	sherds	% TOTAL
Ditches	464	76.97%
Pits	71	11.77%
Structural	37	6.13%
Tree disturbance/natural features	24	3.98%
Pyrotechnic installations	4	.66%
Furrows	2	.33%
Topsoil	1	.16%
TOTAL	**602**	**100%**

Due largely to the lack of intact stratigraphy on site, the bulk of the ceramic material derives from cut features, primarily pits and ditches (88.74%). These are features which are normally regarded as the least susceptible to contamination particularly in their primary and lower fills. The constant re-cutting and intercutting of boundary ditches and other features seen in urban sites and some rural sites is absent at Bumpy Lane, this factor further reduces contamination.

The pottery assemblage shows a wide date range, from the Neolithic to the Post-medieval periods. Incidence of residuality is restricted in the assemblage, mainly because of the low occurrence of intercutting features and the consequent low contamination (table 96).

Further residuality may be identified within the fills of the early Iron Age 'horseshoe' enclosure. Difficulties in distinguishing small sherds of prehistoric pottery such as coarse flint tempered fabrics, which may be either late Neolithic or early Iron Age, or late Bronze Age sandy and shelly fabrics from corresponding Iron Age forms make residuality difficult to detect. This may be determined at the analysis stage. Levels of abrasion were recorded, but they cannot be seen as a reliable guide to the extent of residuality, due mainly to the varying durability of the fabrics.

Table 96: Quantification of pottery, by sherd, within phase

Pottery Group	Period 1	Period 3	Period 6	Period 7	Period 9	Period 13	Period 14	TOTAL
Neolithic		31						31
Late BA /Early IA			31	7				8
Early-middle Iron Age				71	2			73
Late Iron Age	1			1			1	3
Roman	23				433			456
Post-med.-modern						2		2
TOTAL	24	31	31	79	435	2	1	603

Building Material

Table 97: Quantification of building material by feature type

Context type	Post-med. Flat roof tile	*Tegula/ Imbrex*	Daub/fired clay	sherds	% total
Ditches		34	1	35	81.4%
Pits	1	3		4	9.3%
Structural		1	1	2	4.65%
Furrows	2			2	4.65%
TOTAL	3	38	2	43	100%

Table 97 shows the quantities of building material recovered from different feature types on site. The small quantities of daub encountered and the fragmentary condition of the roof tile suggests piecemeal deposition and/or re-deposition away from domestic structures.

Table 98: Quantification of building material by phase

Category	Period 7	Period 9	Period 13	TOTAL
Tegula/Imbrex	4	34		38
Post-medieval flat roof tile		1	2	3
Daub/Fired clay	1	1		2
TOTAL	5	34	2	43

The distribution of building material through time (table 98) shows no concentrations of diagnostic materials, and reflects the pottery assemblage in terms of material quantity per period.

Range and variety

Type Series

The type series is listed below in chronological order. New fabrics or types not previously published have been marked with a double asterisk (**).

NEOLITHIC			*TOTAL 31*
-	Coarse flint (Peterborough type ware)		31
LATE BRONZE AGE/ EARLY IRON AGE			*TOTAL 38*
-	Shelly		33
-	Sandy		5
EARLY-MIDDLE IRON AGE			*TOTAL 73*
F28	Fine sand		6
F03	Grog/sand		13
F18	Sand/shell		4
F20	Calcareous inclusions		10
F01A	Coarse flint		9
F16	Coarse shelly		7
F28-29	Sandy		23
F	Shell, sand and organic	**	1
LATER IRON AGE			*3*
F09	Sand/grog		1
F06	Grog		2
ROMAN			*TOTAL 456*
R01	samian		4
R03A	Fine white ware		7
R05	Orange sandy		7
R06	Grey ware		138
R07B	Black sandy		17
R07C	Black gritty		2
R09A	Pink grogged		1
R11A	Oxford whiteware		3
R12B	Nene Valley mortaria		12
R12B	Nene Valley Colour Coat		2
R13	Shelly		246
R17	Smooth orange		2
R	Buff sandy		10
R	Misc. sandy		5
POST MEDIEVAL			*TOTAL 2*
P01	Glazed earthenware		1
P14	Black ware		1

Neolithic

The thirty-one sherds, 5.14% of the total assemblage of Neolithic coarse tempered fabric represent the earliest ceramic evidence from the site. The pottery is in the late Neolithic impressed ware tradition (Peterborough ware) and three sherds bear characteristic whipped cord decoration on the exterior and in one case both the exterior and interior surfaces. This form of decoration, known as 'maggots', due to the short segmented appearance was prevalent throughout the late Neolithic period to about 1700 BC (Gibson and Woods 1992, 129).

Late Bronze Age/Early Iron Age

Pottery dated to this period comprises thirty-eight sherds, 6.3% of the total assemblage. Two fabrics, were recorded, a leached shelly fabric with deeply pitted 'corky' surfaces and a sandy fabric with characteristically thin walls.

The late Bronze Age/early Iron age material comprises entirely body sherds and no forms could be identified. A single small sherd of the sandy fabric retained a double line of grooved decoration.

Iron Age

Pottery datable to this period comprises seventy-five sherds, 12.43% of the total assemblage.

In common with the earlier ceramic material, the Iron Age pottery was recovered in a very fragmentary condition and no forms could be reconstructed. Dating was only possible through comparison of fabrics with those from other sites, notably Salford Quarry (BCAS in prep). The range of fabric types for the larger part of this fabric group is consistent with an early-middle Iron Age date. Only three sherds (one of which derived from the topsoil) were datable to the late Iron Age.

Decoration, was limited to a single line of fingernail impressions on the body of a of flint tempered vessel.

Roman

Roman pottery makes up the largest chronological grouping from Bumpy Lane. A total of 456 sherds dating to this period was recovered, 75.62% of the total assemblage.

Two further chronological sub divisions can be distinguished by the finewares present in the various associated contexts. The first group is dominated by fine white wares and samian pottery and is dated to the 1st-2nd centuries. The second contains Nene Valley colour-coats and Oxfordshire whiteware mortaria and is dated to the and late 3rd-4th centuries. Both groups feature large quantities of undiagnostic grey wares and shelly wares which were manufactured throughout the Roman period.

Fourteen vessels had recognisable forms (table 99).

Table 99 Roman Forms

Roman Forms	No of vessels
Jars	5
Mortaria	3
Bowls	2
Lid-seated jars	1
Beakers	1
Necked jars	1
Flagons	1
TOTAL	**14**

The bulk of the Roman assemblage is likely to have been produced locally, with only the finewares and mortaria imported. Imports comprise mainly of regional varieties from the Nene Valley, Oxfordshire and Hertfordshire.

No decoration was noted on any of the Roman pottery. A thin white exterior slip survived on three sherds of fine orange fabric R05.

Post-medieval and Modern

Three sherds of post-medieval pottery of 18th-19th century date were recovered.

Evidence of use

Evidence for use in the Bumpy Lane pottery assemblage is confined to surface soothing and internal residues. All the pottery displaying evidence for use dated to the Roman period.

Soothing of the exterior surface is limited to five sherds of shelly fabric. Twelve sherds, comprising mainly shelly wares display internal soothing. In one instance a shelly ware sherd with a sooted exterior bore a thick carbonised internal residue. External soothing of vessels may be seen as evidence

of heating above a fire whilst soothing of the interior and the carbonised residue probably result from the burning of the contents, also from direct contact with the heat source. The types of substances contained within these vessels may be revealed by residue analysis

The prevalence of Roman pottery types showing evidence of use almost certainly results from the disproportionate quantity recovered and the high degree of surface abrasion on the Iron Age and earlier fabrics. It is possible also that some cooking vessels were used to heat their contents not over a hearth, but by the use of heated stones.

Building Material

Roof tile

Thirty-nine fragments of roof tile were recovered from eight contexts. Thirty-seven fragments are datable by fabric and form to the Roman period and three to the post-medieval period (table 100).

Table 100 Roman tile forms

Tile form	Quantity
Tegula	27
Imbrex	9
Unidentified	1
TOTAL	37

The Roman tile falls within the character of larger assemblages in Bedfordshire although the Bumpy Lane material are in general thinner(8-10mm) when compared to the tiles from both the small town of Sandy and the villa at Kempston (BCAS in prep). Three fabric types are represented; shelly, grog/shell and grog/sand with the shelly fabric accounting for 90% of the total. Kilns producing shelly tiles have been excavated at Harrold, Beds (Brown, 1994) and the presence of a major production site explains the dominance of shelly fabrics in tile assemblages from the region.

The three fragments of Post-medieval flat roof tile displayed no evidence for their attachment. Two fragments were harsh and sandy and the remaining third was sandy with calcareous inclusions.

Daub/fired clay

The two fragments of daub or fired clay recovered retained no surfaces or wattle impressions. Two fabrics were identified, the first contained coarse grog inclusions and the second, smaller fragment was sandy.

Condition

Pottery

The condition of the pottery is generally good with only 40 sherds, 6.63 % of the total assemblage showing varying degrees of abrasion.

Recognisable forms account for only 2.7% of the assemblage, suggesting a high degree of fragmentation as a whole. This would appear to be most pronounced in the Iron Age and earlier pottery assemblage, although this may in part be explained by the inferior firing of prehistoric pots compared to Roman examples.

Building materials/fired clay

The condition of the building material and fired clay is variable. All the material in this group is fragmentary but abrasion is only apparent on the daub/fired clay.

2.5.5 HUMAN BONE

Factual Data

A single cremation, (8170/8171) was recovered from the western part of Area 1, to the south of the circular Iron Age enclosure. Although four sherds of lateBronze Age /early Iron Agepottery was recovered it is likely to date from the Roman period on the basis of the seventy one iron nails also recovered. This may indicate that the bone was once contained within a wooden box (Philpott 1991).

2.5.6 ANIMAL BONE

Factual Data

Quantification

One box of bone was recovered from hand dug contexts. There were no sieved samples.

Table 101 Number of contexts containing bone by period

Period	No. of contexts
1	1
7	9
9	8
14	1

Summary

The bulk of the bone came from two periods the Iron Age (7) and the Roman (9). All bones from period 7 come from cattle except for some rough subrectangular lumps from a post hole which appear to be antler. Roman material comes from cattle, pig and sheep/goat, found in ditch fills.

Condition

Measurements can be taken and ageing data is available from teeth and epiphyseal fusion.

2.5.7 MACROSCOPIC PLANT AND INVERTEBRATE REMAINS

Factual data

Quantification and provenance of material

Settlement features of Neolithic and Iron Age date produced surprisingly little in the way of charred food plant remains, with only a single fragment of *Corylus avellana* (hazel) nut shell from an Iron Age pit (Table 102). Charcoal was recovered from features of a range of dates (Table 103).

Table 102: Charred Seeds and Chaff from Bumpy Lane

No. of samples by Period	**Iron Age**	**Unphased**
with 1-10 items	1	2
Total samples	1	2
Species by Period		
Cereal indet.	-	+
Prunus spinosa sloe	-	+
Corylus avellana hazel nut shell frags.	+	+

+ 1-10 items,

Table 103: Charcoal from Bumpy Lane

Type of sample		**?Neolithic**	**Late Bronze Age / Early Iron Age**	**Iron Age**	**Roman**	**Unphased**
No. flots		-	1	7	-	2
No. hand-picked		1	-	2	1	-
Total samples		1	1	9	1	2
No. samples with charcoal						
Alnus / Corylus tp.	alder/hazel	-	-	1	-	-
Quercus sp.	oak	1	1	-	-	2
cf. Pomoideae	hawthorn etc.	-	-	1	-	-
cf. *Prunus* tp.	sloe etc.	-	-	3	-	-

2.6 HARROWDEN

2.6.1 STRUCTURAL EVIDENCE

Summary (fig.18)

Excavations at Harrowden were limited to the projected line of the roadside ditches. The earliest evidence came from a single ditch of Iron Age date. A scatter of residual Iron Age pottery also indicates activity. Surprisingly the best represented period was the Romano-British. Evidence for a dense network of rectilinear enclosures was recovered, almost certainly indicating settlement of a similar type to the nearby Eastcotts site. Post holes, although impossible to interpret accurately within the restricted confines of the trenches suggest structures. No Saxon activity was recovered. Evidence for medieval settlement appeared from the 11th century. Although excavation took place within the heart of the earthworks only a relatively limited number of features were recovered, these included a sequence demonstrating the changing form of land use, from settlement to cultivation, during this period. This part of the settlement may have become deserted in a piecemeal fashion, evidence for post-medieval activity coming from a number of trenches.

Background to the excavation

The excavations at Harrowden were located at TL 072475, approximately 2.5km. to the south of Bedford town centre, within the parish of Eastcotts. The site lay to either side of the A600 (prior to diversion during the construction of the Bypass), trenches 1, 2, 3, 4, and 5 to the west of the road and trenches 6 and 7 to the east. Some 50m to the north-west lay the excavations at Bumpy Lane and 100m to the north east those at Eastcotts. The site was situated on alluvial gravels and silts, on ground sloping gently south from 29.6m OD to 27.6m. OD towards the Elstow Brook. The Brook ran through the centre of the extant earthworks and defined the southern limit of our investigations. The land was under pasture, the surviving earthworks testified to this having been the dominant land use since the abandonment of this part of the village for settlement.

As part of evaluation work carried out along the length of the Bypass in 1992, a trial trench was excavated in the area of the earthworks on the east side of the A600 (Dawson 1993). This revealed features of 12th - 13th century and 17th - 18th century date with Roman finds in a residual context.

The area under direct threat from the Bypass has already been damaged by the Southern Orbital Sewer which cut a wide swathe through the site (the earthworks were surveyed prior to this), the construction of the A600, and the Bedford to Cambridge Railway line. Nevertheless a substantial area of earthworks survive either side of the road. Investigations were restricted to the line of roadside drainage ditches.

Method statement

Approximately 400m of drainage runs were investigated, seven trenches amounting to 0.26ha. Fieldwork was carried out by experienced excavators, in accordance with the *Bedfordshire County Archaeology Service's Procedures Manual*. Topsoil was initially removed by a wheeled JCB but access across the wetter areas proved too difficult and work was completed using a tracked 360° excavator. Topsoil was removed to the top of the natural alluvial sands and gravels or archaeological deposits, whichever was encountered first, after which hand excavation proceeded. Where no features were identified within the alluvium this was also removed by machine. There was no programmed collection of material from within the topsoil. All other finds were retained for analysis with

environmental samples taken where appropriate. All archaeological features were recorded and a sample of natural features investigated.

Factual data

Quantification of material

Table 104 Quantity of site structural records

Record type	Number
Contexts	477
Site drawings	28
Photographs	468

Table 105 Quantification of feature types

Feature type	Number	% Total
Ditches and gullies	243	51
Layers	44	9
Pits	48	10
Structural contexts	87	18
Others	55	12
Total	477	

Evidence by Period

Table 106 Summary of provisional phasing

PERIOD	CONTEXT No. / %		LANDSCAPE GROUPS	DESCRIPTION
Period 1 Natural	20	4		
Period 7 Iron Age	7	1	4	Land division
Period 9 Romano-British	231	49	3, 5, 6, 7, 10	Settlement
Period 13 Medieval	83	18	1, 2, 9, 12, 13, 15	Settlement
Period 14 Post Medieval to Modern	97	21	8, 11, 17, 18	Settlement?/Cultivation
Period 15 Unphased groups	32	7	14	

PERIOD 7 (Late) Iron Age (fig.19)

Trench 6

The earliest dated archaeological feature on the site comprised a right-angled length of ditch, the angle of the return just visible within the trench limits. Iron Age pottery was found within the fills and in a residual context within other trench 6 features.

Although only a short section of the ditch was revealed, it appears to be on a similar alignment to the later Roman ditches in this area, perhaps suggesting suggesting a measure of continuity in the form of land division. A similar, although perhaps more convincing relationship between features of Iron Age and Roman date was observed at the Bumpy Lane site to the north.

PERIOD 9 Romano-British (fig.19)

Over sixty Romano British features were found on the site in trenches 1, 3, 4, and 6. Although in detail it is difficult to create links between the isolated trenches the majority of the ditches share a common alignment, approximately that of the brook to the south (see also Bumpy lane above). It is likely that a substantial Roman settlement, perhaps similar in form to that at Eastcotts, lies beneath the earthworks of the later medieval village.

Trench 1

At the north end of trench 1 there are five linear features running NE - SW across the trench. These were between 2.5 and 4.3m. wide with steeply sloping or undercutting sides and flattish bases, they were spaced very regularly with a thin strip of natural gravel less than 0.5m. wide separating each feature; they certainly extended beyond the trench limits. On excavation, a small amount of C4th Romano-British pottery was recovered from the fills.

It is difficult to explain such regular cuts in terms of a boundary, especially in the light of the more convincing boundary ditch, (A17), this was recut on a number of occasions but within it's established line. It has been suggested that these are in fact linear gravel quarries dug in an organised sequence across the area. Similar organised gravel winning has been noted before in London on the Royal Mint site (D. Hawkins pers comm) and in a post-medieval context at Tattenhoe in Milton Keynes (Ivens *et al* 1995). During our excavation, groundwater had to be constantly pumped away as the site at this point is within the floodplain of the brook. Also the sides of these features were very unstable and frequently collapsed. If these conditions pertained when the features were originally excavated this may suggest that the thin strip of gravel separating each quarry was left to temporarily control groundwater.

These features may just be a sequence of drainage ditches dug in quite rapid succession to avoid the problem of quickly collapsing sides, but they are different in character to a ditch (A17) that provides a southern boundary. This ditch has been re-cut three times, whereas the possible quarries are all single phase features.

Trenches 3 and 4

A small number of Romano British pits and ditches in trenches 3 (L10) and 4. (L6) were noted. These cannot be closely dated but are almost certainly part of the more extensive system revealed in trench 6 (below).

Trench 6

Boundaries

In trench 6 the main landscape feature is a repeating pattern of ditches aligned NE-SW and NW-SE (approximately perpendicular to the brook and similar to that of the later medieval earthworks) which divides the area into small square or rectangular plots. Elements of the system have been re-cut and re-established at different times, with further subdivision of some plots. At the north end of the trench a NW - SE fence line of post-holes (A 27) with clay and limestone packing, forms a subdivision of the system or perhaps a structure.

What may be the northern boundary to Romano-British activity was seen at the extreme north end of trench 6, (A29), although this was significantly out of alignment with all other features.

Settlement

A number of Romano British features post-date the field system as they are cut through the silted up ditches. There is a post-hole structure (A 42) consisting of nine post-holes divided roughly into two N - S lines 3 metres apart. The plan is however quite irregular and the nature of this structure is unclear.

There are also scattered small pits and short sections of drainage gullies, perhaps representing later activity peripheral to the main focus of settlement.

PERIOD 13 Medieval (fig.19)

Fifteen features can be firmly dated to this period. Problems of interpretation exist, similar to those encountered with the Romano British material, resulting from the narrowness of the trenches. An additional, and surprising, brake to interpretation was the relative paucity of remains. Although the excavation trenches are located in an area of substantial earthworks, medieval features were only found in trenches 4, 6 and the much smaller trial trench excavated in 1992.

Phase 1 C11th-C13th

Trench 4

This produced an interesting sequence; a pit and two ditches containing 12th - 13th century pottery represent the earliest medieval activity, although a sequence of five small undated ditches running E - W across the trench were cut through by Phase 2 ditch and may also belong to this period.

Trench 6

The trial trench produced two large ditches and a large pit containing 12th - 13th century pottery, from a small area. In contrast, trench 6, the largest single area of excavation, located approximately 10 - 15 metres to the west of this produced relatively scattered evidence. There was a pit and a gully, and more interestingly, a large ditch, re-cut twice, that appeared to correspond to a series of dumped soil layers forming one of the prominent earthworks in the field. The ditch (assoc. group 31) was actually cutting the outer layers of the bank, suggesting that it was either a later addition or that it was re-establishing an earlier, similar feature. This ditch and bank form a boundary between an area with pits, ditches and gullies (in trench 6 and the trial trench) to the south and an area covered by the north end of trench 6 that plans of the earthworks show was given over to ridge and furrow cultivation. Remnants of furrows (landscape group 1) were found in this area but no other medieval features.

Phase 2 C13th -C15th

Trench 4

These features were sealed by a worm-sorted, naturally developed soil layer 100 - 250 mm. deep which could have formed under arable or pasture conditions, in a relatively short period of time; Richard McPhail suggests 100 years. The pottery from excavated sections of this layer includes Roman and 12th - 15th century medieval material. The layer (landscape group 15) represents a late medieval ploughsoil that has incorporated finds from Roman and earlier medieval features below it as a result of plough disturbance.

The soil layer is in turn sealed by a cobbled trackway, 3.6 metres wide running NW - SE across the trench. This consisted of a 100 - 200 mm. layer of rounded pebbles up to 100 mm. diameter (which were probably collected from the nearby Elstow Brook) overlain in places by patches of gravel laid down to repair and level the surface. medieval pottery, the latest dating to the 15th. century was recovered from the trackway.

These features illustrate changing use of this part of the shrunken medieval village. During the 12th - 13th centuries there was some settlement activity represented by pits and ditches. The area then perhaps became more outlying from the main settlement, was used for cultivation and was ploughed. The trackway is constructed in the late medieval period as a result of some other changes in the villages structure.

PERIOD 14 Post-medieval to Modern (fig.19)

There are 21 features of a post-medieval date. These are concentrated mainly in trenches 1, 2 and 3 with a small amount located in the 1992 trial trench.

In the trial trench, one isolated pit contained 17th - 18th century pottery. A group of five post-holes (assoc. group 57) in close proximity to this, that do not make any discernible structure, may also be of this date, as one contained fragments of medieval or post-medieval roof tile.

The area to the west of the A600 in trenches 2 and 3 was used for rubbish dumping in the post-medieval period as there is one pit (assoc. group 6) containing 14th - 16th century material and small

groups of pits containing 16th - 17th century material (assoc. group 3) and 18th - 19th century material (assoc. group 2).

In trench 1 there are two 19th century ditches and several modern features which may be related to activity associated with the house adjacent to the excavation.

PERIOD 15 Unphased groups

Undated settlement features, probably either Roman or medieval in origin.

2.6.2 REGISTERED AND NON CERAMIC BULK ARTEFACTS

Factual data

Quantification of material

A total of fifty registered artefacts was recovered during excavation. The non-ceramic bulk assemblage comprised eleven nails, six samples of slag (total weight 1519g) and twelve flint artefacts (including 2 registered finds).

Provenance

Twenty-four artefacts (32%) within this assemblage are typologically datable. Preliminary examination of the material indicates a date range spanning the Mesolithic to the 19th century, and includes:

- a small assemblage (12 pieces) of Mesolithic to Bronze Age flint.
- a small Roman assemblage (6 artefacts) spanning the late 1st to the 4th centuries.
- a small medieval and post-medieval assemblage (2 and 3 artefacts respectively) dating from the early 13th to the 17th centuries.
- a coin of George III dating to the 19th century.

These objects are briefly catalogued below.

Table 107 Datable registered finds, by chronological period.

Rf no	Context no	Description	Date
5	415	Ca coin Tetricus I	AD270-273
13	112	Ca coin Constans	AD337-350
14	773	Ca coin (very worn)	Roman
15	791	Ca brooch of 'keyhole' type	late 1st century
20	123	Vessel glass rim	mid-late 4th century
22	797	Ceramic spindlewhorl	Roman
6	415	Ca buckle and buckle plate	early 13th century
7	421	Ca strapfitting	1350-1450
19	346	Ca ferrule	post-medieval
28	665	Ca lacetag (type II)	16th-17th century
31	648	Wine bottle fragment	17th century
1	329	Ca halfpenny George III	1806

Quantities of artefact recovered by Context Types are presented below. Artefacts recovered from external cultivation were collected using a metal detector.

Table 108 Registered and bulk finds by Feature type.

Context type	Registered Finds		Bulk Finds	
	Number	%	Number	%
Ditch, gully	17	34.0	5	17.0
Structural cut	1	2.0	-	-
Pit (unspecified)	2	4.0	2	7.0
Rubbish pit	2	4.0	3	10.0
Quarry pit	1	2.0	1	3.0
External cultivation	20	40.0	11	39.0

External dump	4	8.0	5	17.0
External surface	3	6.0	2	7.0
TOTAL	**50**	**100.0**	**29**	**100.0**

Phasing and date range

Table 109 Registered and Bulk finds by period and landscape group

Period	Landscape group	Description	Registered artefacts	Metalworking debris	Fe Nails	Flint
9	3	R-B enclosures	Ca coin, brooch & lacctag Quern frag, Vess glass frag, Fe unid obj x5	-	1	-
9	5	R-B settlement	Spindlewhorl, Fe unid obj	-	-	-
9	7	R-B settlement	Flint piercer, Ca coin, Vess glass frag	-	-	-
9	10	R-B settlement	Quern frag	Fe slag x42g	-	-
13	2	Med settlement	Vess glass x2, Fe unid x2	-	-	Retouched flake x1
13	9	Trackway	Ca ring & strapfitting Pb waste	-	2	-
13	12	Med settlement	Fe unid obj	-	1	-
13	13	Med settlement	-	-	-	Waste flake x1
13	15	Agricultural soil	Ca coin, buckle, sheet & strip, Pb waste, Window glass Fe Buckle, strip, pivot & spadeshoe, Fe Unid obj x4	Fe slag x409g	2	Blade x1, Waste flake x1
14	8	P-Med activity	Ca ferrule, Fe knife & unid obj	Fe slag x92g	-	-
14	11	C16th activity	Ca coin, Fe unid obj	Fe slag x976g	3	Burnt flint x1
14	17	Topsoil	Flint scraper, Ca wire, Quern frags x3, Whetstone	-	-	Blade x2, Waste flakes x3
14	18	Modern activity	Fe buckle	-	2	-

Thirty-two percent of the registered finds (16 artefacts) have been assigned to the Roman period, while the remainder (34 artefacts) have been phased to medieval and later periods. The majority of bulk finds have been phased, by association, to groups within the later periods.

The presence of both residual and intrusive elements is evident within the assemblage. Residuality is not unexpected, given the length of occupation of the site. Among the datable registered finds, a Roman coin of the 3rd century is residual within layer [414], period 13, while post-medieval material is intrusive within one feature of Roman and one of early medieval date.

Four fragments of vessel glass and one fragment of window glass were recovered from two contexts within period 9. Only one of these fragments (Rf20) is of Roman date (mid-late 4th century). The other (Rf39) is a post-medieval apothecaries bottle base and is intrusive. The remaining fragments are post-medieval. The glass was examined by H. Cool.

The flint tools and debitage, which range in date from the Mesolithic to the early bronze age, form a residual element in both Roman and medieval/post-medieval periods. Two pieces display characteristics of flint quality and manufacture indicative of a Mesolithic or earlier Neolithic date, while the remainder are characteristic of the later Neolithic to early bronze age periods.

Residual and intrusive elements do not appear to be concentrated within any particular trench or area of the site.

The metalworking residues represent the debris from iron smithing activity. The slag is not concentrated within any one area of the site, but has been randomly redeposited with other material within rubbish pits and ditches.

Range and variety

Artefacts were hand-collected from 50% sampled contexts, as outlined in section 3.4 of the project design specification (Baker and Dawson 1993b). Supervised metal detecting accounted for over 40% of the registered finds, and although improving the range of recovery of metal objects, is likely to have biased the overall composition of the artefact assemblage in their favour (table 110).

Table 110 Quantities of registered artefact by material.

Material	Quantity	Percentage
Iron	21	42.0
Copper alloy (incl. coins)	13	26.0
Lead/lead alloys	2	4.0
Stone (excl. flint)	6	12.0
Flint	2	4.0
Glass (vessel & window)	5	10.0
Ceramic	1	2.0
TOTAL	**50**	**100.0**

All non-ceramic material (registered and bulk finds) has been assigned to 23 simple name groups (table 111), in accordance with the Bedfordshire Artefact Typology. These have been allocated functional categories (table 112).

Table 111 Simple names and quantities present at Harrowden

Simple Name	Quantity	Functional Category (see below)
brooch	1	12
buckle	3	12
clay pipe	11	8
coin	4	6
ferrule	1	2
flint debitage	10	15
knife	1	5
lacetag	1	12
nails	11	2
piercer	1	15
pivot	1	2
quern	5	3
ring	1	16
scraper (flint)	1	15
sheet	1	16

slag	6 samples (1519g)	4
spadeshoe	1	10
spindlewhorl	1	4
strapfitting	1	12
strip	2	16
vessel (glass)	9	3
waste (pb)	2	4
whetstone	1	5
window glass	1	1
wire	1	16

Table 112 Functional categories

Categories	Registered Finds	Bulk Finds
1. Buildings	1	-
2. Fastenings & Fittings	2	Nails (11)
3. Household	9	Vessel glass (post-med x5)
4. Craft & Industry	3	Slag (6 samples)
5. Multipurpose blades & sharpeners	2	-
6. Commerce	4	-
8. Pastimes	-	Clay pipe (11 fragments)
10. Agriculture	1	-
12. Personal adornment & dress fittings	6	-
15. Prehistoric	2	Debitage (10)
16. Wide variety or unknown function	20	-

Condition

Twenty-three registered artefacts (21 of iron and 2 of copper alloy), and 7 iron nails were selected by the Artefacts Manager and submitted to the conservator (A Tribe) for assessment. Although not examined by the Conservator, the remaining registered artefacts were believed to be stable and in fair to good condition. The condition of the finds was assessed by visual examination with the aid of a tereo microscope and by x-radiography.

Iron Items

All of the iron items were x-radiographed (UCL X-RAY NOS: EH0280-EH0282). Most of these were in fair condition, with a few showing signs of extensive mineralisation. The standard orange-brown, brown and dark grey corrosion products predominated. Very few items bore traces either of carbonised wood among the soil and corrosion products covering them, or of mineral preserved organic material. Traces of wood or plant matter were present on two items, one of which (RF 35) also bore traces of possible mineral preserved leather. Three of the iron registered finds submitted for x-radiography were found to be nails.

Copper Alloy Items

The two artefacts received for assessment were a buckle (RF 6) and a coin (RF 14). These were both x-radiographed (UCL X-RAY NO: EH0283). The buckle was in fair condition, with a green patina present in some areas, but the coin was in very poor condition, distorted and with a dark purple-brown surface upon which some detail could be observed. X-radiography was particularly useful in revealing the extent of surface decoration present on the buckle.

2.6.3 CERAMICS

Factual Data

Quantification of material

Pottery

The pottery was recorded by fabric type and form. Quantification was by sherd and vessel count, rim percentage and weight. This information was subsequently computerised to facilitate data manipulation. A total of 1196 sherds was recorded, representing 921 vessels, weighing 21507g. Unless stated, all quantitative statements and tables in this assessment are based on sherd count.

Building material

A total of 94 fragments of tile and brick, weighing 8989g was recovered. The majority of these fragments (52%) was recognisably Roman in date, while a further 39% were of medieval/post-medieval origin. The remaining 9% were too fragmentary to be diagnostic and could not be assigned to any period.

A total of 75 fragments of daub and fired clay was recovered, weighing 3648g.

Provenance

Pottery

Table 113 below shows the relative quantities of pottery recovered from the different feature types on site. The figures are expressed as a sherd count and as a percentage of the total.

Table 113: Quantity of pottery from various feature types, by sherd.

Context type	Sherd count	% Total
Ditches	547	46.0
Pits	83	6.8
External cultivation (ploughsoil)	421	35.0
External layers and dumps	134	11.3
Structural cuts	5	0.4
Natural deposits (tree holes etc.)	6	0.5
Total	**1196**	**100%**

The majority (53.2%) of the assemblage derived from cut features (predominantly ditches and pits) generally regarded as those contexts likely to yield the most meaningful information. External layers and dumps (11.3%) would have been in use over an extended period of time and consequently, are susceptible to contamination. The material recovered from ploughsoil (35.0%) has been scanned for new fabrics or forms of intrinsic interest, but will not be incorporated into the full analysis of the ceramics.

The recovery of sizeable sherds, which are largely unabraded, suggests that the pottery was not subject to the usual processes that lead to fragmentation and abrasion. Limitations imposed by the 50% excavation and sampling policy, however, have reduced the number of full or reconstructable profiles obtained and conclusions drawn must be based largely on information gained solely from rim sherds. The policy of trenching as opposed to open area excavation also reduces the likelihood of identifying distinct and separate areas of activity, such as kitchens or storage areas on the site as a whole.

Table 114: Assemblage composition by period and sherd count.

Period	Number of sherds	% Total
Late Iron Age	41	3.4
Roman	652	54.5
Medieval	194	16.2
Late medieval	177	14.8
Post-medieval	88	7.4
Modern	44	3.7
Total	**1196**	**100.0**

Pottery

The ceramic assemblage dates from the late Iron Age to the post-medieval periods. Lack of detailed vertical stratigraphy at Harrowden meant that there was little direct relative dating evidence from the site. The date ranges assigned to the pottery types are based upon evidence published elsewhere. Contamination occurred to a high degree across the site, particularly within trench 4, (period 13), where medieval plough disturbance and subsequent worm-sorting caused a mixed horizon which contained substantial quantities of both Roman and late medieval pottery (table 115).

Table 115: Quantification of pottery by sherd, and phase.

	Period 1	Period 7	Period 9	Period 13	Period 14	Total
Late IA	1	14	26	-	-	41
Roman	5	-	392	227	28	652
Saxo-Norm	-	-	-	2	1	3
Medieval	-	-	-	175	16	191
Late med	-	-	-	145	32	177
Post-med	-	-	2	-	86	88
Modern	-	-	3	3	38	44
Total	**6**	**14**	**423**	**552**	**201**	**1196**

Period 7: Late Iron Age

The majority of the late Iron Age pottery appears to be residual, occurring in later periods, although it is possible that these later forms may have a longer currency than suspected. Boundary ditch [695] within trench 6, was the only feature to contain solely Iron Age pottery (2 sherds). Other features within this period contained intrusive pottery. Sherds assigned to this period constitute 1.2% of the total assemblage.

Period 9: Romano-British

This period contains 35.4% of the pottery recovered from the site, the majority of which derived from a sequence of ditched boundaries within trench 1 and a network of enclosures and cut features within trench 6. The greatest concentration of ceramics falls within the early Roman period, although the most numerous sherds are grey wares and shelly wares, which span the whole Roman period. Sherds of 3rd-4th century vessels are present, but only in small quantities. Although occurring in smaller amounts, the Roman ceramics from Harrowden are similar in character to those recovered from Eastcotts and may imply a continuation or spread of settlement.

Twenty-six residual late Iron Age sherds were present within this phase, as were five intrusive post-medieval/modern sherds.

Period 13: Medieval

This phase contains 46% of the total pottery assemblage. A high incidence of residuality occurs, with 41% of the 552 sherds recovered being attributable to the Roman period. The bulk of the medieval pottery dates to the 12th and 13th centuries, although the ceramic sequence is continuous through to

the 14th -15th centuries. In the early medieval period, shelly wares predominate, while in the later period, late medieval reduced sandy wares are prevalent.

Three sherds of modern pottery are intrusive in this phase.

Period 14: Post-medieval to modern
Seventeen percent of the total pottery assemblage was contained within this phase, recovered from rubbish pits concentrated mainly within trenches 1, 2 and 3. Of the 201 sherds assigned to this period, 38% were redeposited, being mainly late medieval and Roman in date.

Cross Context joins
The assemblage was examined for cross-contexts; in total only seven were recorded. Of these, one is between different layers within the same feature and is consequently not significant for the phasing of the site. The remainder are across different features: ditches [202], [208] and layer (329); ditch [302] and layer (329); pit [205] and layer (329); layers (428) and (429); ditch [430] and layer (429), (two examples). Not all of the cross-contexts joined physically; the vessels are, however, sufficiently distinctive in form, fabric, surface finish, manufacture and evidence of use for links to be made. The significance of these cross-contexts, taking all possible depositional processes into consideration, will be determined during discussion with the structural analyst at the analysis stage.

Building Material
Quantities of building material and the feature types from which they were recovered are tabulated below.

Table 116: Quantity of Building material from different feature types.

Context type	Sherd count	% Total
Ditches	49	52.1
Pits	16	17.0
External dumps	14	14.9
External cultivation (ploughsoil)	9	9.6
External surfaces	4	4.2
Structural cuts	1	1.1
Natural deposits (tree holes etc.)	1	1.1
Total	**94**	**100.0**

Quantities and types of building material recovered from the site are tabulated below by period.

Table 117: Building material by period.

Form	*Tegulae*	*Imbrices*	Brick (Roman)	Flat Roof	Unidentified	Total
Period 1	-	-	-	1	-	**1**
Period 9	28	1	4	8	5	**46**
Period 13	3	-	4	10	1	**18**
Period 14	-	3	6	18	2	**29**
Total	**31**	**4**	**14**	**37**	**8**	**94**

Daub and fired clay
Quantities of daub and fired clay and the feature types from which they were recovered are tabulated below.

Table 118: Quantity of daub and fired clay, from different feature types.

Feature Type	Fragment no	% Total
Ditches	70	93%
Pits	3	4%
External cultivation (ploughsoil)	2	3%
Total	**75**	**100%**

Most of the fired clay (52%) derives from the fill of ditch [618], within trench 6, and comprises substantial pieces, which may represent kiln furniture. The remaining pieces are very fragmentary and abraded. No material was recovered from structural contexts.

Seventy-three percent of the assemblage has been dated, by association, to the Roman period (period 9). Of this total, the majority (71%) was concentrated within ditch fill [618], with a large pottery assemblage of Roman date.

Range and Variety

Pottery Type Series

Fabrics types are listed below in chronological order. The type marked with one asterisk is known from Milton Keynes (fabric 40a, Marney 1989), but is new to the Bedfordshire Pottery Type Series.

LATE IRON AGE		*TOTAL*	*41*
F03	Grog and sand		9
F05	Grog and shell		20
F06B	Grog tempered (medium)		3
F06C	Grog tempered (coarse)		8
F08	Shell and grog		1
ROMAN		*TOTAL*	*652*
R	?Roman		9
R01	Samian		2
R03A	Fine whiteware		2
R03B	Gritty whiteware		7
R07B	Sandy blackware		53
R07C	Gritty blackware		14
R18	Pink gritty		2
R19	Amphora		6
R05A	Orange sandy		35
R06	Greyware		20
R06A	Greyware (Nene Valley)		4
R06B	Greyware (coarse)		62
R06C	Greyware (fine)		95
R06D	Greyware (micaceous)		7
R06E	Greyware (calcareous)		102
R34 *	Cream/orange ware		1
R17	Smooth orange		2
R13	Shelly		209
R12B	Nene Valley colour coat		9
R11	Oxford redware		8
R11A	Oxford whiteware		1
R11D	Oxford colour coat		1
R11E	Oxford mortaria (white)		1
R11F	Oxford mortaria (red)		1

MEDIEVAL		*TOTAL*	*194*
B01	St Neots type		2
B01C	St Neots type (orange)		1
C	Misc. medieval sandy		8
C01	Light orange sandy		60
C59A	Early medieval hand-made		8
C59B	Early medieval sandy harsh		7
B07	Medieval shelly (developed St Neots type)		92
C60	Greyware (?Hertfordshire)		3
C70	Gritty		1
C12A	Developed Stamford		1
C05	Medieval sandy (red margins)		4
C04	Medieval sandy (Bedford type)		2
C07	Medieval sandy (oxidised)		5
LATE MEDIEVAL		*TOTAL*	*177*
C09	Brill/Boarstall type (fine)		5
C10	Potterspury type		9
E01	Late medieval reduced		141
E02	Orange ware		22
POST-MEDIEVAL		*TOTAL*	*88*
P	Misc. ?Early post-medieval		19
P23	Raeren		5
P14	Blackware		31
P01	Glazed earthenware		1
P30	Staffordshire slipware		12
P33	Tin-glazed		10
P19	Speckled glazed ware		2
P37	White salt-glazed		2
P36A	Brown salt-glazed stoneware		1
P36B	Nottingham stoneware		4
MODERN		*TOTAL*	*44*

Iron Age

Only two forms of jar are distinguishable within the Iron Age assemblage. Storage jars and lid-seated jars are well attested forms recovered from sites such as Stagsden and Warren Villas (BCAS in prep).

Decoration on Iron Age pottery was restricted to one sherd which displayed coarse vertical combing.

Roman

Thirty-five percent of Roman ceramics have recognisable forms (table 119).

Table 119: Roman forms.

Forms	Quantity	Percentage
Jars (cooking pots)	109	15.7
Jars (lid-seated)	46	6.7
'Dog-dish' bowls	28	4.1
Bowls	19	2.8
Storage jars	9	1.2
Flanged bowls	8	1.1
Platters	7	1.0
Amphorae	6	0.8

Beakers	6	0.8
Poppy-head beakers	6	0.8
Mortaria	2	0.4
Flagons	1	0.2
Undiagnostic body sherds	446	64.4
TOTAL	**693**	**100.0**

Jars and bowls constitute the majority (91%) of the diagnostic vessels. Less common forms are represented by single examples only. Sherds with recognisable forms constitute 36% of the total assemblage, while the remainder comprises unrecognisable base or body sherds. The utilitarian forms represented, coupled with the small amount (6%) of imported wares, are indicative of a domestic assemblage whose status was not high. Among the locally manufactured pottery, shell-tempered vessels are the most numerous, constituting 32% of the Roman assemblage. Recognisable forms are similar to vessels produced at kilns in Harrold (Brown 1994), although detailed comparison of the material will be necessary to confirm this.

Decorative elements were recorded on 5% of the total pottery assemblage; the majority of sherds bearing decoration being of Roman date (table 120).

Table 120: Decoration on Roman pottery, by sherd.

Type of Decoration	Number of sherds
Horizontal combing	15
Burnishing	3
Burnished lattice	2
Cordon	4
Rouletting	6
Painting	1
Slipped	3
Total	**34**

On Roman vessels, evidence for the standard decorative elements of the period was noted, namely rilling or horizontal combing on the shelly wares and burnishing (often in a lattice pattern) on greywares. Slipping, painting and rouletting were noted on imported finewares.

Imports

The pottery has been divided into four provenance groups:

- local - pottery from within the county
- regional imports - pottery from neighbouring counties
- national imports - pottery from further afield, but still within Britain
- Continental imports - pottery from abroad

Approximately 6% of the Roman ceramics from Harrowden are imports. These are detailed in table 121.

Roman

Table 121: Roman imports.

Provenance group	Fabric code	Fabric type	Sherd no
Regional imports	R11	Oxford redware	8
	R11A	Oxford whiteware	1
	R11D	Oxford colour coat	1
	R11E	Oxford mortaria (white)	1

	R11F	Oxford mortaria (red)	1
	R03A	Fine whiteware	2
	R03B	Gritty whiteware	7
	R06A	Greyware (Nene Valley)	4
	R12B	Nene Valley colour coat	9
		TOTAL	**34**
Continental imports	R01	Samian	2
		TOTAL	**2**

Medieval and later

Forty-five percent of medieval and later ceramics have recognisable forms (table 122).

Table 122: Medieval and later forms.

Forms	Quantity	Percentage
Bowls	63	18.5
Jars (cooking pots)	39	11.0
Dishes	19	6.0
Jugs	16	4.9
Chamber pots	9	3.0
Plates	6	2.0
Saucers	1	0.3
Bottles	1	0.3
Undiagnostic body sherds	185	54.0
TOTAL	**339**	**100.0**

Bowls, jars, dishes and jugs constitute 89% of the recognisable forms. Most other forms are represented by single examples only. Sherds whose form could be recognised constitute 46% of the total assemblage, while the remainder comprised undiagnostic body or base sherds. It is possible that some of the glazed body sherds originated from jugs. However, as not all glazed vessels were jugs, glazed body sherds undiagnostic of form have been regarded as deriving from unrecognised vessels.

Decoration on medieval and later vessels was limited to glazing (jugs externally and bowls internally; 26 sherds in total), while only one sherd showed evidence of an applied thumbed strip.

Imports

Imported medieval and later pottery constituted 29% of the assemblage. Table 123 details these imports in the provenance groups described for Roman imports.

Table 123: Medieval and later imports.

Provenance group	Fabric code	Fabric type	Sherd no
Regional imports	B07	Medieval shelly	92
	C60	Greyware (?Herts)	3
	C09	Brill/Boarstall	5
	C10	Potterspury	9
		TOTAL	**109**
National imports	C12A	Developed Stamford	1
	P30	Staffordshire slipware	12
	P37	Staffs white salt glazed	2
	P36B	Nottingham stoneware	4
		TOTAL	**19**
Continental imports	P23	Raeren	5
		TOTAL	**5**

Evidence for use throughout the phases

A record of attributes including extent of abrasion, presence of residues, sooting or wear marks, repairs or secondary holes was made to provide an indication of the function of the pottery. Attributes relating to use were recorded on 7% of the total pottery assemblage, as follows:

Attribute no	Attribute type
1	Internal sooting
2	External sooting
3	Base sooting
4	Lid sooting
5	External sooting (partial)
6	Internal sooting (partial)
7	Internal/external sooting
8	Residue
9	Pitting (vessel interior)

The following table quantifies these attributes by period (using the above coding).

Table 124: Attributes by period

Attribute no	1	2	3	4	5	6	7	8	9	Total
Roman	1	3	-	22	14	4	1	2	2	49
Med. & later	-	-	1	-	15	3	-	18	-	37
Total	**1**	**3**	**1**	**22**	**29**	**7**	**1**	**20**	**2**	**86**

Sooting

The determination of sooting patterns is likely to be doubtful due to the incomplete nature of most of the pottery. Eleven percent of sherds have evidence of sooting. This is more common on pottery dating to the Roman period, where twenty-two rim sherds from lid-seated cooking jars are sooted externally up to a distinct line, indicating where a lid would have been placed. No ceramic lids were recovered, however, suggesting the use of other materials, such as wood, for this purpose. The majority of sooted sherds of both Roman and medieval and later date were sooted externally, indicating the use of vessels over a fire. Only two Roman sherds were sooted internally, suggesting the burning of contents within them, while one vessel was sooted over the breaks. This indicates the vessel was either broken over the fire, or that it was burnt after being discarded.

Residues

Internal residues were noted on twenty sherds (two Roman and eighteen of medieval and later date). Two sherds of Roman date show evidence of severely abraded or pitted internal surfaces, indicating that the contents were vigorously stirred or that vessels were used to contain acidic substances.

Wear marks/repairs

No wear marks were recorded and there was no evidence of vessels having been repaired.

Spalling

Fourteen sherds of Roman date showed evidence of spalling. It is possible that this occurred during use, although it is most likely to have resulted during firing.

Building Material

Five fabric types were defined, primarily by main inclusion and fabric colour. They are, in order of prevalence: a) shelly b) orange sandy c) sand and calcareous inclusions d) grog and shell and e) yellow sandy. A record of attributes including extent of abrasion, presence of burning and/or mortar and the presence and shape of peg-holes was undertaken.

Table 125: Fabric types recovered by period

Fabric Type	Sand/calc	Shelly	Grog/shell	Orange sandy	Yellow sandy	Total
Period 1	1	-	-	-	-	1
Period 9	-	40	1	5	-	46
Period 13	1	9	1	7	-	18
Period 14	13	5	1	7	3	29
Total	15	54	3	19	3	94

Daub and fired clay

Three fabric types have been recognised and are listed below in order of prevalence.

Table 126: Daub and fired clay by fabric type.

Fabric type	Number of fragments	% Total
Sandy	56	75%
Calcareous	10	13%
Organic	9	12%
Total	75	100%

No particular distinction was noted between fabric types and the periods to which they were assigned, although fabrics with calcareous inclusions appear to be restricted to the Roman and earlier periods (table 127). The sample is, however, too small for any significant conclusions to be drawn.

Table 127: Daub and fired clay by period and fabric type.

Period	Sandy	Calcareous	Organic	Total
7	-	1	2	3
9	41	9	5	55
13	15	-	2	17
Total	56	10	9	75

A number of fragments recovered from feature [618] retain surfaces, and bear organic/grain impressions, although no wattle impressions survived. Among those retaining finished surfaces (9 fragments), it was possible in some cases, to distinguish between the oxidised wall face and reduced reverse.

Material from ditch [618] comprises 38 sizeable fragments, 10 of which have roughly finished edges, in harsh, hard-fired sandy fabric, crudely made into flat, circular 'plates'. Although crudely made, some containing coarse flint inclusions of approximately 2.0cm in size, the clay is well fired almost to the appearance of pot fabric. The discs range in thickness from 1.5-0.5cm, although the extent of fragmentation makes it impossible to estimate diameter. Only two fragments could be physically joined. However, comparison of fabric, surface finish, firing and colour indicates there are at least four separate plates. Eight fragments are totally or partially oxidised.

Evidence for function is tenuous; it is possible that the plates represent portable components in kiln floors, to be used either independently or in conjunction with kiln bars, or as spacers to separate tiers of pots within the kiln. They are, however, more crudely manufactured than the 'standard' clay plates, which are often perforated and carefully finished, such as those recovered from the nearby Mile Road kilns near Elstow (Dring 1971).

Feature [618] also produced an anomalous clay fragment, approximately 2.5cm thick, weighing 443g and with an estimated diameter of 12.0cm. The object has been carefully made, in well fired, fine sandy fabric and has smoothed, but abraded surfaces and a well defined edge. The object may be an

unperforated kiln plate, or a component of a pillared hypocaust system. There is, however, a lack of structural evidence for the latter on the site.

Condition of the material

Pottery

The condition of the pottery is generally very good. Only 8% of the assemblage displayed signs of abrasion, and this was restricted to ceramics of late Iron Age and Roman date. It was possible to determine whether wear was caused by use or by post-depositional processes. The fabrics were generally well-fired and, with the exception of the Roman shelly fabrics, there was little leaching out of inclusions. No further treatment is necessary.

Building Material

Although fragmentary, the building material survives in a generally good condition. Some of the tiles in shelly fabric are abraded, which, in the absence of diagnostic forms, may serve as an indicator of date.

Daub and fired clay

Fired clay from feature [618] is in very good condition, although fragmentary, while the remaining 36 fragments are poor and abraded.

2.6.4 ANIMAL BONE

Factual data

Quantification and provenance of material

Four boxes of bone were recovered from hand dug contexts. Five soil samples contained evidence for bone fragments and micro fauna.

Table 128 Number of contexts containing bone by period

Period	No. of contexts
7	1
9	40
13	15
14	15
15	1

Range and variety

The three groups of bone from this site show changing predominant species. The Roman period has evidence for horse, cattle, pig, sheep goat and dog with cattle predominant. The medieval period has the same species with the addition of chicken, with sheep/goat predominant. The post medieval has rabbit as an addition with a balance between cattle and sheep/goat. The sieved samples include rodent and amphibian.

2.6.5 MACROSCOPIC PLANT AND INVERTEBRATE REMAINS

Factual data

Quantification, provenance and range of material

Somewhat unusual results were obtained from this site, with over 40 hazel nut shell fragments and much oak charcoal being found in a Roman post hole. Otherwise, only a little charcoal was recovered from Roman and post-medieval features. The medieval boundary ditch A31 (Sample 5) evidently once carried a stream or seasonally held floodwaters from the river because shells of the flowing water operculate gastropods *Bithynia tentaculata* and *B. leachii* are present.

Table 129 Charred Seeds and Chaff

No. of samples by Period	**Roman**
with 1-10 items	-
11-100	1
Total samples	1
Species by Period	
Corylus avellana hazel nut shell frags.	++

+ 1-10 items, ++ 11-100 items, +++ 101-1000, ++++ 1000+

Table 130 Charcoal

Type of sample		**Roman**	**Post.med.**
No. flots		3	1
No. hand-picked		1	
Total samples		4	1
No. of samples with charcoal			
Alnus / Corylus tp.	alder/hazel		1
Quercus sp.	oak	1	
cf. Pomoideae	hawthorn etc.	2	

2.7 EASTCOTTS

12.7.1 STRUCTURAL EVIDENCE

Summary (fig.20)

The earliest evidence for activity came primarily from the trial trenches in the form of a burial of probable Neolithic date and a nearby pit, both indicating funerary/ceremonial activity and placing the Eastcotts site firmly within the ritual landscape focused at Octagon Farm. Evidence for later prehistoric enclosure was also recovered along with two foci for Iron Age occupation. The main body of evidence dates to the Romano-British period. A network of conjoined rectilinear enclosures was established close to the Elstow Brook in the late First century. These were clearly the focus for settlement although whether it was multiple occupation or a single farmstead is uncertain. The final extent of the settlement implies the former. The enclosures were extended through the second to fourth centuries westwards, upslope away from the brook (possibly in response to rising water levels). Those to the east either became abandoned or subject to changed, less intensive use. The settlement appears to have continued in use into the late fourth century with no subsequent re-occupation of the site.

Background to the excavation

The site lies at TL 075479, 2.5km to the south east of Bedford town centre within the modern parish of Eastcotts, where the route of the Bypass runs to the south of the River Great Ouse. At this point it follows a low gravel ridge running between the main river channel and a tributary stream the Elstow Brook.. The Eastcotts site ran approximately west to east across the shallow south-facing slope of the ridge towards the Brook in the east.

Prior to excavation the land had been under arable cultivation, furrows indicating ploughing from the medieval period. Alluvium covered the southern part of the site, and on aerial photographs was visible as a dark blanket spread out to either side of the Brook. To the north similar sub-soil deposits were encountered within the excavations, but these were interpreted as colluvial in origin.

Previous archaeological work began with observations made during the construction of the Southern Orbital Sewer in 1977/1978. This work revealed scatters of Roman pottery and slight soil marks were revealed following topsoil removal, as were the remains of a Roman pottery kiln (White 1980). Four evaluation trenches were excavated in this area. The trenches confirmed the Romano-British character of the site while at the same time evidence for Neolithic activity, including an inhumation, was recovered. As a result of these discoveries full excavation was proposed.

Method statement

Work was undertaken between January and July of 1994, conditions, especially during the first quarter, were generally poor as a result of high rainfall. Topsoil removal was undertaken using a tracked excavator. Initial attempts to transport the topsoil off-site with dumper trucks failed, the heavy rain causing an unacceptable level of rutting. Consequently, the spoil heaps had to be moved by bulldozer. As there was limited space available for soil stacking within the road corridor (and none to either side), it was decided that the most efficient way to clear the site would be in two phases. A southern strip was cleared with the soil stacked to the north, once excavation was complete this stack was moved back on to the southern side, a new strip was then excavated to the north with soil stacked

to the south. This necessitated a piecemeal approach to excavation, and at no point was the entire site visible.

As topsoil was removed it became clear that up to 200mm of sub-soil, essentially a mix of alluvium and colluvium, lay beneath it. Both deposits were removed together once it was established that no archaeological features lay at their interface. The alluvium was clearly visible on air photos as a dark stain.

Excavation was carried out in accordance with procedures laid out in *Bedfordshire County Archaeology Service's Procedures Manual*. All the major features were sectioned along with a sample of isolated and naturally derived features. Further excavation was undertaken in areas of greater complexity or importance. Excavation was generally carried out by hand, although a machine was used to re-move further topsoil and clarify areas of uncertainty. A JCB was used towards the end of the fieldwork to excavate further sections through under-sampled features.

All artefacts and ecofacts located were retained for analysis and relevant environmental samples were taken in accordance with the research design.

Factual data

Quantification of material

Table 131 Quantity of site structural records

Record type	Number
Contexts	3239
Site drawings	98
Photographs	2340

Table 132 Quantification of feature types

Feature type	Number	% Total
Ditches and gullies	1379	43
Layers	111	3
Pits	845	26
Structural contexts	715	22
Natural	94	3
Others	70	2
Total	**3216**	**100%**

Evidence by Period

Table 133 Summary of provisional phasing

PERIOD	CONTEXTS No. / %		LANDSCAPE GROUPS	DESCRIPTION
Period 1 Natural glacial and alluvial deposits	90	3	40, 41	
Period 2 Early Prehistoric			None	Mesolithic settlement
Period 3 Neolithic	7		18	Funerary/ ceremonial

Period 4 Late Neolithic/Bronze Age	24	1	19, 49	Boundaries
Period 7 Iron Age	34	1	4, 20	Scattered settlement
Period 9 Romano-British	65	2	45	Settlement
Phase 1	1287	40	1, 2, 3, 7, 10, 11, 15, 22, 35, 50, 51, 52, 53, 54	
Phase 2	944	30	17, 23, 24, 25, 26, 27, 28, 29, 30, 31, 33, 34, 36, 37, 47, 48, 55	
Phase 3	100	3	32, 38	
Period 13 Medieval	35	1	5, 12, 42	Cultivation
Period 14 Post-medieval to Modern	78	2	43, 44	Cultivation
Period 15 Unphased groups	533	16	16, 21, 39, 46	

PERIOD 1 Tree clearance

A total of nine tree throw holes were recorded, of which seven were partially excavated. These were variable in size, but all displayed the characteristic crescent shaped soil mark surrounding an area of disturbed or redeposited natural. Feature [1873] contained significant quantities of Romano-British pottery, indicating that tree clearance was still taking place at this time.

PERIOD 2 Early Prehistoric

There are no structural groups assigned to this phase, it being represented wholly by residual lithic material. A preliminary scan suggests a significant proportion is of Mesolithic date, the mix of debitage and tools indicating settlement, possibly a seasonal or temporary encampment.

PERIOD 3 Neolithic (fig.21)

The results from the trial trenches were startling in the relative abundance of deposits and material of Early Neolithic date. Both a crouched inhumation (A248) and associated pit (A50) contained significant lithic assemblages suggesting further discoveries would be made during full excavation. As it turned out the only addition to this group was the second half of the already part excavated pit. No further Period 3 features were identified. This reinforces the interpretation of the features as isolated elements within a funerary/ritual landscape, ring-ditches to the north providing a further link with the general spread of ceremonial and ritual monuments in this area.

PERIOD 4 Late Neolithic/Early Bronze Age (fig.21)

Two parallel ditches, (L49) at the western end of the site, were dated to this period on the basis of lithics and may indicate the replacement of the earlier Neolithic funerary/ceremonial landscape with one characterised by linear boundaries, presumably defining agricultural and/or landscape units. A second group of ditches, (L19) further to the west has been included in this period on the grounds of an early stratigraphic position and characteristic leached fills (these were in sharp contrast to the later, darker Roman fills) although no datable material was recovered.

PERIOD 7 Iron Age (fig.21)

A small amount of Iron Age material was recovered from two groups of features, (L4) to the east and (L20) to the west. Both are characterised by a loose concentration of small pits or postholes and probably represent two separate settlement or activity foci. Significantly, residual Iron Age material

occurs, predominantly in Period 9 features, within a radius of 50m of both foci (L2, L3, L7 and L9 close to L4, and L25, L28 and L31 close to L20).

A curvilinear gully (A20) with an east facing break or entrance has been placed in (L20). Excavation produced no finds and the feature was badly truncated by Romano-British activity, but this might represent the remains of a poorly preserved hut circle, with a projected (albeit rather small) diameter of 7m. to 8m.

PERIOD 9 Romano-British (fig.22)

The vast bulk of the excavated material dates to this period. Three phases can be identified and these primarily relate to the structural development of the enclosure systems. Phase 1 sees the establishment across the central and eastern part of the site of two and possibly three main enclosure groups; these clearly undergo development and modification within phase 1, the sequence of these developments is difficult to divine but a model is proposed. During phases 2 and 3 this eastern part of the site becomes either abandoned or subject to less intensive use, identifiable activity becoming concentrated to the central and western areas, with elaboration and extension of the settlement towards the triple ditches which form a western boundary to the settlement. This movement of the settlement, upslope away from the Elstow Brook, may relate to rising water levels during the later Roman Period. The northern limits of the settlement are visible as crop-marks just beyond the road corridor. The extent of the settlement to the south is unknown, alluvium inhibiting the development of crop marks and rendering geophysical survey unproductive, although observations during the construction of the Southern Orbital Sewer and in excavations at Harrowden suggest settlement may have covered much of the area between the road corridor and the brook.

The narrow transect taken through this clearly more extensive settlement reveals a plan not dissimilar to those recorded at Maxey (Pryor and French 1985), Wavendon Gate (Williams *et al* forthcoming) and Warren Villas (BCAS in prep.) where larger parts of similar settlements have been recorded. However, the limit of the excavation at Eastcotts makes it difficult to decide whether we are dealing with a number of complex and internally sub divided, but essentially discrete, enclosures as at Stanwick, Northhants, for instance (Neal 1989), or a contiguous system of conjoined enclosures as at Little Paxton (Jones and Ferris 1993) and Warren Villas.

Although the majority of features have been integrated into the three phase system, the major boundary to the settlement, the triple ditches remain floating and independent of it.

Triple ditches (fig.21)

Three parallel ditches (A2, 3 and 4) of variable width and profile were aligned from north to south and defined a boundary some 25m. across. Finds from these features were rare and included first/second to fourth century AD pottery as well as a small quantity of Iron Age material. This may suggest an Iron Age origin with continued use and maintenance into Period 9. On the other hand the earlier material may just be residual.

Phase 1, 1st to 2nd century (fig.23)

This Phase represents the establishment and early use of the Eastcotts settlement site. Allowing for the difficulties in interpreting extensive settlement from limited transect excavations it, is possible that two main enclosure groups existed, Enclosure Group A (EGA) within the central part of the site and Enclosure Group B (EGB) to the east. At the very least these groupings represent useful discussion blocks toward describing the detailed development of the enclosures. It will be seen that the Phase 1 evidence for EGA is relatively straightforward whereas that for EGB is more complex with evidence for development and modification over time. This may reflect a real bias in the focus of energies and activities towards the easternmost enclosure, or it may indicate that this area was the primary site of occupation, EGA being secondary and initiating the westwards drift of the settlement seen through Phases 2 and 3.

Enclosure Group A (EGA)
The major enclosure ditch (L26) defining the limits of this group is actually dated by its upper fills to Phase 2. These only date its disuse however and a large number of internal features, including a major east-west division, appear to date to Phase 1 and respect the line of (L26), suggesting it, or an earlier version, was in place at this time. Groups of C1st-C2nd pits (L35) towards the west and north-west of the enclosure also indicate activity. To the west of EGB only scattered features were identified suggesting that this area was peripheral to the main occupation area.

Enclosure Group B (EGB)
Towards the eastern end of the site a complex arrangement of successive linear boundaries mark the position of a second possible Enclosure group. Within this at least two separate sub-phases of development can tentatively be seen. Essentially, a simple rather open framework of ditched enclosures in Phase 1a, (L2, L3, L10, L50 and L51), becomes sub-dived and redefined into Phase 1b creating the appearance of a more elaborate and slightly more substantial system, (L7, L11, L52, L53 and L54). It should be allowed that the simplicity of the Phase 1a system might be a result of poorer definition due to the fragmenting and destructive imposition of the later system.

Although these two sub-phases have been identified it is unlikely that they represent real area-wide re-organisations enacted as part of a single integrated plan. It is more likely that development was piecemeal and organic, boundaries being re-cut or re-defined and areas sub-divided towards a general increase in complexity over time. The sub-phases merely identify the beginning and end of this process with an internal complexity hinted at by the early group (L20) in Phase 1a and the enclosure (L7) in Phase 1b.

Settlement
Within the EGB system a number of the defined spaces appear to be free of surviving or identifiable activity. These may have been utilised as yards, paddocks, gardens or other open spaces, while others have clearly been the focus for intensive activity of the sort that survives to be recorded, (e.g. pit groups (L50) and (L51) in Phase 1a and (L11) in Phase 1b). More specialised evidence came in the form of pottery Kiln (A163) (archaeomagnetic date of 140-190 AD (AJC-120) and the pit (A291) within which preserved wattle hurdling suggested agricultural or industrial processing. Within (L11) a number of post built structures were identified, (A221) probably simple fences with (A217) a possible rectangular post-built building.

General Phase 1 features
Two groups of features remain spatially isolated from the Phase 1a/b system outlined above, although spot-dating and their position at the eastern end of the site suggest they are within Period 9.1. Landscape group 1 may represent a third major enclosure group, although only its western edge was revealed within the limits of excavation and this had been badly damaged by the construction of the Southern Orbital Sewer. Landscape group 15 represents isolated pits and other features scattered across the eastern end of the site. The majority of dateable material indicated activity during the first to second century although a small amount suggests activity continuing into the third.

Phase 2, 2nd to 4th century (fig.24)
This Phase sees a concentration of activity at the western end of the site where Enclosure group A remains in use with subsidiary enclosures extended to the west towards the triple ditch boundary (L45). Very little contemporary activity or material can be identified to the east beyond EGA suggesting that this area had either become abandoned or that the nature and intensity of activity had changed.

The extension of subsidiary enclosures to the west can be seen to be a complex process. It involved a number of developments obvious at the level of provisional phasing, but was also no doubt a more subtle and continuously evolving process that only further more considered analysis will shed light on.

Enclosure Group A (EGA)
Although possibly established in Phase 1 the majority of the evidence for EGA indicates use during Phase 2. The major enclosure ditch (L26), defining an area 70m. by 30m., was still open into at least

the third century, with internal sub divisions creating clearly defined cells. These may reflect the organisation of the enclosure into activity areas such as (L33) and it notable that the pitting (L36) and (L37) is largely confined to the southern side of the enclosure and within the secondary enclosure (L29). This latter area had been a focus for activity in Phase 1, the construction of (L29) formalising and emphasising this.

A roughly "T" shaped feature (A88) was identified just to the south of (L29). Excavation revealed a complex series of fills including a layer rich in carbonised spelt wheat; suggesting use as a drying oven.

Early subsidiary enclosures

To the west and NW of EGA a complex of discontinuous enclosures marked the extension of settlement out towards the western boundary of the site (ditches L45). Rectilinear in form the ditches follow the alignment established by EGA. Landscape group 23 appears to be a rather discontinuous square or rectangular enclosure with ditches (L24) and (L25) to the north suggesting subsidiary enclosures or even perhaps agricultural activity. No structures and very little contemporary pitting was identified in relation to these groups suggesting the focus for actual occupation may have lain elsewhere.

Later Subsidiary enclosures

Enclosure Group C

These rectilinear/curvilinear ditches mark the southern parts of three enclosures. All three are stratigraphically later than the ditches of (L24) and (L25) (see above) with the westernmost possibly extended south over (L23) and through the site of Building (L34) (see below).

Enclosure Group D

A series of one linear and three curvilinear ditches situated towards the southern limit of excavation and marking the position of at least three enclosures. Again these are later than parts of (L23) and (L27) but significantly they may also be later than one element of the EGC system, clearly the two were not laid out at the same time.

Other Phase 9.2 features

Building (L34)

A poorly preserved building was indicated by a rectangular pattern of limestone fragments and river washed pebbles, possibly foundations (A55), defining an area 8m. by 6.50m. A line of post holes, two of which were stone lined, may also be connected with this building. This structure overlay the northern side of (L23) but was respected by a ditch of (L30) suggesting contemporeanity with the EGC system, although a later extension of this system, (L31), appears to cut through the site of the building presumably putting it out of use.

Pit Groups (L17) and (L55)

Although the majority of Phase 2 activity was at the western end of the site a few isolated pits were recorded to the east.

Funerary activity

Cremations (L 47)

Cut into the upper fills of ditch (A66), tucked into the NW corner of the enclosure (L23), were two cremations, C989 and C983. The former was contained within an urn, the latter merely a concentration of burnt bone. Spot dating and stratigraphic position suggest a date of the C2nd-C3rd.

Inhumations (L48)

Five inhumations were recorded, these being scattered across the eastern end of the site within EGB. Although poorly dated, one was accompanied by a pot of C2nd-C4th, they are likely to have been sited outside or at least on the margins of settlement, i.e. after EGB had ceased to be used as such, and probably post-date the cremations. A date of third century or later seems likely.

Phase 3, 4th - 5th century (fig.24)
These largely comprise pits or short lengths of ditch stratigraphically later than the Phase 2 ditches and enclosures. No significant late Roman extension or shift in the settlement form was recognised.

PERIOD 13 Medieval

The only medieval activity identified relates to cultivation. Occasional scattered plough furrows were identified across the site, generally aligned downslope towards the Elstow Brook.

PERIOD 15 Unphased groups

A large number of isolated features produced little or no datable artefacts. Only landscape group 21 consists of any structural evidence, a number of post hole groups, possibly representing the poorly preserved remains of small buildings. The majority of Phase 15 features are likely to be Roman in date and might be integrated into that period during analysis.

2.7.2 REGISTERED AND NON CERAMIC BULK ARTEFACTS

Factual data

Quantification of material

A total of 332 registered artefacts, and 3 architectural fragments was recovered during excavation. The non-ceramic bulk assemblage comprised 126 nails, 4 boxes of slag (total weight 27619g), and 1112 flint artefacts (including 70 registered finds). For clarity, the flint assemblage has been excluded and will be discussed separately (see 2.7.4).

Provenance

Among the registered finds, 122 artefacts (46% of the total assemblage) are typologically datable. Preliminary examination of the material indicates a date range spanning the prehistoric to the medieval period, and comprises:

- a Roman assemblage (121 artefacts) spanning the 1st to 4th centuries.
- a single jeton dating to the medieval period.

Artefacts of Roman origin constitute 99% of the datable assemblage, while medieval finds comprise the remaining 1%.

Quantities of artefact recovered by Context types are presented below. Artefacts recovered from external cultivation were collected using a metal detector.

Table 134 Registered and bulk finds by Feature type.

Context type	Registered Finds		Nails		Slag	
	Number	%	No.	%	Weight (g)	%
Ditch, gully	96	36.1	40	31.7	12106.5	43.8
Pits	85	32.0	50	39.7	12524.0	45.3
Structural cut	4	1.5	8	6.3	408.0	1.5
Layer	13	4.9	2	1.6	1165.5	4.2
Masonry	11	4.2	5	4.0	940.5	3.4
Grave	3	1.1	-	-	-	-
Hearth	-	-	2	1.6	-	-
External cultivation (ploughsoil)	43	16.1	6	4.8	75.0	0.3
External dump	7	2.6	13	10.3	399.5	1.5
External surface	1	0.4	-	-	-	-
Furrow	3	1.1	-	-	-	-
Total	**266**	**100.0**	**126**	**100.0**	**27619.0**	**100.0**

Phasing and date range

Table 135 Registered finds by period and landscape group

Period	Landscape group	Description	Registered Finds
9.1	3	Ditches, Enclosure Group B, Phase 1a	4
9.1	11	Pit Group, Enclosure Group B, Phase 1b	1
9.1	15	Pit Group	2
9.1	22	Internal divisions, Enclosure Group A	7

9.1	35	Pit Group	3
9.1	50	Pit group, Enclosure Group B, Phase 1a	5
9.1	51	Pit group, Enclosure Group B, Phase 1a	5
9.1	52	Ditches, Enclosure Group B, Phase 1b	2
9.1	53	Ditches, Enclosure Group B, Phase 1b	2
9.2	17	Pit Group	2
9.2	23	Enclosure	6
9.2	24	Enclosure	1
9.2	25	Enclosures	1
9.2	26	Boundary ditch, Enclosure Group A	17
9.2	28	Enclosures	3
9.2	29	Boundary ditch, Enclosure Group A	7
9.2	30	Enclosures	14
9.2	31	Enclosure	13
9.2	33	Sub-division, Enclosure Group A	8
9.2	34	Building	13
9.2	36	Pit Group	7
9.2	37	Pit Group	21
9.2	47	Cremations	3
9.3	38	Pit Group	51
13	5	Furrows	1
13	42	Furrows	3
13	43	Subsoil	1
14	43	Topsoil, alluvium/colluvium	54
15	39	Isolated pits/ditches western end	9
Total	-	-	**266**

Of the 15 registered artefacts recovered from within landscape group 34 (period 9.2), 9 are rotary quern fragments of early Roman date, which had been re-used within the walls of the building.

Table 136 Bulk Non-Ceramic artefacts, by period

Period	Timber Nails	Hobnails	Ferrous slag (g)	Vitrified Hearth Lining (g)	Copper Alloy Waste (g)
9	-	-	155.0	-	-
9.1	12	-	909.0	74.0	-
9.2	59	8	17461.5	331.0	13.0
9.3	28	4	7167.5	779.0	-
14	6	1	229.0	-	-
15	6	2	500.0	-	-
Total	**111**	**15**	**26422.0**	**1184**	**13**

The majority of the metalworking residues (95.7%) represent the debris from iron smithing activity, and 97% of this assemblage derived from deposits within period 9. None of the material came from hearths, the majority (89%) having been redeposited in ditch and pit fills (table 134). This secondary redeposition of slags is not uncommon, presumably resulting from periodic cleaning of hearths and surrounding areas.

As slag dumps are frequently found at some distance from the site of the process which produced them, associational groups containing over c1000g of ferrous slag were examined to determine whether any concentration or pattern to their deposition could be noted, or if they contained hammerscale.

Hammerscale is regarded as an important indicator of the location of ironsmithing as quantities are more likely to remain in the vicinity of a smithy, as opposed to the bulk slags which may be removed further afield for dumping or use as hardcore.

Six associational groups were examined (table 137). The slags from these groups were found to be concentrated in Enclosure group A (period 9.2). Concentrations of slag from period 9.3 were from pits which had been dug into the ditch fills of this same enclosure group, suggesting the slags originated from period 9.2
smithing activity.

Table 137 Associational groupings containing slag.

Period	Landscape Group	Associational Group	Feature	Quantity of ferrous slag
9.2	31	58	887, 831	1553g + hammerscale
9.2	37	298	983, 1247, 2101	2218g + hammerscale & 28g vitrified hearth lining
9.2	26	84	2010, 2016, 2084, 2433, 925, 1339	4118g + hammerscale & 125g vitrified hearth lining
9.2	26	79	922, 1248	1498g + hammerscale
9.3	38	54	2412, 2895	5144g + hammerscale & 488g vitrified hearth lining
9.3	38	108	3105	946g + hammerscale & 116g vitrified hearth lining

Range and variety

Artefacts were hand-collected from sampled contexts, as outlined in section 3.1 of the project design specification (BCAS 1993). Supervised metal detecting accounted for approximately 20% of the registered finds, and although improving the range of recovery of metal objects, is likely to have biased the overall composition of the artefact assemblage in their favour (table 138).

Table 138 Quantities of Registered Artefact by material

Material	Quantity	Percentage
Iron	105	38.4
Copper Alloy (incl. coins)	51	18.2
Lead	7	2.6
Silver (incl. coin)	2	0.7
Slag	1	0.4
Ceramic	3	1.1
Glass	14	4.3
Vitreous paste	1	0.4
Stone	69	29.0
Bone	5	1.9
Leather	7	2.6
Wood	1	0.4
TOTAL	**266**	**100.0**

All non-ceramic material (excluding flint) has been assigned to 49 simple name groups (table 139), in accordance with the Bedfordshire Artefact Typology. These have been allocated functional categories (table 140). The functional categories and their respective quantities are set out below in table 140,

and in detail in table 143. The components, and their quantities of each functional category by period are presented in tables 144 to 154.

Table 139 Simple names and quantities present at Eastcotts.

Simple Name	Quantity	Simple Name	Quantity
bar	2	mill stone	1
bead	2	mount	1
bell	1	nail	111
binding	1	off-cut	1
bracelet	4	pin	3
brooch	2	polisher	1
bung	1	quern	58
burin	1	ring	1
chain link	1	rod	1
candle holder	1	sheet	7
coffin nail	2	shoe	4
coin	29	slag	27619g
comb	1	socket	1
core	1	spoon	1
crucible	1	spear head	1
face pot	1	spindlewhorl	1
fragment	6	strapfitting	1
gaming piece	1	strip	14
hobnail	15	tablet	1
jeton	1	tang	1
key	2	timber dog	1
knife	7	vessel (glass)	13
ligula	2	waste (pb)	6
latchlifter	1	weight	1
lump	3	whetstone	9

Table 140 Functional categories

Categories	Registered Finds	Bulk Finds
1. Buildings and Services	-	Architectural frags. (3)
2. Fastenings & Fittings	6	Timber Nails (111)
3. Household	76	
4. Craft & Industry	11	Slag (27619g)
5. Multi-purpose Tools	17	
6. Commerce	31	
8. Pastimes	2	Clay pipe (1 fragment)
11. Weaponry	1	
12. Personal adornment & dress fittings	16	Hobnails (15)
13. Toilet Instruments	3	
16. Wide variety or unknown function	38	
17. Unknown	66	

The greatest quantity of objects (28.6%) of artefacts belong to the Household category, within which the largest single object class is that of quernstones; 58 examples in total, many of which had been re-used within a masonry wall.

Leather Assemblage

The leather comprised seven registered artefacts recovered from the fills of three separate pits, within Period 9. Two shoes, (Rfs 235 and 239), not a matching pair, and small fragments from a shoe upper (Rf242), were recovered in association with a wooden hurdle within landscape group 15 (period 9.1). The style of manufacture and decorative elements of the shoes suggest a date within the 2nd-3rd century, which is compatible with the pottery with which they were found (pers comm Q Mould).

The primary fill of a pit within landscape group 36 (period 9.2) contained a fragment of waste leather (Rf66) and a fragment with thonging (Rf71). Two undiagnostic fragments of scrap leather (Rf 331) and the fragmentary bottom unit of a shoe of nailed construction (Rf273), were recovered from the fills of a large pit within landscape group 38 (period 9.3). Pottery from both features has been dated to the 2nd and 3rd centuries, and it is unlikely that the leather will be able to provide any independent dating information.

Wooden Object

A single, incomplete wooden artefact (Rf245) was recovered from landscape group 38, (period 9.3). At present, identification remains uncertain; the object is made from ash (*Fraxinus* sp), is semi-circular in shape, with several worked surfaces and the remains of a central perforation. The surface of the perforation is blackened, but the condition and colour of the preparations examined are not consistent with burning/charring. The cells did not appear to be impregnated, filled or coated with dense materials, such as pitch, although the cell walls may have been darkened or stained by some extraneous substance.

Structural Wood

Artefactual samples of waterlogged wood from a hurdle, associated posts and other items (including 'driftwood') were examined by Rowena Gale for species identification. Tool marks and signatures on worked pieces were noted. Where relevant, evidence suggesting the use of coppiced rods was collated. All samples derived from features within period 9. Nine different species of wood have been recorded within the assemblage. Species presence by period and landscape group is tabulated below.

Table 141 : Structural wood by period and landscape group.

		SPECIES							
Period	Landscape Group	Ash	Birch	Blackthorn/ Cherry	Elder	Maple	Oak	Pomoideae	Willow/ Poplar
9.1	3	*							*
9.1	35					*			
9.1	51			*	*		*	*	*
9.2	31						*		
9.2	37		*	*					*
9.3	38	*							

Preliminary investigations indicate some consistency in the use of species for components of the hurdle and associated row of stakes within landscape group 51 (period 9.1). The rods are all of willow or poplar gathered from 4-6 year old stems. Their uniform growth suggests they were grown as coppice. The associated sails/stakes proved to be a mixture of species, including ash, blackthorn/cherry, elder, willow/poplar and oak, and ranged in age between 4-10+ years. The row of stakes aligned with the hurdle were identified as willow/poplar and ranged in age between 3-8+ years. Many had been cut or tapered to a point at one end.

Vessel Glass

Twelve fragments of vessel glass were recovered. With the exception of RF 130, all were recovered from late Roman contexts. Eleven of the fragments are of Roman date. The exception is Rf 119, which, although found within a period 9 enclosure ditch, appears to be of post-medieval date and should be regarded as intrusive.

The Roman material ranges in date from the 1st century (Rf 107) to the 4th (Rf 80). The largest single category are fragments from blue/green bottles which can be dated from the Flavian period to the early 3rd century. The other fragments cannot be closely dated, but from their colours are most likely to be of 2nd-3rd century date. A possible exception to this is Rf 165, which may be a Frontius bottle (Isings Form 89/128). These have been most frequently found in fourth century contexts in Britain.

Condition

One hundred and thirty-seven registered artefacts (41%), and 44 iron bulk finds were selected by the Artefacts Manager and submitted to the Conservator (A Tribe) for assessment. Although not examined by the Conservator, the remaining registered artefacts were believed to be stable and in fair to good condition.

Table 142 Artefacts submitted for Conservation

Material	Quantities
Iron Registered Artefacts	105
Iron Bulk Finds	44
Copper Alloy Registered Artefacts and Coins	30
Silver Registered Artefacts and Coin	2
TOTAL	**181**

The condition of the finds was assessed by visual examination with the aid of a stereo microscope and by x-radiography.

Iron Items:
All of the iron items were x-radiographed (UCL X-RAY NOS: EH0262-EH0276). Most of these were in fair to poor condition, with some showing signs of very extensive mineralisation. The usual orange-brown, brown and dark grey corrosion products predominated. Several items bore traces of carbonised wood among the soil and corrosion products covering them. Traces of possible mineral-preserved organic material were present on only a few items, and in most of these it appeared to be plant matter from the burial environment rather than organic material originally associated with the object.

Copper Alloy Items:
The thirty artefacts received for assessment included twenty coins (one item originally identified as a coin was re-classified as sheet fragments). All these items were x-radiographed (UCL X-RAY NOS EH0277 and EH0278). Generally these were in fair to poor condition, with good surface patinas visible on only a few. Green and light green corrosion products predominated, with some objects also having blue-green corrosion products on them. The coins generally bore worn surface detail, although some were much clearer, with x-radiography proving very useful in revealing the extent of surviving detail.

Silver Items:
These were x-radiographed (UCL X-RAY NOS: EH0277 and EH0278). The silver spoon (RF 157) was received in two fragments, but was in fair condition, incomplete and partially covered with copper corrosion products. Surface detail was very good.

The leatherwork survived in a fairly good state of preservation. The structural condition of the wood varied from relatively firm to soft and degraded. The surfaces of a few samples were badly abraded.

Eastcotts Registered and non-ceramic bulk artefacts by functional category and period.

Table 143: Simple names by functional category

Category	Simple name	Category	Simple name
01	architectural fragment (3)	06	jeton (1)
02	coffin nail (2)	06	weight (1)
02	key (2)	08	gaming piece (1)
02	latchlifter (1)	11	spearhead (1)
02	nail (111)	12	bead (2)
02	timber dog (1)	12	bracelet (4)
03	bung (1)	12	brooch (2)
03	candle holder (1)	12	hobnail (15)
03	face pot (1)	12	pin (3)
03	mill stone (1)	12	shoe (4)
03	quern (58)	12	strap fitting (1)
03	spoon (1)	13	comb (1)
03	vessel -glass (13)	13	ligula (2)
04	crucible (1)	16	bar (2)
04	off-cut (1)	16	binding (1)
04	polisher (1)	16	chain link (1)
04	slag	16	fragment (6)
04	spindlewhorl (1)	16	lump (3)
04	waste -pb (6)	16	mount (1)
04	weaving tablet (1)	16	ring (1)
05	knife (7)	16	rod (1)
05	tang (1)	16	sheet (7)
05	whetstone (9)	16	socket (1)
06	coin (29)	16	strip (14)
08	bell (1)	17	unidentified (66)

Table 144: Building Materials

Period Simple name	1	3	9	9.1	9.2	9.3	13	14	15
architectural frag	-	-	-	-	2	1	-	-	-

Table 145: Fasteners and Fittings

Period Simple name	1	3	9	9.1	9.2	9.3	13	14	15
coffin nail	-	-	-	-	2	-	-	-	-
key	-	-	-	-	-	-	-	1	1
latchlifter	-	-	-	-	-	1	-	-	-
nail	-	-	-	12	59	28	-	6	6
timber dog	-	-	-	-	-	-	-	1	-

Table 146: Household

Period Simple name	1	3	9	9.1	9.2	9.3	13	14	15
bung	-	-	-	1	-	-	-	-	-
candle holder	-	-	-	-	1	-	-	-	-
face pot	-	-	-	-	1	-	-	-	-
mill stone	-	-	-	-	1	-	-	-	-
quern	-	-	-	4	31	11	-	12	-
spoon	-	-	-	-	1	-	-	-	-
vessel (glass)	-	-	-	1	9	3	-	-	-

Table 147: Craft and Industry

Period Simple name	1	3	9	9.1	9.2	9.3	13	14	15
crucible	-	-	-	-	1	-	-	-	-
off-cut	-	-	-	-	-	-	-	1	-
polisher	-	-	-	-	-	-	-	-	1
slag	-	-	155g	983 g	17805.5g	7946g	-	229g	500g
spindlewhorl	-	-	-	1	-	-	-	-	-
waste (pb\ca)	-	-	-	3	1	-	-	2	-
weaving tablet	-	-	-	-	1	-	-		-

Table 148: Multi-purpose Tools

Period Simple name	1	3	9	9.1	9.2	9.3	13	14	15
knife	-	-	-	-	6	-	-	1	-
tang	-	-	-	1	-	-	-	-	-
whetstone	-	-	-	-	3	5	-	1	-

Table 149: Trade and Commerce

Period Simple name	1	3	9	9.1	9.2	9.3	13	14	15
coin	-	-	-	1	12	1	1	14	-
jeton	-	-	-	-	-	-	-	1	-
weight	-	-	-	-	-	-	-	1	-

Table 150: Pastimes

Period Simple name	1	3	9	9.1	9.2	9.3	13	14	15
gaming piece	-	-	-	-	1	-	-	-	-
bell	-	-	-	-	-	1	-	-	-

Table 151: Weaponry

Period Simple name	1	3	9	9.1	9.2	9.3	13	14	15
spearhead	-	-	-	-	1	-	-	-	-

Table 152: Personal Adornment and Dress

Period Simple name	1	3	9	9.1	9.2	9.3	13	14	15
bead	-	-	-	1	-	-	-	-	-
bracelet	-	-	-	-	3	-	-	1	-
brooch	-	-	-	1	1	-	-	-	-
hobnail	-	-	-	-	8	4	-	1	2
pin	-	-	-	-	2	1	-	-	-
shoe	-	-	-	3	-	1	-	-	-
strap fitting	-	-	-	-	1	-	-	-	-

Table 153: Toilet Instruments

Period Simple name	1	3	9	9.1	9.2	9.3	13	14	15
comb	-	-	-	-	1	-	-	-	-
ligula	-	-	-	-	2	-	-	-	-

Table 154: Wide-ranging Uses

Period Simple name	1	3	9	9.1	9.2	9.3	13	14	15
bar	-	-	-	-	1	1	-	-	-
binding	-	-	-	1	-	-	-	-	-
chain link	-	-	-	-	1	-	-	-	-
fragment	-	-	-	2	2	1	-	1	-
lump	-	-	-	1	-	-	1	1	-
mount	-	-	-	-	1	-	-	-	-
ring	-	-	-	-	-	-	-	1	-
rod	-	-	-	-	1	-	-	-	-
sheet	-	-	-	2	2	1	-	1	1
socket	-	-	-	-	1	-	-	-	-
strip	-	-	-	1	5	2	1	3	2

2.7.3 FLINT

Factual data

Quantification

A total assemblage of seventy registered flint artefacts and 1042 bulk finds, weighing 5277.2g, and comprising flint tools, cores and debitage was recovered from Eastcotts. This material was recorded by simple type name, manufacturing technique and individual weight. This information was entered on to a computer database for swifter data manipulation.

Provenance

The majority of flint from Eastcotts was recovered from excavated features. A large quantity of worked flint, 153 pieces or 13.75%, of the total was also picked up from the topsoil and alluvial subsoil exposed in the site baulks and from the spoilheaps.

Table 155 shows the respective quantities of worked flint of all types recovered from the various phases. 'In situ' flint is limited to periods 3 and 4.

Table 155: Flint quantity by phase

Period	Quantity (all types)	% Total
Period 1: Natural Features	16	1.4%
Period 3: Neolithic	378	34%
Period 4: Late Neolithic/Bronze Age	5	0.5%
Period 7: Iron Age	6	0.5%
Period 9: Romano-British	464	41.7%
Period 13: Medieval	2	0.2%
Period 14: Post-medieval to modern	195	17.5%
Period 15: Unphased	45	4.1%
TOTAL	**1112**	**100%**

Provisional assessment indicates that the recovered flint assemblage ranges in date from the Mesolithic to the Bronze Age. Four hundred and thirty-three pieces, or 38.93% display characteristics of manufacture and flint quality suggestive of Mesolithic or earlier Neolithic date and 571 pieces or 51.34% of the total show characteristics appropriate for the later Neolithic through to the Bronze Age. The remaining 108 pieces (9.71%) are not diagnostic (tables 157-158).

Table 156: 'In situ' flint material

Period	Associational group	Group type	Flint quantity and type
3	50	pit group	3× scrapers; 1× leaf arrowhead or sickle tip; 2× blade cores; 87× blades; 258× flakes; 22× burnt flint
3	248	crouched inhumation	1×'lozenge' shaped arrowhead; 1×cutting blade; 2× bladelets; 1 × flake.
4	74	ditch	2
4	96	ditch	2
4	109	ditch	1
TOTAL			**383**

The majority of worked flint from Eastcotts is likely to be residual. The material from periods 3 and 4 are discussed separately because of the presence of 'in situ' flintwork (table 156).

Period 3, Neolithic

Inhumation 1 (Associational group 248)

Five flint artefacts were found within the fills associated with crouched inhumation 1 (table 156), although the exact relationship of this material with the burial is unclear. The finely executed 'lozenge' shaped arrowhead is the most closely datable item, being a late development in the Early Neolithic leaf arrowhead tradition. The solitary soft hammer struck flake may date to the Mesolithic or early Neolithic, whilst the 2 bladelets and single utilised 'cutting' blade are likely to be Mesolithic in date, and as such are residual. The undamaged and unabraded condition of the arrowhead suggests that it is not residual, and was almost certainly deposited at the same time as the burial.

Pit Group 50

Two adjacent small pits make up this group, which is almost certainly contemporary to Inhumation 1. It has been suggested that pit group 50 may represent a ritual deposit, associated with the nearby burial, the presence of 3 well made and serviceable scrapers supports this hypothesis. No ceramic material was recovered from this group and dating was made through an assessment of manufacturing technique (table 156). The larger debitage is of a very similar nature in both features, and is appropriate for an earlier Neolithic date; flakes were dominant, many of which were probably struck with a soft hammer, and blades/blade cores making up a significant part of the assemblage (89 pieces or 23.54%). The material excavated from these features includes a large quantity of small debitage, which was probably produced as the result of tool production. The presence of this small debitage and the large quantity of material recovered overall is a good indication of 'in situ' flint.

Period 4, Late Neolithic/Bronze Age

Associational groups 74, 96, 109

Three contexts, relating to ditch fills, yielded 3 flakes and 2 fire crazed but otherwise unworked flint fragments. Although not closely datable, this small assemblage is not out of place in a late Neolithic or Bronze Age context.

Range and Variety

A scan of the flint assemblage indicates that the majority of the recovered material comprises debitage, cores or burnt pieces (table 158). The remaining material includes a full range of tool types appropriate to the Mesolithic, Neolithic and into the early Bronze Age. The large quantity of the flint recovered, approximately 4 times as much as the comparably sized Village Farm, contrasts with the flimsy structural evidence for the early prehistoric period. Although disturbed the flintwork suggests considerable activity on the site throughout this period. The wide range of the tools represented is also indicative of prolonged activity

The quality of the flint encountered is generally good with few instances of flawed nodules noted. The flint ranges in colour from pale grey to honey and toffee browns, to darker browns and black. Cortex survives on 664 pieces, or 59.71% of the total assemblage, this ranged in colour thickness, and levels of abrasion, but is consistent with most, if not all of the raw material being obtained locally from river deposited gravels.

Condition

The condition of the recovered flint assemblage is generally good, with few pieces other than those recovered from the topsoil showing signs of extensive post depositional damage. The 'in situ' flint from pit group 50 is particularly notable for its sharp, fresh appearance. A very small proportion of the total assemblage of varying date showed signs of patination in the form of white or pale grey mottles.

Table 157: Flint tools all periods

Date and type	*Quantity*	*Total*
MESOLITHIC		9
Crested blades	2	
Burins	2	
Microdenticulate	1	
Microliths	4	
EARLY NEOLITHIC		2
'lozenge' arrowhead	1	
leaf arrowhead/sickle frag.	1	
MESOLITHIC/EARLY NEOLITHIC		8
Cutting blades	8	
LATE NEOLITHIC		10
'chisel' arrowheads	5	
'oblique' arrowheads	2	
triangular arrowhead	1	
'Discoidal' scraper	2	
EARLY BRONZE AGE		5
'thumbnail' type scrapers	5	
LATE NEOLITHIC/EARLY BRONZE AGE		5
Ovate	1	
Notched scrapers	1	
Knives	3	
MISCELLANEOUS		32
Misc. retouched	9	
Misc. scrapers	23	

Table 158: Flint debitage, all periods

Date and type	*Quantity*	*Total*
MESOLITHIC		1
Core tablet	1	
MESOLITHIC/EARLY NEOLITHIC		413
Blades/bladelets	259	
Soft hammer struck flakes	133	
Cores/rejuvenation flakes	21	
LATE NEOLITHIC/BRONZE AGE		551
Hard hammer struck flakes	316	
Misc. flakes	198	
cores	36	
Hammerstone	1	
MISCELLANEOUS		76
Burnt pieces	76	

2.7.4 CERAMICS

Factual data

Quantification of material

Pottery

The potter was recorded by fabric type and form. Quantification was by sherd and vessel count, and weight. This information was subsequently computerised to facilitate data manipulation. A total of 15812 hand-collected sherds was recorded, representing 13443 vessels, weighing 234954g. Fifty-six sieved soil samples produced an additional 142 sherds of pottery. These will be incorporated into the excavated assemblage at the analysis stage. All quantitative statements and tables in this assessment are based on the sherd count.

Building Material

A total of 303 fragments of tile and brick, weighing 34308g was recovered. Of these, 38.5% are recognisably Roman in date, while 1.3% are of medieval/post-medieval origin. The majority, 60.2%, are, however, too fragmentary to be diagnostic and could not be accurately assigned to any period, although their association with Roman pottery and similar tiles of recognisable form, suggests that many are Roman in date.

Daub and fired clay

A total of 176 fragments of daub and fired clay was recovered, weighing 2725g. Additionally, 207 kiln bar fragments, weighing 15594g and a quantity of fired clay, representing kiln lining and fragments of a clay pedestal, weighing 13363g in total were found.

Provenance

Table 159 below shows the relative quantities of pottery recovered from different feature types present on the site. The figures are expressed as a sherd count and as a percentage of the total.

Table 159: Quantity of pottery, by sherd, from different feature types.

Context type	Sherd count	% Total
Pits	7310	46.0
Ditches	6569	42.0
External cultivation (ploughsoil)	442	2.8
Masonry	397	2.5
Structural cuts	285	1.8
Layers	274	1.7
External dumps	264	1.6
Pyrotechnic installations	123	0.7
Natural deposits (tree holes etc.)	77	0.4
Land drains	38	0.2
External surfaces	17	0.1
Furrows	10	0.1
Burials	6	0.1
Total	**15812**	**100.0**

The majority, 89.8%, of the assemblage derived from cut features, predominantly pits and ditches, generally regarded as those contexts likely to yield the most meaningful information. Two pits in particular, features [3102] and [3105], were highly productive in terms of pottery, producing 722 and

2606 sherds respectively. These features were among the few to be fully excavated on the site, and produced several complete vessels and a number of sizeable, unabraded sherds (average weight: 19g) which could be joined to reconstruct vessels either totally or partially. A total of 3.4% of the assemblage derived from external layers, surfaces and dumps. These would have been in use over an extended period of time and consequently, are susceptible to disturbance and contamination. The pottery recovered from burials (5 inhumations and 2 cremations) comprises only 6 sherds, which constitute less than 1.0% of the total.

The material gathered from ploughsoil, 2.8% of the total assemblage, has already been scanned for fabrics and forms of intrinsic interest and will not be incorporated into the full analysis of the ceramics.

Table 160 Assemblage composition by period and sherd count.

Period	Number of sherds	% Total
Early-mid Iron Age	23	0.1
Late Iron Age	1451	9.09
Roman	14313	90.7
Saxon	5	0.01
Others	20	0.1
Total	**15812**	**100.0**

Phasing and date range

Pottery

The pottery assemblage displays a wide date range, from the early Iron Age to post-medieval periods. Lack of detailed vertical stratigraphy at Eastcotts meant that there was little direct relative dating evidence from the site. The date ranges assigned to the pottery types are based upon evidence published elsewhere.

Approximately 15% of the assemblage is residual within features of later date, while intrusive elements account for less than 1% of the total. The greatest concentration of pottery occurs within late Iron Age and Roman periods, with features assigned to the later Roman period containing 57% of the total Roman assemblage (table 161).

Table 161: Quantification of pottery, by sherd within phase.

	Early-mid Iron Age	Late Iron Age	Roman	Saxon	Others	Total
Period 1	-	4	45	-	-	49
Period 3	-	-	5	-	-	5
Period 7	6	8	2	-	2	18
Period 9	5	4	12	-	-	21
Period 9.1	2	1322	4204	-	5	5533
Period 9.2	8	29	5311	2	8	5358
Period 9.3	-	6	3935	3	2	3946
Period 13	-	4	39	-	1	44
Period 14	2	69	588	-	2	661
Period 15	-	5	172	-	-	177
Total	**23**	**1451**	**14313**	**5**	**20**	**15812**

Building Material

Quantities of building material and the feature types from which they were recovered are tabulated below.

Table 162: Building material by feature type

Context type	Sherd count	% Total
Ditches	120	40.0
Pits	95	31.1
Masonry	30	10.0
External cultivation (ploughsoil)	25	8.1
Layers	7	2.3
Natural deposits	7	2.3
External dumps	6	2.0
Structural cuts	6	2.0
Pyrotechnic installations (hearth)	3	1.0
Land drains	2	0.6
External surfaces	1	0.3
Furrows	1	0.3
Total	**303**	**100.0**

Quantities nd types of building material recovered from the site are tabulated below by period.

Table 163:Building material by period

Form	Tegulae	Imbrices	Brick	Box Flue	Flat Roof	Unid	Total
Period 1	1	-	-	-	-	5	6
Period 9	-	-	-	-	-	1	1
Period 9.1	2	-	4	-	-	18	24
Period 9.2	58	15	11	2	-	108	194
Period 9.3	11	2	1	-	-	16	30
Period 13	-	-	-	-	-	10	10
Period 14	5	-	5	-	4	18	32
Period 15	-	-	-	-	-	6	6
Total	**77**	**17**	**21**	**2**	**4**	**182**	**303**

Daub and fired clay

Quantities of daub, fired clay and kiln material and the feature types from which they were recovered are tabulated below.

Table 164 Quantity of daub, fired clay and kiln material, from different feature types.

Feature Type	No of fragments	% Total
Kiln	160	42.0
Ditches	110	28.9
Pits	97	25.1
External cultivation (ploughsoil)	5	1.3
External surfaces and dumps	4	1.0
Structural cuts	3	0.7
Land drains	2	0.4
Layers	1	0.3
Masonry	1	0.3
Total	**383**	**100.0**

Range and variety

Pottery Type Series

Fabric types are listed below in chronological order. The types marked with two asterisks are completely new to the Bedfordshire Type Series.

EARLY-MID IRON AGE		*TOTAL*	*23*
F	?Prehistoric		1
F01A	Fine flint		2
F01B	Coarse flint		4
F02	Grog and flint		1
F28	Fine sand		13
F29	Coarse sand		2

LATE IRON AGE		*TOTAL*	*1451*
F03	Grog and sand		210
F05	Grog and shell		359
F06	Grog tempered		870
F07	Shell tempered		3
F08	Shell and grog		8
F25	Harsh sandy		1

ROMAN		*TOTAL*	*14313*
R	Buff sandy		276
R02	Mica-gilded		104
R32	Lead glazed		1
R01	Samian		490
R33	Mortaria (Verulamium type)		12
R03A	Fine whiteware (Verulamium type)		197
R03B	Gritty whiteware		576
R03C	Smooth whiteware		62
R31	Coarse whiteware		1
R23	Roughcast colour coat		47
R07B	Sandy blackware		198
R07C	Gritty blackware		297
R10A	Buff gritty		40
R10B	Fine buff gritty		7
R24	Red quartz		1
R08	Black micaceous		62
R09A	Pink grogged		4
R18	Pink gritty		64
R19	Amphorae		20
R21	Mortaria		5
R35 **	Grog tempered		148
R36 **	Orange gritty		6
R05A	Orange sandy		430
R05B	Fine orange		9
R28	Gritty calcareous		1
R06	Greyware		5852
R17	Smooth orange		10
R13	Shell tempered		4500
R14	Red-brown harsh		21
R12A	Mortaria (Nene Valley)		22
R12B	Nene Valley colour coat		454
R11	Oxford oxidised		228
R11D	Oxford colour coat		106

R11E	Oxford mortaria (white fabric)		40
R11F	Oxford mortaria (red fabric)		19
R22A	Hadham oxidised		3
SAXON		*TOTAL*	*5*
A	?Saxon		2
A16	Coarse sandy		1
A18	Fine sandy		1
A25	Sand and calcareous inclusions		1
OTHER PERIODS		*TOTAL*	*20*
P	Post-medieval		3
MISC	Unrecognisable		17

Iron Age

Pottery of early and late Iron Age date constitutes 9.19% of the total assemblage. All the fabric types of Iron Age date are known from other sites in the county.

Thirty-four percent of Iron Age pottery has recognisable rim forms (table 165).

Table 165: Iron Age forms

Forms	Quantity	Percentage
Jars (lid-seated)	330	22.4
Jars (storage & cooking pots)	116	7.9
Jars (cordoned)	44	3.0
Butt beakers	6	0.4
Undiagnostic body sherds	978	66.3
TOTAL	**1474**	**100.0**

Sherds with recognisable forms total 34% of the Iron Age assemblage, while the remainder comprises unrecognisable base or body sherds. Jars/cooking pots constitute the majority of the diagnostic Iron Age vessels and are typical of the region, with storage and lid-seated jars being well attested forms recovered from sites such as Stagsden and Warren Villas (BCAS in prep).

Eleven vessels, predominantly of late Iron age date have evidence of decoration surviving. Coarse vertical combing and 'twig-brushing' are the most common, and are well attested features on pottery from other sites in the region (Elsdon 1993). Burnishing is evident upon the exteriors of some vessels.

Roman

The Roman pottery constitutes 90.7% of the total assemblage. The greatest concentration of ceramics falls within the early Roman period, although the most numerous sherds are grey wares (5852) and shelly wares (4500), which span the whole Roman period. Sherds of 3rd-4th century types are present, but only in small quantities, constituting 6% of the total.

Eleven percent of Roman ceramics have recognisable forms (table 166).

Table 166: Roman forms.

Forms	Quantity	Percentage
Jars (cooking pots)	697	4.9
Jars (lid-seated)	191	1.3
Bowls	174	1.2
Folded beakers	131	0.9
Jars (everted rims)	128	0.9
Mortaria	94	0.6
Beakers (plain rims)	80	0.5
Flagons	48	0.3
Poppy-head beakers	35	0.2
Amphorae	19	0.1
Storage jars	13	0.1
Flanged bowls	9	0.06
Bowls (reed rims)	3	0.02
'Dog-dish' bowls	1	0.01
Lids	1	0.01
Undiagnostic body sherds	12689	88.9
TOTAL	**14313**	**100.0**

Jars and bowls constitute the majority of the diagnostic vessels, constituting 75%. Less common forms are generally represented by single vessels only. One vessel exhibits regular, drilled holes pierced before firing, and may have functioned as a strainer. Sherds with recognisable forms constitute 11.1% of the total assemblage, while the remainder comprises unrecognisable body sherds. The utilitarian forms represented, coupled with the relatively small amount of imported wares (15%), are indicative of a domestic assemblage whose status is not high. Among the locally manufactured pottery, shell-tempered vessels are the most numerous, constituting 31% of the Roman assemblage. Recognisable forms are similar to vessels produced at kilns in Harrold (Brown 1994), although detailed comparison of the material will be necessary to confirm this. Excavation of the Eastcotts kiln produced 58 sherds of wasters in sand-tempered greyware (see later). Similarities have also been noted between sand tempered greywares found at Eastcotts and those manufactured at the Warren Villas kiln (Slowikowski and Dawson 1993).

Decorative elements were noted on approximately 6% of the Roman pottery (table 167).

Table 167: Decoration on Roman pottery, by sherd.

Type of Decoration	Number of sherds
Rilling	591
Random combing	6
Burnishing	27
Burnished/incised lattice	8
Wavy incised	20
Stabbing	3
Rouletting	75
Slipping	43
Barbotine	9
Applied scales	3
Total	**785**

Evidence for the standard decorative elements of the period was noted, predominantly rilling or combing on the shelly wares and burnishing, often in a lattice pattern, on greywares. Among the imported finewares the presence of slipping, barbotine, rouletting and applied scales was recorded.

Imports

The pottery has been divided into four provenance groups:

- local - pottery from within the county
- regional imports - pottery from neighbouring counties
- national imports - p ttery from further afield, but still within Britain
- Continental imports - pottery from abroad

Approximately 15% of the Roman ceramics from Eastcotts are im orts. These are detailed in table 168.

Table 168: Roman imports.

Provenance group	Fabric code	Fabric type	No. of sherds
Regional imports	R11	Oxford redware	228
	R11D	Oxford colour coat	106
	R11E	Oxford mortaria (white fabric)	40
	R11F	Oxford mortaria (red fabric)	19
	R22A	Hadham oxidised	3
	R33	Mortaria (Verulamium type)	12
	R03A	Fine whiteware	197
	R03B	Gritty whiteware	576
	R03C	Smooth whiteware	62
	R12A	Mortaria (Nene Valley)	22
	R12B	Nene Valley colour coat	454
		TOTAL	**1719**
National imports	R32	Lead-glazed	1
		TOTAL	**1**
Continental imports	R01	Samian	490
		TOTAL	**490**

Saxon

Although totalling only 5 sherds, less than 1.0% of the total assemblage, the pottery provisionally identified as Saxon comprises jars and a bowl in simple, hand-made forms. Three sherds with highly burnished surfaces, recovered from feature [2354], are in known Saxon fabrics and can definitely be attributed to this period. The remaining sand tempered sherds are, however, indistinguishable from early Iron Age pottery, and further analysis is required to firmly ascertain a date.

Post-medieval

Three sherds of post-medieval pottery of 17th-18th century date were recovered.

Evidence for use

A record of attributes including extent of abrasion, presence of residues, sooting, repairs or secondary holes was made to provide an indication of the function of the pottery. Attributes relating to use were recorded on approximately 3% of the total pottery assemblage, and were most common on vessels of Roman date.

Table 169: Recorded attributes, relating to use.

Attribute type	Number of sherds
External sooting	145
Lid sooting	23
Residues	35
Pitting (vessel interior)	3
Burning	5
Secondary holes	9

Repairs	5
Total	**225**

Sooting
The determination of sooting patterns is likely to be doubtful due to the incomplete nature of much of the pottery. Two percent of sherds have evidence of sooting. This is more common on pottery dating to the Roman period, where lid-seated cooking jars are sooted externally up to a distinct line, indicating where a lid would have been placed. The use of ceramic lids is demonstrated by the recovery of one example, although other materials, such as wood, are also likely to have been used for this purpose. The majority of sooted sherds were sooted externally, indicating the use of vessels over a fire. Five Roman sherds were sooted internally, suggesting the burning of contents within them.

Residues
Residues were noted on thirty-five sherds, all of Roman date. Nine partially or totally complete vessels have been laid aside for residue analysis at a future date, including the cremation vessel from feature [987]. No analysis is envisaged at this stage, either for visible or invisible residues, due to work-programming and resource difficulties.

Three sherds of Roman date show evidence of severely abraded or pitted internal surfaces, indicating that the contents were vigorously stirred or that vessels were used to contain acidic substances.

Secondary holes and repairs
A small number of vessels, represented by 9 sherds, had post-firing holes bored through them. This indicates either modification of the vessel for some secondary purpose, or repairs to the vessel.

Evidence for repairs was most apparent on sherds of imported Samian, two of which retained lead rivets *in situ*. Attempts at repair were also noted on sherds of locally manufactured greyware vessels.

Spalling
Forty-six sherds of Roman date showed evidence of spalling. It is possible that this occurred during use, although it is most likely to have resulted during firing, particularly in the case of five sherds recovered from within the kiln [688].

Building Material
Five fabric types were defined, primarily by main inclusion and fabric colour. They are, in order of prevalence: a) shelly, b) orange sandy, c) grog and shell, d) sand and calcareous inclusions, and e) grog and sand. Examination of attributes including extent of abrasion and leaching, presence of sooting and/or mortar and decoration was undertaken.

Daub and fired clay
Six fabric types have been recognised and are listed below in order of prevalence (excluding kiln material).

Table 170: Daub and fired clay by fabric type

Fabric type	No. of fragments	% Total
Grog and sand	66	37.5
Grog and organic	48	27.3
Sandy	25	14.2
Grog	13	7.4
Organic	13	7.4
Sand and organic	11	6.2
Total	**176**	**100.0**

A number of fragments retain surfaces and bear organic/grain impressions, although no wattle impressions survive. Among those retaining finished surfaces , it was possible in some cases, to distinguish between the oxidised wall face and reduced reverse.

Impressions and surfaces recorded are listed below (table 171).

Table 171: Attributes recorded on daub and fired clay.

Attribute	No. of fragments	% Total
Surfaces	20	11.4
Organic	18	10.2
Grain	8	4.5
None	130	73.9
Total	**176**	**100.0**

Four sizeable, oxidised fired clay pieces (total weight 460g) recovered from feature [2273] appear to represent the lining of a furnace, although they were not found *in situ*. The fragments are convex in shape and taper from 30.0mm at their t ickest point to 10.0mm at the edge.

Kiln Material

Excavation of a single-flued kiln [688], produced a quantity of kiln furniture. The feature contained a central pedestal in sand-tempered fabric, in the form of a circular column, expanded at both ends, which measures approximately 40cm in height and 23cm in diameter. Kiln bars, which would have radiated from the central pedestal, were predominantly made in fabric tempered with grog and sand (52.1%), while the remainder were in the same sand-tempered fabric as the pedestal. The bulk (71.5%) of the kiln bars were recovered from within fills of the kiln, although none were resting *in situ*. The remainder derived from features, mainly rubbish pits and ditches, w ich were not associated with the structure.

The majority (75.4%) of the bars are tapering and cigar-shaped, and are similar to those excavated from the Mile Road kilns near Elstow (Dring 1971). Square-sectioned tapering bars constitute the remainder (24.6%). There appears to be no correlation between fabric type and shape of the bars. Sand-tempered bars are of the same fabric as pottery products recovered from the kiln. The presence of bars in a different fabric suggests the kiln may contain material dumped there from another kiln in the vicinity. One complete kiln bar was recovered, measuring 310mm in length, and several other fragments could be joined.

A number of fragments crudely made into flat circular plates with roughly finished edges were recovered. These ave an average thickness of 15.0mm, although the extent of fragmentation makes it impossible to estimate diameter. The plates represent portable components of the kiln floor, to be used in conjunction with kiln bars. They are similar to the plates recovered from Harrowden, being more crudely manufactured than 'standard' clay plates such as those found at the Mile Road kilns (Dring 1971).

Fragments of an *in situ* clay lining, of 1.0-2.0cm t ickness and weighing 2124g, were recovered from the base of the kiln.

Condition

Pottery

The condition of the pottery is fair. Twenty-four percent of the assemblage displayed signs of abrasion, and this was largely restricted to ceramics of Iron Age date (20% of total). Among Roman fabrics, shell tempered vessels were the most abraded, and some leaching out of inclusions was noted. The majority of all fabrics was generally well-fired and no further treatment is necessary.

Building Material

Although fragmentary, the building material survives in a fair condition. Sixty-four percent of the tile assemblage displays varying degrees of abrasion; this is most evident on those tiles manufactured in shelly fabric.

Daub and fired clay

All daub and fired clay is fragmentary and highly abraded. While surviving in better condition, the kiln furniture and fragments of superstructure are also abraded.

2.7.5 HUMAN BONE

Factual data

Quantification of the material

Table 172: Eastcotts human remains

TYPE	CONTEXT	COMMENTS	DATE
Inhumation 1	Burial in cut	Complete, crouched	Neolithic
Inhumation 2	Burial in cut	Complete, supine	Roman
Inhumation 3	Burial in cut	Complete, supine	Roman
Inhumation 4	Burial in cut	Complete, supine	Roman
Inhumation 5	Burial in cut	Complete, supine	Roman
Cremation 1	Upper ditch fill	Contained in pot	Roman
Cremation 2	Upper ditch fill	No container	Roman
Tibia	Pit	Isolated fragment	Roman
Skull	Pit	Isolated fragment	Roman

Note: Samples from Inhumation 1 were submitted for C14 dating but were rejected on grounds of collagen deficiency.

Range and variety

During excavation five isolated inhumations were recorded along with two cremations. A single inhumation (1) was recovered during trial trenching at the western end of the site. This was presumed to be of Neolithic date on the grounds of accompanying lithics and was isolated from the remaining four (2-5). These were all concentrated within Enclosure Group B to the eastern end of the site and probably have a mid to late Roman date, after the abandonment of this part of the site for occupation. The two cremations, probably earlier Roman, were both recovered from within the upper fills of a ditch to the west of Enclosure Group A.

2.7.6 ANIMAL BONE

Factual data

Quantification of material

Thirty one boxes of bone were recovered from hand-dug contexts. Seventy four soil samples contained evidence of bone fragments of micro-fauna.

Table 173 Number of contexts containing bone by period

Period	No. of contexts
1	9
3	1
4	1
7	3
9	357
13	2
14	18
15	31

Range and variety

The majority of bone came from period 9 (Roman) of which the material from phase 2 constituted the major part. The species represented here are horse, cattle, pig, sheep/goat (there is identified goat), dog chicken, goose, bird, Red deer and Roe deer. There is evidence of antler working. Two cattle skulls and one horse skull came from a ditch fill (2558).

The sieved samples include rodent, bird, amphibian and fish (the only example in the entire Bypass assemblage).

Condition

Eastcotts provides a large , well dated and well stratified assemblage. Measurements and ageing data are available from all species.

2.7.7 SOIL MICROMORPHOLOGY (R. I. Macphail)

Factual data

Quantification and Provenance of material

The site stratigraphy consists of natural subsoils which are overlain by a dark artefact rich stony soil. This soil represents the period of use, disuse, and weathering of the site before it became buried by post-Roman deposits such as alluvium. Fieldwork suggests the site is located in an area of brown alluvial sands and typical argillic brown earths of the Efford 1 soil association formed on river terrace gravel (Hodges *et al.* 1983). The fieldwork also indicated that post-Roman abandonment lead to earthworm burial of Roman features, possibly under grassland, and Roman stratigraphy became somewhat protected. Later the site was influenced by medieval ploughing? possibly colluviation. and probable flooding from the Elstow brook, the latter leading to the site being sealed by some 500mm of alluvium.

Beyond the above general observations made on visible sections, five soil samples were taken for micro morphological analysis from within deposits associated with the Period 9.2 Building (A35). The results of provisional analysis are presented in table 00 and discussed below.

Methodology

The subsoil (C880; samples I and 3). occupation soil (C2754; sample 2) and overburden (501: sample 4) were sampled for thin section analysis and bulk sample studies (table 167)(Avery and Bascombe 1982. Clark 1990) through a baulk. A lateral control sample (sample 5) of the occupation layer was taken some 4m. along the baulk. Undisturbed samples were impregnated with a crystic resin mixture at the Institute of Archaeology and manufactured into thin sections at the University of Sterling (Murphy 1986). Sample 4 was impregnated but not manufactured into a thin section. Thin sections were studied employing Bullock *et al.* (1985), Courty *et al.* (1989) and other relevant publications cited in the text.

Results

Table 174: Summary of results of provisional soil micromorphological analysis

Sample No.	Depth	Context	Stratigraphy	Micromorphology
4	48-56cm	501	Alluvium	Not processed
2 &5	56-67cm	2754 2755	Clay loam containing cultural material	Fine charcoal, relic organic matter and other anthropogenic inclusions such as burnt soil, flint, daub and bone. Laminar textural features-possibly a relic of crusts.
1	67-75cm	880	Upper subsoil	Possible mixed loam Eb horizon. Abundant dusty clay coatings, common Fe and Mn stained inwash. Charcoal present.
3	78-86cm	880	Lower subsoil	As above with more dominant clay-rich subsoil.

These are summarised in table 174. Soils are moderately well sorted medium and fine sandy clay loams typical of alluvial terrace soils (Avery 1990). Magnetic susceptibility is typically low in the subsoils, with probable anthropogenic enhancement in the occupation horizon and in the overlying more recent overburden (Clark 1990). Micro fabric analysis of the subsoils found them to be argillic (Avery 1990) in character, but textural features were more dusty than would be expected in Bt horizons formed purely under undisturbed woodland (Duchaufour 1982; Fedoroff *et al.* 1990). In addition the presence of charcoal was noted, which may again imply the soil had a disturbed ancestry. Possible humic, clay inwash associated with abundant iron and manganese staining may be an

enigmatic feature, not apparently associated with typical gley subsoil formation. In the last Iron and manganese staining of the matrix is more common, with voids often showing iron depleted fabrics. This is not the case at Eastcotts

The occupation has a number of inclusions that are of anthropogenic origin. In addition this horizon, in both samples 2 and 5, is characterised by laminar voids and associated dusty and clay in-fills. The micro-soil stratigraphy associated with them is also rich in organic remains. these laminar features have been associated, in a number of sites, with occupation floors (Macphail *et al.* 1990; Davidson *et al.* 1992: Gé *et al* 1993)

2.7.8 MACROSCOPIC PLANT AND INVERTEBRATE REMAINS

Factual data

Quantification and provenance and range of material

Eastcotts was the richest of the sites investigated for macroscopic plant and invertebrate remains. A Neolithic pit (A50, Sample 74) produced a mixture of charcoal including *Alnus / Corylus* tp. (alder or hazel), *Fraxinus excelsior* (ash) and *Quercus* sp. (oak) (Table 176). Small quantities of charcoal were also recovered from an Iron Age pit. However, the majority of the evidence is for the Roman period.

An early Roman pottery kiln, A163 yielded *Triticum spelta* (spelt wheat) glumes (Samples 20 and 38) (Table 175) but surprisingly no charcoal. Perhaps the kiln was fuelled on threshing waste. Small quantities of grain, including a little spelt wheat and barley were retrieved from some early Roman pits along with some charcoal.

One early Roman pit, A291, contained much extremely well preserved organic material (Sample 191, Tables 177, 78 and 179). The pit does not seem to have supported a significant aquatic flora of higher plants or a fauna of aquatic Coleoptera. The majority of the waterlogged macroscopic plant and insect remains appear to be derived from the immediate surrounds to the pit. The major habitat suggested by the seeds is disturbed / waster ground, the most numerous seeds in the sample being *Brassica* or *Sinapis* sp. (wild turnip etc), *Stellaria media* gp. (chickweed), *Urtica dioica* (stinging nettle), *Sambucus nigra* (elder) and Gramineae (grasses). Trees were also present on the site. The sample contains many deciduous leaf fragments. There are also many buds and capsules of *Salix* sp. (willow). One tree rarely identified from archaeological contexts, but certainly appropriate to the area is *Populus* sp. (popular), which was represented by its distinctive bud scale.

In addition to the two major categories of vegetation that were probably growing in the vicinity of the pit, there are remains of other plants that are likely to have been brought to the site. *Agrostemma githago* (corn cockle) suggests crop processing, an activity confirmed by the charred remains. *Pteridium aquilinum* (bracken) is unlikely to have been growing at Eastcotts because it is a plant of acid soil, but it seems to have been commonly imported by Roman settlements. The occurrence of *Rhinanthus* sp. (yellow rattle) seeds raises the possibility that hay had also been imported.

Remains of two potential horticultural trees are of special interest: *Prunus avium* (sweet cherry) and *Juglans regia* (walnut). Both are, on present evidence, Roman introductions. Cherry stones are quite frequently found on Roman rural settlements, but walnut is a very unusual find from a non-urban Roman site. The occurrence of possible walnut wood in the deposit raises the possibility that a walnut tree grew on the site.

The insect assemblage from the assessment sample is not sufficiently large for a full ecological interpretation, but it is very much an outdoor fauna, with only *Anobium punctatum*, the woodworm beetle, and perhaps *Lathridius minutus* gp. likely to have been derived from buildings. Many of the beetles would be appropriate to the weedy disturbed ground, for example the carabid beetle *Calathus fuscipes* or *Helophorus nubilus*, which feeds on Cruciferae. However, there also appears to be a distinct grassland element, with phytophagous species such as *Gymnetron pascuorum*, which feeds on *Plantago lanceolata* (ribwort plantain) and the chafer *Hoplia philonthus*. Dung beetles including *Aphodius rufipes* are present. One beetle, *Chalcoides* sp., feeds on willow and poplar leaves.

Two early Roman pits and ditches contain molluscan assemblages comprising mostly open-country terrestrial species and the amphibious *Lymnaea truncatula* (Samples 146 and 147).

The two richest mid Roman flots, Samples 79 and 92, are from a corn drier, A88. They contain very large quantities of *Triticum spelta* (spelt wheat) glumes, with rather less grain. The only weed seed at all abundant in them is *Bromus* sp. (brome grass). A mid-Roman pit, A298, yielded some well preserved charred spikelets ,(grain still enclosed by the glumes), of spelt wheat (Sample 63). Other mid-Roman samples

contain much less seed material. However, one sample (Sample 197) from building A55 contains many large pieces of charcoal including, unusually, *Rhamnus catharticus* (purging buckthorn) and *Ulmus* sp. (elm) as well as the more usual *Quercus* sp. (oak) and cf. Pomoideae (hawthorn etc).

Waterlogged sediment was also encountered in a mid Roman pit, A103 (Samples 44, 45 and 46). While preservation was not as good as in the earlier pit, the waterlogged seeds still give useful results (Tables 177 and 178). Most of the seeds are again from plants of waste ground such as *Rumex obtusifolius* (broad-leaved dock), *Carduus* or *Cirsium* sp. (thistles) and *Urtica dioica* (stinging nettle), however, the discovery of two seeds of *Apium graveolens* (celery) in Sample 46 is of special interest. Although native, it is a maritime plant, so its occurrence at Eastcotts suggests it was grown for consumption.

The amphibious snail *Lymnaea truncatula* was present in the enclosure ditch A38 (Sample 68).

The late Roman and late Roman / early Saxon flots contain little charred material and activity on the sites seems to have declined. A possible late Roman ditch, A284, contains a few badly preserved waterlogged seeds, mostly *Carex* sp. (sedge) (Sample 85).

Table 175: Charred Seeds and Chaff from Eastcotts

Np. of samples by Period	**Early Roman Period 9.1**	**Mid Roman Period 9.2**	**Late Roman Period 9.3**
with 1-10 items	4	4	5
11-100	3	-	-
101-1000	-	2	-
1000+	-	1	-
Total samples	7	7	6
Species by Period			
Triticum spelta spelt wheat	++	++++	+
T. spelta spelt wheat - glumes	++	++++	-
Hordeum sp. barley	+	-	-
Avena sp. oats	+	++	-
Avena sp. oats - awn frags.	-	++	-
Prunus spinosa sloe	-	+	-
Arable weeds	+	++++	+
Non-arable weeds	-	-	+

+ 1-10 items, ++ 11-100 items, +++ 101-1000, ++++ 1000+

Table 176: Charcoal from Eastcotts

Type of Sample		Neolithic	Iron Age	Early Roman	Mid Roman	Late Roman	Late Roman / Early Saxon
No. flots		1	1	1	3	-	-
No. hand-picked		-	-	-	8	1	1
Total samples		1	1	1	11	1	1
No. samples with charcoal							
Alnus / Corylus tp.	alder/hazel	1	-	-	2	-	1
Fraxinus excelsior	ash	1	-	-	-	-	-
Quercus sp.	oak	1	-	1	11	1	1
cf. Pomoideae	hawthorn etc	-	1	1	2	-	1
Rhamnus catharticus	purging buckthorn	-	-	-	1	-	-
Ulmus sp.	elm	-	-	-	1	-	-

Table 177: Eastcotts Roman Waterlogged Seeds

Sample		44	45	46	85	191
Ranunculus cf. *bulbosus*	buttercup	-	-	-	-	+
Papaver argemone	poppy	++	-	-	-	+
Fumaria sp.	fumitory	-	-	-	-	+
Brassica or *Sinapis* sp.	wild turnip etc	-	-	-	-	++
Thlaspi arvense	field penny-cress	-	-	-	-	+
Silene sp.	campion	-	-	-	-	+
Agrostemma githago	corn cockle	-	-	-	-	+
Cerastium sp.	mouse-ear chickweed	-	-	+	-	+
Stellaria media gp.	chickweed	++	-	+	-	++
S. graminea	stitchwort	+	-	-	-	+
Montia fontana	blinks	+	-	-	-	-
Chenopodium polyspermum	all-seed	-	-	-	-	+
Atriplex sp.	orache	-	-	-	+	-
Filipendula ulmaria	meadowsweet	-	-	-	-	+
Rubus fruticosus agg.	blackberry	+	+	+	+	+
Aphanes arvensis agg	parsley piert	-	-	+	-	-
Prunus avium	cherry	-	-	-	-	+
Chaerophyllum temulentum	rough chervil	-	-	-	-	+
Heracleum sphondylium	cow parsnip	-	-	-	-	+
Conium maculatum	hemlock	-	+	+	-	-
Apium graveolens	celery	-	-	+	-	-
Torilis sp.	hedge-parsley	-	-	-	-	+
Bryonia cretica	white bryony	-	+	-	-	-
Polygonum persicaria	red shank	-	-	-	-	+
Rumex acetosella agg	sheep's sorrel	-	-	+	-	+
R. obtusifolius	broad-leaved dock	+	+	++	-	+
Urtica urens	small nettle	++	-	++	-	-
U. dioica	stinging nettle	++	-	+	+	+++

Juglans regia	walnut	-	-	-	-	+
Hyoscyamus niger	henbane	+	-	-	-	+
Solanum cf. *dulcamara*	woody nightshade	-	-	-	-	+
Scrophularia sp.	figwort	-	-	-	-	+
Rhinanthus sp.	yellow rattle	-	-	-	-	+
Odontites verna	red bartsia	-	-	+	-	-
Mentha cf. *aquatica*	water mint	-	-	-	+	-
Lycopus europaeus	gipsywort	+	+	-	-	-
Prunella vulgaris	selfheal	-	-	-	-	+
Stachys sp.	woundwort	-	-	-	-	+
Lamium sp.	deadnettle	+	-	-	-	-
Glechoma hederacea	ground-ivy	-	-	-	-	+
Ajuga reptans	bugle	-	-	-	+	-
Galium aparine	goosegrass	-	+	-	-	+
Sambucus nigra	elder	-	++	-	+	++
Tripleurospermum inodorum	scentless mayweed	+	-	-	-	+
Carduus or *Cirsium* sp.	thistle	++	+	+	-	+
Onopordum acanthium	cotton thistle	-	+	-	-	-
Lapsana communis	nipplewort	-	-	-	-	+
Sonchus asper	sowthistle	-	-	-	-	+
Taraxacum sp.	dandelion	-	-	-	-	+
Luzula sp.	woodrush	-	-	-	-	+
Eleocharis S. *Palustres* sp.	spike rush	-	-	-	+	-
Carex sp.	sedge	+	+	-	++	+
Gramineae indet.	grass	-	-	-	-	++

+ 1-10 seeds, ++ 11-100 seeds, +++ 101-1000 seeds

Table 178: Eastcotts Roman Other Waterlogged Plant Remains

		Sample	44	45	46	191
Pteridium aquilinum	bracken	- frond frag.	-	-	-	+
Crataegus / Prunus sp.	hawthorn / sloe	- thorn	-	-	-	+
cf. *Juglans regia*	walnut	- wood	-	-	-	+
Populus sp.	poplar	- bud scale	-	+	-	+
Salix sp.	willow	- bud	+	+	-	++
Salix sp.	willow	- capsule	-	-	-	++
Triticum spelta	spelt wheat	- glume	-	-	+	-
Bud scales			-	-	-	++
Deciduous leaf fragments			-	-	-	++
Leaf abscission pads			-	-	-	+
Bryophyta			-	-	-	+

+ 1-10 seeds, ++ 11-100 seeds, +++ 101-1000 seeds

Table 179: Eastcotts Roman Coleoptera

	Sample	
	46	191
Calathus fuscipes	+	+
C. melanocephalus	-	+
Amara sp.	+	+
Harpalus sp.	+	-
Helophorus nubilus	-	+
Cercyon sp.	+	+
Megasternum obscurum	+	+
Limnebius sp.	-	+
Ptiliidae indet.	-	+
Lesteva longolelytrata	-	+
Anotylus rugosus	-	+
A. sculpturatus gp.	+	+
Xantholinus linearis or *longiventris*	-	+
Gyrohypnus sp.	+	+
Philonthus sp.	-	+
Staphylinus olens	-	+
Tachyporus sp.	+	+
Aleocharinae indet.	-	+
Geotrupes sp.	-	+
Aphodius rufipes	-	+
Aphodius sp.	+	+
Hoplia philanthus	-	+
Agrypnus murinus	-	+
Agriotes sp.	-	+
Anobium punctatum	-	+
Lathridius minutus gp.	+	+
Enicmus transversus	+	-
Corticariinae indet.	-	+
Phyllotreta sp.	-	+
Longitarsus sp.	-	+
Chalcoides sp.	-	+
Apion sp.	+	+
Gymnetron pascuorum	-	+

+ 1-10 items, ++ 11-100 items, +++ 101-1000, ++++ 1000+

2.8 OCTAGON FARM

2.8.1 STRUCTURAL EVIDENCE

Summary (fig.25)

Scheduled Ancient Monuments at Octagon Farm comprise the core of a Neolithic/Bronze Age ritual landscape. Trial and full excavation investigated fifteen of the monuments including mortuary enclosures and ring-ditches. A structural chronology was established with aspects of palaeotopography and its influence on siting investigated. The landscape was divided by rectilinear boundaries at some time in the Late Bronze Age /Early Iron Age although the ritual significance of the area may still have been retained. Later Iron Age and Romano-British settlement was concentrated along the edge of the floodplain to the north.

Background to the excavation

The monument complex at Octagon Farm (known as the Cardington cursus complex) is located some 4km. east of Bedford town centre at TL 090500 straddling the border between the parishes of Cardington and Willington. The site lies between the River Great Ouse to the north and the Elstow Brook to the south, approximately 2km. west of their confluence. The land slopes gently towards the river, from 26 m. OD in the south to 24m. OD in the north as the low alluvial gravel terrace gives way to a narrow floodplain terrace. Arable cultivation has taken place for some time (there was extensive evidence for medieval ridge and furrow) although the fields to the west, into which trenches 94:12 and 94: 13 passed, had been set aside at the time of the investigation.

The protected core of the monument complex at Octagon Farm (Scheduled Ancient Monument 20745) comprises 17 ditched enclosures, these representing ritual and funerary monuments dating from the middle Neolithic into the Bronze-Age. A further eight Scheduled Monuments exist close by and clearly represent important components within the landscape. To the north along the edge of the gravel terrace and overlooking the floodplain, a linear spread of crop mark enclosures probably date to the Iron Age and Roman periods.

This assessment reports work undertaken between 1990 and 1994 on areas within the line of the Bypass and along the projected line of the Norse Road Link. The different stages of work are presented here in an integrated phasing, the separate seasons of fieldwork can be traced in the trench numbers which are prefixed by the year of excavation.

Throughout the report the monuments are referred to by the number allocated within the Sites and Monuments and Buildings Record (SMBR) held at County Hall. The monuments at Octagon Farm collectively have the SMBR number 1480, and each individual monument has a suffix, for example, 1480.04 (see table 180).

The table below lists those monuments and crop-marks referred to in the text and represented on plans. In addition the monuments are classed as unexcavated or excavated, in the latter case the relevant phasing group or groups are listed (these were allocated during provisional phasing), and in which year the work was undertaken, with trench numbers also included.

Table 180 List of Monuments

Mon. No.	Description	Group No.	Year of excavation (including trench numbers)		
			1990 ❶	1992 ❷	1994
1480.01	Enclosure	Unexcavated			
1480.02	Ring Ditch	A3	12	1/2	
1480.03	Mortuary Enclosure	A1	12		
1480.04	Mortuary Enclosure	A6	9	3	
1480.05	Field system	A5		3/8	16
1480.06	Ring Ditch	Unexcavated			
1480.07	Mortuary Enclosure	Unexcavated			
1480.08	Cursus	A12	7/8		
1480.09	Enclosure	Unexcavated			
1480.10	Enclosure	Unexcavated			
1480.11	Ring Ditch	A16		6	
1480.12	Enclosure, Ring Ditch	A18, A19		7	
1480.13	Ring Ditch	A24	10?		
1480.14	Triple Ring Ditch	A15	6b		
1480.15	Ring Ditch	A25	11		
1480.16	Sq. Enc.	A75	5a,b,c,d		
1480.17	Enclosure	A89	4c		
1480.18	Enclosure/Ring Ditch (x2)	A90, A92, A93	4a/4b		
1480.19	Ring Ditch	Unexcavated			
1480.20	Enclosure	A77, A78, A79, A85, A87	2,2b		
1480.21	Ring Ditch	Unexcavated			
1480.22	Ring Ditch	Dog Farm			
1480.23	Ring Ditch	Dog Farm			
1480.24	Ring Ditch	Dog Farm			
1480.25	Ring Ditch	Dog Farm			
1480.26	Ring Ditch	Dog Farm			
1480.27	Ring Ditch	Unexcavated			
1480.28	Cursus	Unexcavated			
1480.29	Ring Ditch	Unexcavated			
1480.30	Ring Ditch/Enclosure	Unexcavated			

❶ The proposed trenches 90:1 and 90:3, close to the River Ouse, were not opened owing to problems with access. Nothing was found in trench 90:13 in the S-Western corner of the site.

❷ Only trenches 92:1-8 have been included in this report, trenches 92:9-13 lie outside the boundaries of the Octagon Farm complex.

Trench evaluation 1990

Fieldwork was undertaken to confirm the location, character and condition of survival of the monuments threatened by the proposed route, and to examine peripheral areas apparently devoid of archaeology (Baker 1990).

Fieldwalking 1990/1992

Fieldwalking in 1990 and 1992 produced significant quantities of flint although their distribution could not be related to the layout of the monument complex and appears random, the result of secondary or tertiary deposition.

Geophysical surveys 1991/1992
To check the location of monuments, and to investigate those areas between them, three phases of geophysical survey were commissioned. The first in 1991 (GSB 1991) concentrated on the core of the complex, those in 1992 (GSB 1992a, 1992b) covered more peripheral areas to the N.

Trench evaluation 1992
The 1992 trenches were designed to examine monuments in the line of the altered route, largely relating to the Norse Rd. Link and to investigate anomalies revealed by geophysical survey (BCAS 1992).

Trench excavation 1994
These trenches were placed along the line of the roadside ditches. They were located between the sites of known monuments.

Method Statement

The 1994 excavations consisted of two interrupted, parallel trenches, 5m. wide and 30-40m. apart located along the line of the roadside ditches. In addition trenches were excavated in advance of the insertion of a gas main diversion, just to the N of the disused railway. These latter trenches were either 2m. or 10m. wide, depending on function.

Excavation was carried out in accordance with guidelines set out in *Bedfordshire County Archaeology Services' Procedures Manual.* Topsoil and subsoil were removed by a mechanical excavator. Where subsoil was deeper than usual, it was stripped in two phases. The site was often wet and muddy, and in some cases, under water. However, most of these surfaces were very clean when first stripped of topsoil, so the presence or absence of archaeological features could be noted prior to any movement on the site.

Factual data

Quantification of material

Table 181 Quantity of site structural records

Record type	Number
Contexts	1109
Site drawings	155
Photographs	

Table 182 Quantification of feature types

Feature type	Number	% Total
Ditches and gullies	286	26
Layers	82	7
Pits	109	10
Structural contexts	146	13
Furrows	162	15
Natural	320	29
Others	4	
Total	1109	

Table 183 Summary of Phasing

PERIOD	CONTEXTS No. / %		LANDSCAPE GROUPS	DESCRIPTION
Period 1 Natural glacial and alluvial deposits	440	40	8, 10, 11, 17, 19, 20, 21	
Period 3 Neolithic	157	14	2, 5, 12	Ritual monuments
Period 4 Late Neolithic/Early Bronze Age	98	9	1	Barrow cemetery
Period 6-7 Late Bronze Age/Iron Age	70	6	3, 9, 15, 16, 22, 23	Field system, settlement
Period 13 Medieval	142	13	4	Cultivation
Period 14 Post Medieval to Modern	100	9	6	Cultivation
Period 15 Unphased groups	55	5	18	

PERIOD 1 Natural glacial and alluvial deposits (fig.26)

The underlying geology at Octagon Farm consisted of Pleistocene terrace gravels (L11). These had been cut into during the Holocene by the braided channel of the River Great Ouse and its tributaries, resulting in a network of palaeochannels visible on air photographs. These braided channels may largely have silted up before the construction of the monuments, although it is worth considering whether some of them may still have held water on a seasonal or temporary basis and this is suggested by the location of the monuments on gravel islands between the channels.

Alluviation may have been continuos, if sporadic, throughout the prehistoric Roman and medieval periods (Robinson 1992, provides a more detailed scheme for the Ouse valley). A build up of around 300-400mm. of alluvium covered the whole site and in places separate event could be identified. The Neolithic 'paperclip enclosure' 1480.04 was sealed by alluvium which in turn was cut by isolated pits and tree throws. Later alluviation was identified, possibly dating to the Roman period medieval period.

Where alluvial deposits were removed, or where the gravel was exposed on the higher 'islands', a variety of siltier, sandier or more gravely spreads and pockets could be seen, these relating to a range of periglacial processes.

Tree clearance

A number of features interpreted as tree-throw holes were identified. These may relate to the removal of trees through natural or human agency but are significant in the light of evidence from other bypass sites for identifying early clearance. A number of phases of clearance may be represented but as yet not enough stratigraphic analysis has been carried out to closely define them.

Although most tree-throws were identified away from the monuments, some were recorded within the boundaries of the mortuary enclosures for instance. These may still represent a more general clearance phase but the possibility exists that the trees were integral to the monument as has been postulated for the long mortuary enclosure at Irthlingborough (John Humble pers. comm.).

PERIOD 3 Neolithic

Ritual/Ceremonial enclosures

Possibly providing the primary stimulus to clearance, the first major use of the site was as a location for a complex of ritual or ceremonial monuments. Dated on the basis of form and a small amount of ceramics to the Middle Neolithic, these comprised so-called mortuary enclosures and small cursuses.

(Landscape Group 2)

Enclosure 1480.02 (Associational groups 3 and 4)

A rectangular ditched enclosure, 95 x 35m., orientated N-E to S-W with the ditch on average 1m. wide and 0.45m. deep. Excavation located an entrance just N of the middle of the easternmost side and an apparently asymmetrically opposed entrance in the southern third of the western side. However, bearing in mind that the trench (90: 12) was only 2m. wide in all but its easternmost extension, it is possible that the gap in the enclosure's western side indicates an interrupted ditch rather than an entrance.

Within the rectangular enclosure, eight irregular features were excavated which have been interpreted as tree throws. This seems a reasonable explanation for all but a problematical group of features in the N-E corner. Here a number of irregular shaped pits cut into a series of more elongated features. The problem with these features is that on the one hand, various of their characteristics seem too regular and homogeneous for tree throws, and on the other, a logical explanation of possible archaeological activity is lacking. The upper fill (C2014) of pit (C2048) contained two small fragments of undecorated, flint tempered Late Neolithic pottery; and four waste flakes, which are possibly Late Neolithic, from its lower fill, (C2025).

Enclosure 1480.04 (Associational group 6)

Immediately to the N of 1480.02 was a small cursus or enclosure, christened for obvious reasons the 'paperclip-enclosure'. Unlike other monuments, this did not take advantage of a gravel island, and rather sits on the redundant course of palaeochannel. It was approximately 75 x 15m. and aligned N-E to S-W with a large gap, possibly an entrance, 15m. long in its S-E side. The S ditch terminal curved in towards the enclosure, although the N terminal appears to remain straight. The ditch had an average depth of 0.6-0.7m., and a rather more variable width; the N-W ditch was 1.35-1.5m. wide, but the S-E ditch measured between 1.9 and 2.7m.

The ditch produced some tiny fragments of pottery, which may be Neolithic or Bronze Age, from an upper fill, (C2018). Dry sieving produced one unretouched flint flake. The uppermost fill, (C220), produced pottery initially thought to be Neolithic but more likely to be Late Bronze Age to Early Iron Age. This later material may attest to the survival of the monument as a landscape feature into the Early Iron-Age, as with many of the round barrows (see below), it may however suggest that it's date of construction needs reconsideration as no other Neolithic monuments contained similar material.

Five post holes were recorded, (A10), of which four were within the enclosure. The position of three post holes near the inside edge of the ditch, and a fourth approximately in the middle, is evocative of an internal structure or palisade.

Enclosure 1480.08 (Associational group 12)

The largest of the Neolithic ritual monuments, enclosure (A12) , sits on a gravel island between two arms of a palaeochannel, it's N-E corner having been disturbed by the now disused Bedford to Cambridge railway line. It was 175 x 60m. orientated N-W to S-E and appears to have opposing entrances in the middle of the long sides. Two trenches were dug across it (90:7 and 90:8). The W ditch appears to have two recuts. The E ditch was recut at least once, and also had a parallel ditch (also recut) immediately to it's W. Both original E and W ditches were between 0.5 and 0.7m. deep, averaging 1.6m. in width. No other features were recorded in association with this monument.

Enclosure 1480.16 (Landscape group 5)

An unusual square enclosure may date to the Neolithic or Early Bronze Age. This measured 27 x 25m., and consisted of an interrupted ditch with a possible entrance on the E side. The ditch varied in width from 0.75-2.7m. and was between 0.48 and 0.58m. deep. There was no dating evidence from this enclosure, but it may have a parallel at Willington Quarry (1988), where a square enclosure produced a central pit containing a female inhumation with a red deer antler above the body (BCAS 1993).

Enclosure 1480.12 (Landscape group 12)

One last monument which probably belongs in this period, despite its small scale, is rectangular enclosure (L12). It and ring ditch (A18) together make up monument 1480.12, about 250 m. N-W of the large rectangular enclosure 1480.08. The ring ditch is superimposed on the rectangular enclosure with both features sharing almost exactly the same centre point, and sitting on a gravel island. This rectangular enclosure is much smaller than the others, measuring only 30 x 15m., and orientated E-W. It has opposing entrances at the W end of the long axis, partially obscured by the W side of ring ditch (A18). The E side of the enclosure is totally obscured by the E side of the ring ditch. The excavated section (trench 92:7) revealed a width of 2.3 m. and depth of one metre. It is suggested (BCAS 1992) that this ditch was backfilled, and it does seem likely that this backfilling was directly linked to the construction of the ring ditch.

Although no signs of a mound were seen, it is possible that the enclosure had an oval barrow, and that this was later modified into a round barrow. The small size of (L12) and its close relationship with the ring ditch suggests that it is later than the larger rectangular enclosures to the S, and that it may represent a transitional phase to the new style of round barrows and individual inhumation, whilst retaining the rectangular shape.

PERIOD 4 Late Neolithic/Early Bronze Age

Barrow Cemetery

The Neolithic ritual landscape appears to have retained its significance with the addition in the Late Neolithic/Early Bronze Age of a barrow cemetery. This consisted of a series of ring ditches visible on aerial photographs and located in part through geophysical surveys (GSB 1991, 1992a). Eight of these monuments were investigated during trial excavation. Overall the barrows generally had a diameter of between 20-27m., possessing a single ditch. Exceptions are the triple ring ditch 1480.14 at 45 m. in diameter, the single ditched 1480.06 at 30m. in diameter, (which on aerial photograph appears deeper than others), and 1480.19, possessing a slightly elliptical ditch 28 x 31 m. across. Barrow (A94), a component of 1480.18, was the only one of those investigated to have a double ditch. Overall these small ring ditch diameters (along with the shallow depths of the ditches) are consistent with others in the Ouse Valley (Woodward 1986).

Table 184 Ring-ditch diameters

Monument Number	Diameter (m.)
1480.03	25
1480.06	30
1480.11	27
1480.12	27
1480.13	27 x 30
1480.14	45
1480.15	20
1480.18	24
1480.18	20
1480.19	28 x 31
1480.21	21 x 11 (remaining)
1480.29	25
1480.30	50 x 30
1480.30	15

Ring ditch 1480.03 (Associational group 1)

This is the most southerly round barrow in the group, lying above the E entrance of rectangular enclosure 1480.02 of Period 3. Its ditch was 2-2.4m. wide and 0.7-0.8m. deep, although the bottom was not reached due to waterlogging. The upper fill, (C228), contained a sherd of undated, although possibly Iron Age, pottery. One possible flake and one waste flake were also found in these upper fills,

(C228 and C236). Evidence for the barrow mound was recovered in both E and W sections, dipping into the ditch, and possibly indicative of a bowl or saucer type barrow (the only other round barrow with evidence for the mound was the triple ring ditch (A15)). The position of barrow 1480.03 over the entrance of enclosure 1480.02 is significant, especially as it is probable that the enclosure ditch of the earlier monument was still partially open at the time the round barrow was constructed (BCAS 1992).

Ring ditch 1480.11 (Associational group 16)
A single ring ditch of diameter 27m. The ditch was 1.8m. across and 0.9m. deep. Geophysical survey revealed a central pit, possibly a burial.

Ring ditch 1480.12 (Associational group 18)
This barrow had an average ditch width of 3.3 m. and depth of 1.5 m., and overlay the small rectangular enclosure (L12)(see 1480.12 of Period 3). Both of these features and their relationship have been described above. The upper fills of this ring ditch again contained Iron Age pottery.

Ring ditch 1480.13 (Associational group 24)
A single ring ditch, slightly elliptical at 27 x 30m. across. The ditch was 1m. wide and 0.5m. deep. Geophysical survey revealed a central pit, possibly a burial.

Ring ditch 1480.14 (Associational group 15)
This was the most spectacular of the round barrows, preserved as a triple ditch. Trench 90:6, orientated N-S, crossed all three ditches, the outer being 4.2m. wide and 1.25m. deep, the middle 5m. by 1.3m. and the inner 1.5m. by 1.2m. Neither the outer nor the middle ditches showed signs of a recut, although the inner ditch appears to have had two or more. Evidence was also recovered for the barrow mound, the inner ditch cutting through it and therefore suggesting that the three ditches were not contemporary and that the barrow had undergone some significant re-modelling.

Ring ditch 1480.15 (Associational group 25)
A single ring ditch of diameter 15m. The ditch was 1.7m. across with an unmeasurable depth due to waterlogging

Ring ditch 1480.18 (Associational groups 92 and 94)
Two ring ditches comprised monument 1480.18. Ditch (A92) was 2.7m. wide and 0.75m. deep, two possible Iron Age sherds were found in the upper fill (C76). This barrow was cut by a later field system of probable Iron Age date. (A94) was a double ring ditch with a 3m. wide gap between the ditches. The outer ditch was 1.5m. wide and 0.6m. deep, the inner much smaller at 0.7-0.8m. wide and 0.4m. deep.

PERIOD 6-7 Late Bronze-age/early Iron Age

During this period the focus of the landscape use, previously oriented towards a ceremonial/funerary function, shifted towards settlement. This may mark the final clearance of the area of its original, and possibly regenerated, tree cover. The most obvious indicator of this transition was the establishment of a field system, (L3); although this appears to respect the site of the round barrows which were probably still visible as upstanding mounds, with the ditches still deep enough to trap fragments of Iron-Age pottery. Along the Northern edge of the site more complex crop-marks indicate settlement sites.

The Field System
(Landscape group 3)
The field system consists of two parallel ditches running N-W to S-E, with three N-E to S-W ditches at right angles forming at least five separate enclosed areas. The system was visible as crop marks and tested by excavation where it crossed a trench. Dating evidence was scarce, with a small amount of Iron Age pottery found in the corner of the northern ditch (A21).

Settlement activity

Scattered isolated features dating to the Iron Age were recorded within the trenches. Because of the limited amount of excavation little can be said in terms of settlement form or focus beyond acknowledging presence. As the main focus for occupation appears to be to the North, where the most complex crop-marks were situated, it might be that the evidence presented here, sited amidst the fields, represents only temporary or at best marginal settlement. Given the proximity to the barrows and the likelihood of these still forming a substantial visual element to the landscape the possibility of these features representing continued ritual activity must also be allowed (see L23 below).

(Landscape group 23)

A pit, (A27), and a probable stake hole, (A28), within trench 94:16 close to one of the SW-NE ditches of the field system (L3). The pit contained large amounts of Early Iron Age pottery, an unidentified fired clay object, and burnt material. This assemblage may be indicative more of ritual deposition than domestic refuse.

(Landscape group 9)

A group of features, isolated in the middle of trench 94:1, consisted of two gullies, four post holes and a pit. The pit and one of the gullies contained a fair amount of Early Iron Age pottery. The position of these features on the western bank of palaeochannel (A17) may be significant.

(Landscape group 22)

A single pit within trench 90:4b contained charred seeds. The presence of spelt suggests an Iron Age date at the earliest, although hulled barley could have been present from the Neolithic. This group was situated to the North of the site within enclosure 1480.18 (see below).

Other enclosures

Enclosure 1480.17 (Landscape group 15)

Enclosure (L15) to the N consists of a rectangular enclosure 80 x 70m. and orientated N-E to S-W, with a large outer ditch (1.7m. wide, 0.6m. deep), and a smaller inner ditch (0.8m. x 0.35m.) on three sides. There appeared to be an entrance central to the East. This enclosure produced no dating evidence, but it resembles Iron Age/Romano-British enclosures with a similarity to those enclosing the sites of Late Iron Age or Romano-Celtic temples.

Enclosure 1480.18 (Landscape group 16)

Some 80m. E of 1480.17, this enclosure did have evidence (although scant) in the upper fills of the E-W ditch to support an Iron Age date. More reliable was its form, which seems consistent with Iron Age enclosures. It was sub-rectangular, orientated E-N-E to W-S-W, bisected by a N-S ditch with an entrance in its easternmost end. Two pits were excavated within the enclosure, the southernmost containing three sherds of Iron Age pottery.

PERIOD 13 Medieval

A system of medieval ridge and furrow cut the alluvial subsoil. This was orientated N-W - S-E. Two tenuous linear features, (A40), in a the western trench 94:12 tie in with an E-W boundary shown on the map. To the North of the site the ploughing orientation changes with furrows (A63) running E-W in trenches 94:1-3; the relationship between these two sets of furrows is uncertain. A small amount (four sherds) of 17th to 18th century pottery was found in both sets of furrows.

PERIOD 15 Unphased groups

There were several archaeological features at Octagon Farm which could not be associated with any other groups or periods owing to lack of stratigraphic, spatial or dating evidence.

2.8.2 FLINT AND BURNT STONE

Factual data

Quantification of material

An assemblage of one registered artefact of flint and seventy-six bulk finds, comprising four fragments of burnt stone, and seventy two flint tools, cores and debitage was recovered from Octagon Farm.

Provenance

A large proportion of the material, thirty-two pieces or 41.56% of the assemblage was recovered from the topsoil removed to the sides of the excavated trenches. Forty five pieces, 58.44% of the total assemblage was recovered from the various excavated features (Table 185).

Table 185 Quantification of flint/burnt stone by Landscape group and period. (The number in brackets is the registered monument number.)

Feature type	Quantity	% of total
ring ditches (1480.03/1480.12)	24	31.26%
'paperclip' enclosure (1480.04)	1	1.29%
rectangular enclosure (1480.17)	2	2.59%
pit/tree bowl (within enclosure 1480.02)	4	5.19%
pits	6	7.74%
boundary ditches	4	5.19%
natural features	4	5.19%
topsoil	32	41.55%
TOTAL	**77**	**100%**

Provisional assessment indicates that the recovered flint assemblage ranges in date from the Mesolithic to the Bronze Age. Twelve pieces, 15.58% of the assemblage, displayed characteristics of manufacture and flint quality suggestive of Mesolithic or earlier Neolithic date and sixty-five, or 84.42% of the total showed characteristics appropriate for the later Neolithic through to the Bronze Age. The four fragments of burnt stone cannot be dated independently.

Table 186 Quantity of non-ceramic material by phase

Period	Quantity (flint)	Quantity (burnt stone)	TOTAL
1: natural glacial/alluvial	4		4
3: Neolithic	5		5
4: late Neo./ early BA.	24		24
6-7: late Bronze Age/ Iron Age	6	2	8
14: Post-Med./ modern	32		32
Unphased	2	2	4
TOTAL	**73**	**4**	**77**

A large proportion of the non ceramic material from Octagon Farm is residual or unphased. The material from the presumed earlier prehistoric monuments and those features phased to periods 1-6 are discussed separately because of the possibility of 'in situ' flint.

Period 1, Natural , glacial and alluvial

Four worked flints were recovered from two contexts of this period. Three pieces, including a Mesolithic crested blade derived from a layer of presumed alluvial origin (assoc. group 54).The battered condition of these pieces suggest redeposition. The single flake from the old river channel (assoc. group 31) is broadly datable to the Late Neolithic/Bronze Age.

Period 3, Neolithic

Two features allocated to this period produced worked flint. A small pit or tree throw hole (assoc. group 4) yielded a single soft-hammer struck flake and three blades, including two that re-fit, all of which suggest an early Neolithic date. One hard-hammer struck flake from an upper fill of paperclip enclosure 1480.04 dates to the late Neolithic or later.

Period 4, Late Neolithic/Early Bronze Age

Flint from this period derives from five contexts, which relate to two ring ditch monuments, 1480.3 and 1480.12. The material from the latter formed the larger group, comprising twenty-three pieces, including two tools (table 187). The remaining material from this feature is consistent with a late Neolithic or Bronze Age date. The single hard-hammer struck flake from 1480.3 is also likely to date to this period.

Period 6, Late Bronze Age/Iron Age

Features dated to this period yielded six flakes characteristic of Late Neolithic through to Bronze Age date.

Range and variety

A scan of the lithic assemblage indicates that the majority comprise debitage or burnt pieces. Of the remaining material, eight pieces were cores and eight displayed secondary working in the form of partial or continuous retouch and are here classed as tools (table 187).

The quality of the flint encountered was generally good. It ranged in colour from pale grey to mid brownish grey and black. A fairly thin, buff or white cortex survived on forty-two pieces, 57.5% of the flint. The quality of the flint, and the colour of the cortex suggests that most, if not, all of the raw material was obtained locally from river deposited gravels.

Table 187 Tools by context type and period

Tools type	context type	period	date
thumbnail scraper	ring ditch fill (148.12)	5	Early Bronze Age
misc. retouched piece	ring ditch fill (1480.12)	5	Late Neolithic/Early Bronze Age
convex end scraper	topsoil	14	Late Neolithic/Early Bronze Age
discoidal scraper	topsoil	14	Late Neolithic/Early Bronze Age
miscellaneous scraper	topsoil	14	Neolithic/Early Bronze Age
miscellaneous scraper	pit fill	14	Neolithic/EarlyBronze Age
miscellaneous scraper	topsoil	14	Neolithic/Early Bronze Age
miscellaneous scraper	structure	14	Neolithic/Early Bronze Age

Condition

The condition of the flint assemblage was generally good, with few pieces other than those recovered from the topsoil showing signs of extensive post depositional damage. The material from ring ditch 1480.12 was particularly notable for the sharpness of the flint, often a good indicator of 'in situ' material. One piece only showed signs of patination, a flake from old river channel (assoc. group 31), neither the flint or the river channel can be precisely dated.

2.8.3 CERAMICS

Factual data

Quantification of material

Pottery

The Octagon Farm pottery assemblage was recorded by fabric type and form. Quantification was by sherd and vessel count. A total of 179 sherds was recorded, representing a minimum of 118 vessels.

All quantitative statements and tables in this report are based on the sherd count.

Registered Ceramics

One registered artefact of a coarse grog tempered fabric was recorded, a globular loomweight (Rf.3).

Building Material and Fired Clay

The ceramic building material and fired clay was quantified by sherd count and weight. A total of 88 fragments weighing 2196.7g was recovered, comprising 5 fragments of brick, 5 of roof tile, and 77 of fired clay.

Provenance

Pottery

Table 1 below, shows the relative quantities of pottery recovered from the varying feature classes encountered at Manor Farm. The figures are expressed as a sherd count and as a percentage of the total.

Table 188 Quantification of pottery by feature type

Context type	sherds	% TOTAL
Pits	82	45.81
Ditches	45	25.13
Structural	27	15.08
Furrows	4	2.24
Tree disturbance	2	1.12
Topsoil/subsoil	19	10.62
TOTAL	**179**	**100%**

Due largely to the lack of intact horizontal stratigraphy on site, the bulk of the ceramic material derives from cut features, primarily pits and ditches (70.94%). These are features which are normally regarded as the least susceptible to contamination particularly in their primary and lower fills. The risk of contamination is further reduced by the limited incidence of intercutting features.

Phasing and date range

Table 189 Quantification of pottery, by sherd, within phase

Pottery Group	Period 3	Period 4	Period 6-7	Period 13	Period 14 (topsoil)	Period 15 (unphased)	TOTAL
Neolithic	2						2
Bronze Age			1			1	1
Misc. Prehistoric		3					4

Early-middle Iron Age	10	2	136				148
Late Iron Age		1			3		4
Roman	1				9		10
Post med.				4	4		8
Misc.					2		2
TOTAL	**13**	**6**	**137**	**4**	**18**	**1**	**179**

The pottery assemblage shows a wide date-range, from the Neolithic to the post-medieval periods. The presence of Iron Age sherds within fills of monuments phased to periods 3 and 4 suggests fairly large scale intrusion. However the large and unabraded sherds which comprise a large proportion of this material suggest rather the survival in the landscape of these features into later Prehistory. A parallel for this possible continuity exists at Village Farm, where the upper fills of the two ring ditches contained quantities of early Iron Age ceramics and flintwork.

Building Material/Fired Clay

Table 190 Quantification of building material by feature type

Context type	Tile	Brick	Fired clay	Loom-weight
Pits			77	1(Rf.3)
Ditches		5		
Topsoil/ subsoil	5			
Natural features			1	
TOTAL	**5**	**5**	**78**	**1**

Table 191 Quantification of building material/fired clay by period

Category	Period 1	Period 6-7	Period 14
Roof tile			5
Brick			5
Fired clay	1	77	
Loom weight		1(Rf.3)	
TOTAL	**1**	**78**	**10**

It should be noted that a large proportion of the material tabulated above including all the material recorded from pits in tables 3 and from period 6-7, above, relates to a single feature, associational group 27, and it probable that all the fired clay derives from one, or possibly two objects.

Range and variety

Pottery Type Series

The type series is listed below in chronological order.

NEOLITHIC		*TOTAL 2*
-	Coarse Flint (Peterborough type)	2
BRONZE AGE		*TOTAL 1*
-	Grog	*1*
MISC. PREHISTORIC		*TOTAL 4*
-	Soapy	1
-	Micaceous	1
-	Shell/sand	2

EARLY-MIDDLE IRON AGE		*TOTAL 148*
F01A	Coarse flint	25
F01B	Fine flint	12
F02	Grog/flint	22
F03	Grog/sand	1
F17	Grog	25
F19	Sand/organic	1
F20	Calcareous inclusions	24
F28	Fine sand	28
F29	Coarse sand	1
F30	Sand/calcareous inclusions	9
LATE IRON AGE		*TOTAL 4*
F05	Grog/shell	1
F07	Shelly	1
F09	Sand/grog	1
F32	Sand/flint	1
ROMAN		*TOTAL 10*
R01	Samian	1
R05	Orange sandy	3
R06	Grey ware	4
R13	Shelly	2
POST MEDIEVAL		*TOTAL 8*
P01	Glazed earthenware	8
MISCELLANEOUS		*TOTAL 2*
-	Sandy	2

Neolithic

Two unabraded sherds of coarse flint pottery, provisionally dated to the late Neolithic were recovered from a probable tree throw hole within rectangular enclosure 1480.02. Although undecorated and similar to the Iron Age coarse flint tempered fabric F01A, the two sherds are dated by the features' association with the presumed Neolithic mortuary enclosure, and the presence of flintwork consistent with this date. Further work at the analysis stage may refine dating of these fabrics. Flint tempered Neolithic Peterborough-type ware has been found elsewhere on the Bedford Bypass at Bumpy Lane and elsewhere in the county at Salford, mid Beds (BCAS in prep.).

Bronze Age

A single abraded sherd, of a soft grog tempered fabric with a 'soapy' texture probably dates to the Bronze Age.

Iron Age

Iron Age pottery makes up the largest chronological grouping from Octagon Farm. Of 152 sherds dating to this period 148 sherds, 82.68% of the total assemblage are characteristic of early-middle Iron Age date and four, 2.23% of the total, of late Iron Age date.

All the fabric types represented are known from other sites in the county and all are likely to have been produced locally. Eighteen Iron Age vessels with recognisable rim or base forms could be identified (table 192).

Table 192 Iron Age forms

Iron Age Forms	No of vessels
upright rimmed jars	3
rectangular/flattened rimmed jars	6
everted rimmed jars	4
carinated jar?	1
miscellaneous jars (base only)	3
bowls	1
TOTAL	**18**

The forms tabulated above are typical of the region, with upright rimmed jars being a common feature at sites such as Village Farm, and Stagsden, north Beds. (BCAS in prep). Rectangular/flattened rimmed, everted rimmed jars and carinated forms, similar to the Octagon Farm examples were also present at Village Farm and have been found at the Iron Age settlement site at Salford, mid Beds. (BCAS in prep).

Table 193 Decoration of Iron Age vessels

Vessel Form	Form of Decoration	Quantity
Flattened rimmed jar	finger indenting on rim	1
Upright rimmed jar	random horizontal incisions	1
Upright rimmed jar	combed arcs within zones	1
Misc. vessel	horizontal grooves	2

Decoration, in the Iron Age assemblage was recorded on five vessels (table 193). Simple horizontal grooves and incisions are most common and are well known from contemporary Iron Age sites elsewhere in the county, for example Salford (BCAS in prep). The most elaborate form of decoration occurred on an upright rimmed jar. This scheme has no exact parallels from the county but falls within the middle Iron Age tradition.

Roman

The Roman pottery makes up 5.58% of the assemblage, 10 sherds.

The bulk of the Roman material, 9 sherds, is topsoil derived, and a single sherd is intrusive. The pottery is fragmentary and no forms could be reconstructed.

Post medieval and modern

Eight sherds of post-medieval pottery dating to the 17th-18th century date were recovered. Two forms, both bowls, were identified.

Evidence for use of the pottery

Physical evidence for use on the pottery was not present.

The dearth of evidence for use in the pottery assemblage probably results from the limited size and nature of the sample. However, the lack of evidence might also be due to surface abrasion on the dominant Iron Age pottery group, which may have caused traces of sooting to be lost, and/or the possibility that some vessels were used to heat their contents not over a hearth, but by the use of heated stones.

Building Material/Fired Clay

Brick

All five fragments of brick recovered, were found from a single context. The fragments are of a sandy fabric and almost certainly derive from the same brick. The fabric, size and proportions of the brick are consistent with a post-medieval date.

Roof tile
Five fragments of flat roof tile were recovered, exclusively from topsoil or subsoil contexts. The form and sandy fabric suggest a post-medieval date.

Fired clay
Fired clay from Octagon Farm comprises seventy-eight fragments, of which seventy-seven derive from a single feature represented by assoc. group 28. All the fired clay is sand tempered and it seems likely that most if not all of the material from this group derives from one or possibly two brick-like objects. Forty fragments retain one or more surfaces, the largest fragment is 130mm wide, 90mm deep and incorporates a circular hole, 23mm in diameter and 38mm deep on the presumed 'end' surface. Pottery from this feature suggests an early or middle Iron Age date for this object. Parallels for this object will be sought at the analysis stage.

Loomweight
Registered Find 3 comprises two conjoining fragments of a roughly spherical loomweight, measuring 70-80mm in diameter and made from a coarse grog fabric. The single perforation measured 8mm in diameter. The globular form of this object is unusual, the normal form for Iron Age loomweights being pyramidal or triangular An early Iron Age loomweight of similar proportions is however known from Winnal Down, Hampshire (Bates and Winham 1985 fig. 70.2).

Condition

Pottery
The condition of the pottery is generally good with only twenty-seven sherds or 15.08% of the total assemblage, including the topsoil derived material showing varying degrees of abrasion.

Recognisable forms account for 11.17% of the assemblage, suggesting a high degree of fragmentation as a whole.

Building Material/Fired Clay
The building material was recovered in good condition, although the roof tile recovered from topsoil was slightly abraded. The fired clay objects from associational group 28 are more fragile and fragmented. Due to the large size of these objects, firing, probably in a bonfire, was not complete and a core of unfired clay is now exposed.

Registered Ceramics
Although fragmentary, registered find 3 was recovered in fairly good condition. Slight abrasion on the surfaces and on the exposed breaks suggests that the object was broken prior to deposition.

2.8.4 HUMAN BONE

Factual Data

Quantification of material

A single isolated cremation was recovered from the final season of excavation. The material was contained within a pit (C1433) sited well away from any of the known monuments. There were no associated finds or features.

2.8.5 ANIMAL BONE

Factual Data

Quantification of material

Only two pieces were recovered, a pig incisor and a piece of lumbar vertebra.

2.8.6 MACROSCOPIC PLANT AND INVERTEBRATE REMAINS

Factual Data

Quantification, provenance and range of material

Some *Quercus* (oak) charcoal was recovered from possible Neolithic tree-throw pits (table 195). A few grains of hulled sp. (barley) and a *Corylus avellana* (hazel) nut shell fragment were found in some presumed late Bronze Age / early Iron Age pits (table 194).

Table 194: Charred Seeds and Chaff from Octagon Farm

No. of samples by Period	**Late Bronze Age / Early Iron Age**
with 1-10 items	4
Total samples	4
Species by Period	
Hordeum sp. hulled barley	+
Corylus avellana hazel nut shell frags.	+
Arable weeds	+

+ 1-10 items

Table 195: Charcoal from Octagon Farm

Type of Sample		?Neolithic	Late Bronze Age / Early Iron Age
No. flots		3	8
No. hand-picked			
Total samples		3	8
No. samples with charcoal			
Alnus / Corylus tp.	alder/hazel		1
Quercus sp.	oak	2	3
cf. Pomoideae	hawthorn etc		1
cf. *Prunus* tp.	sloe etc.		1

Appendix 1: Summary Report on excavations at Medbury Lane, Elstow, 1995, (J. Crick)

Background

In response to a proposed application for mineral extraction on land to the east of Medbury Lane, Elstow, an archaeological evaluation was undertaken by Bedfordshire County Archaeology Service, on behalf of the developers, C A Blackwell Ltd. It was proposed that the site become a borrow pit for the construction work on the Bedford Southern Bypass. The aim of the evaluation was to define the nature and extent of a potential archaeological constraint on development of this site identified in the Bedfordshire Minerals and Waste Local Plan.

An area of archaeological interest was identified in the NW corner of the site, comprising evidence for 10th/11th century settlement evidence. This was thought to be a continuation of a site first identified to the north at Village Farm in 1994. The developer's initial proposal was to avoid disturbance of the NW corner of site, however development took place which necessitated a rapid salvage excavation of this area, between the 6th - 10th April, 1995.

Location and Topography (fig.27)

The site for the borrow pit lies 2.5km south east of Bedford town centre, in Elstow Parish and is centred at TL 05554679. It is on the lower gravel terrace of the river Great Ouse at 30m OD. The land slopes away to the east and south towards a subsidiary stream of the Elstow Brook. To the north the site is bounded by the line of the bypass, where, during April - July 1994 BCAS carried out large scale excavations at Village Farm, in advance of road construction. These excavations identified two late Neolithic/ early Bronze Age ring ditches and settlement evidence relating to the Iron Age, early Saxon, Saxo-Norman and later medieval periods.

Summary of Results (fig.28)

The earliest phase of activity identified at Medbury Lane comprised three Bronze Age cremations in the NW of site. Later prehistoric activity comprised two phases of field enclosures and a small quantity of residual Iron Age pottery, indicative of peripheral settlement activity.

A hiatus in settlement occurs in the Roman period with settlement being resumed in the early-mid Saxon period. As with the Village Farm site the settlement is dispersed with three identifiable foci of activity. These comprised two sunken featured buildings, one to the north of the site and the other to the south and a post-built building with an associated yard area towards the western limit of excavation. A well/water storage pit in the south of the site produced a 7th-8th century domestic pottery assemblage with animal bone.

This scattered pattern of settlement along a NW-SE axis continues into the 10th-11th centuries. The evidence for this period comprised two post-built buildings separated by a distance of 80m and are perhaps two separate farmsteads. Concentrations of post holes across site are suggestive of fenceclines, with several four post structures and associated settlement activity. An area of small-scale metalworking was located on the east of the excavation, comprising four slag-filled pits and a post-built structure. A second well/water storage pit produced a quantity of St Neots ware pottery dating to the 10/11th centuries and animal bone. Two narrow boundary ditches defined the limit of the settlement to the east. The eastern-most of these appears contemporary with timber building in the NE of the site and suggests an expansion of the settlement eastwards in the 11th century. The results of a

geophysical survey and subsequent trial trenching suggests the southern limit of the settlement lies slightly south of the area of excavation.

Discussion

Preliminary analysis of the results of this excavation suggests the remains uncovered on the Medbury Lane site are a continuous spread SE of the settlement activity first identified by the excavations at Village Farm to the north. The Bronze Age cremations record a continuance of the ceremonial activity focused around the two ring ditches to the NW. During the early-mid Saxon and Saxo-Norman periods the settlement remains focused along a general NW - SE axis with slight shifts in the specific foci of activity. The relationship between the archaeological remains of these two sites is the rational behind the inclusion of the preliminary results of the Medbury Lane excavation in this document. An analysis of the Village Farm and Medbury Lane material together enhances the potential of both sites to address the aims and objectives of the project.

Appendix 2: Summary Report on excavations at Cardington Cross, 1993, (A. Thomas)

Background (fig 29)

The site lies approximately 3km. to the south east of Bedford town centre within the parish of Cardington at TL 079480. The excavation was situated adjacent and to the South of the existing course of the Elstow Brook.

Aerial photography clearly shows a complex of crop marks (HER 9081) on the gravel terrace overlooking the brook, approximately 250m. to the South of the site at TL 081479. This complex consists of a number of enclosures of variable size based around a series of parallel linear features, probably indicating the position of a droveway. Although many of the enclosures seem to be of a scale indicative of an agricultural infield system, the smaller enclosures may relate to settlement activities. The date of this complex remains uncertain, but comparisons can be made with similar, recently excavated sites such as Peartree Farm (specifically the arrangement of enclosures along a droveway), Mill Farm and Eastcotts. This would suggest a Romano-British date for this complex, possibly with Iron Age antecedents. A series of linear features can be seen running down-slope towards the area of excavation.

A number of test pits were excavated in the vicinity of the crop mark complex during the summer of 1993 as part of The Elstow Brook Widening Scheme Archaeological Evaluation (BCAS Report 93/14). These all revealed a similar sequence of deposits, generally consisting of 350mm. to 400mm. of topsoil, sometimes overlying modern dredged material and 500mm. to 1000mm. of yellowish brown alluvium sealing either sandy gravel, blue-grey clay or the fills of palaeochannels or still water features. None of these test pits revealed any evidence of archaeological activity.

As part of the same evaluation, a 50m. trench was excavated where a new channel was to be cut for the brook, thus diverting it along the South side of the planned route of the Bedford Southern Bypass. This revealed a dense spread of features sealed by 250mm. of topsoil and 300mm. of alluvium. The limited scope of this trench and the lack of datable artefacts (one sherd of undiagnostic pottery) rendered any interpretation and phasing of these features speculative and necessitated excavation of 0.25ha. along the line of the new cut.

Summary of results (figs. 30 and 31) (table 196)

Archaeological activity at Cardington Cross can be divided into a number of distinct periods and these have been integrated into the single phasing sequence adopted for all the sites of the Bedford Southern Bypass. The major elements identified included prehistoric tree clearance, late Iron Age/Romano-British peripheral settlement activity and boundary construction followed by alluviation from the mid Roman period into the Medieval period.

Discussion

The earliest evidence of human activity at Cardington Cross relates to tree clearance. The high density of tree throw holes and the presence of burnt material within many of these features implies human involvement rather than natural causes. Although finds were rare, the presence of early prehistoric lithic material suggests that tree clearance may have begun relatively early in this area, although the possibility of successive phases of regeneration and clearance should not be ruled out. However, the presence of structural features probably dating to the late Iron Age suggests that tree clearance was largely complete by this time.

A large number of negative features were identified on site, some structural but mostly isolated. Chronological phasing of these is conjectural due to the lack of diagnostic artefacts, but an estimate of late Iron Age or Romano-British seems acceptable through association with the ditch line at the Western limit of excavation. The lithic assemblage recovered from site implies early Prehistoric activity within the area and it is possible that some of the structures may be earlier in date. The general lack of cultural material recovered may support this view. No conclusive relationship with the main area of crop marks could be established, although the ditches within the area of excavation appear to be aligned with the peripheral linear features. The possible date range of the two areas could be compatible. The nature of occupation also remains uncertain, but may be related to peripheral settlement activities; possibly incorporating use of the brook. The double ditch line may have acted as a boundary for such activities, as well as serving a drainage function.

A rise in the water table was indicated by the presence of undisturbed alluvium filling and sealing the ditches. Again the lack of diagnostic artefacts presents a problem in the phasing of this event, but a mid-late Romano-British date would be compatible with the general picture seen within the Ouse Valley (Robinson, 1992) and specifically at Eastcotts, where a shift in settlement pattern away from the brook seems to occur towards the end of the 2nd century or the beginning of the 3rd century.

A cursory examination of the ecofacts (E. Hutchins, pers. comm.) has indicated that many of the tree throw holes contained a suitable amount of charcoal for C dating. The presence of carbonised seeds within some of the negative features may give a broad indication of the agricultural practices occurring in the area but the samples with the most potential for environmental reconstruction were from the ditches, particularly the primary, waterlogged fills. Samples from the primary fill of the second recut of the eastern ditch (A16) contain approximately ten species of weeds and samples through the fills of the western ditch (A17) may provide information on environmental changes contemporary with the rise in the water table and the initial periods of alluviation.

Table 196 Cardington Cross: Summary of phasing

PERIOD	LANDSCAPE GROUPS	DESCRIPTION
Period 1 Natural glacial and alluvial deposits	1	
Periods 2-7 Early Prehistoric to Iron Age	2, 8	Tree clearance, palaeosol
Period 8 Late Iron Age/Early Romano-British	3, 4	Peripheral settlement activity and boundaries
Period 9 Romano-British	5	Alluvium
Periods 10-13 Late Romano-British to Medieval	6	Alluvium/colluvium, reworked by cultivation
Period 14 Post Medieval to Modern	7	Cultivation

Appendix 3: Summary report on excavation and survey as part of the Elstow Brook Widening Scheme (phases I and II)

Background (fig.32)

Prior to the construction of the Bedford Southern Bypass, and in the light of the predicted increase in run-off, drainage improvements were necessary to the Elstow Brook. This involved a large amount of ground disturbance, largely along the north bank of the Brook, and archaeological evaluation was initiated to assess the likely impact. Three phase of work took place, phases I and II during early 1993 between Elstow and Octagon Farm, with the results of evaluation being reported in Clark, Dawson and Shotliff (1993). Sixty two test-pits were excavated at 100m intervals along the northern bank of the Brook, supplemented by seven trial trenches in areas thought to be more archaeologically sensitive.

Summary of results

No archaeological deposits were recovered from any of the phase 1 trenches or pits. Roman and Iron Age features were recorded in a single Phase II trench (results of further excavation in this area are reported above in Appendix 2). The majority of observations were on natural alluvial deposits. The generalised sequence comprised topsoil sealing dredged deposits, in turn sealing alluvial clays, silts and gravels. Darker more organic deposits, observed between the alluvium and underlying natural gravels may have indicated standing water or old channel courses.

Discussion

The report on the results of evaluation stresses the limitations of test-pits in locating settlement activity. The lack of archaeological observations might be explained as a result of this, or alternately may suggest that little settlement took place close to the Brook, presumably the conditions were too wet.

All the test-pits did however produce useful stratigraphic information concerning the development of the post-glacial landscape, the alluviation process and its effects on archaeology. Alluvial clays observed in many of the test-pits would have been deposited when rising water tables lead to flooding with variable rates and quantities of sedimentation. Robinson (1992) has suggested that the rise in the water table took place from the mid-Roman period and evidence from Eastcotts (this volume section 2.7), Octagon Farm (this volume section 2.8) and Cardington Cross (Appendix 2 above) supports this. Observations along the Elstow Brook have potential to support investigations at these sites.

The Elstow Brook evidence also has the potential, through an analysis of the alluvial deposits and underlying Pleistocene gravels, to inform our understanding of the spread and thickness of alluvial deposits in this area, identifying areas prone to flooding and areas of higher and drier ground. The importance of mapping the palaeotopogrphy of the area is highlighted as one of the major aims of analysis.

Appendix 4: Summary of Bypass human bone

Table 197: Summary of evidence for human bone

SITE	IH/CR	CONTEXTS	PERIOD	COMMENTS
Peartree Farm	INHUM	948,949,950	P9;Roman	Infant Burial
	INHUM	621/22,648, 733,761	P9;Roman	Adult in anthropomorphic grave-cut, unaccompanied
Village Farm	CREM	1210/11/21	P7;Iron Age	Unaccompanied
	CREM	1482/3,1499	P7;Iron Age	Unaccompanied
	CREM	2512/2513	P7;Iron Age	Accompanied by whole dog and part cattle bones
Bumpy Lane	CREM	8170/71	P9, Roman	Possibly in box, associated with 71 nails
Eastcotts	INHUM	305/6	P3; Neolithic	Crouched adult in grave cut with associated lithics
	INHUM	608,9,10,11	P9;Roman	Supine adult, unaccompanied
	INHUM	663/4/5	P9;Roman	Supine adult accompanied by pottery vessel
	INHUM	721/2/3	P9;Roman	Supine adult, unaccompanied
	INHUM	2732/33	P9;Roman	Supine adult, unaccompanied
	CREM	987/8	P9;Roman	Contained within urn
	CREM	989,993	P9;Roman	Unaccompanied
	Frag.	3044	P9;Roman	Tibia only
	Frag.	2981	P1;?Natural	Skull frags only
Octagon Farm	CREM	1433/34	P15;Unphased	Unaccompanied

CREM = Cremated burial INHUM = Inhumation burial Frag. =. fragment

Appendix 5: Summary of Bypass animal bone

Table 198: Summary of Bypass animal bone

	Number of contexts containing bone by period															
Site	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
Peartree Farm	1	1	-	-	-	-	-	5	-	197	10	-	-	8	1	8
Village Farm	-	4	-	-	7	-	-	46	-	-	-	26	25	54	2	16
Bunyan's Farm	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Manor Farm	-	-	-	-	-	-	-	2	-	1	-	12	-	-	1	5
Bumpy Lane	-	1	-	-	-	-	-	9	-	8	-	-	-	-	1	-
Harrowden	-	-	-	-	-	-	-	1	-	40	-	-	-	15	15	1
Eastcotts	-	9	-	1	1	-	-	3	-	357	-	-	-	2	18	31
Octagon	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-
TOTAL	**1**	**16**	**-**	**1**	**8**	**-**	**1**	**66**	**-**	**612**	**10**	**38**	**25**	**79**	**38**	**61**

Appendix 6: Summary of Bypass Macroscopic plant remains

Table 199: Presence of Edible Charred and Waterlogged Plants by Period

Species by Period			?Neolithic	Late Neolithic / Early Bronze Age	Late Bronze Age / Early Iron Age	Iron Age	Late Iron Age / Early Roman	Roman	Late Roman / Early Saxon	Saxon	Saxo-Norman	Medieval
	Triticum spelta	spelt wheat	.	.	.	+	.	+	+	.	.	.
	Triticum sp.	free threshing wheat	.	.	.	+	+	.	.	.	+	+
	Triticum sp.	wheat	.	.	.	.	.	.	.	+	.	.
	Secale cereale	rye	.	.	.	.	.	.	.	.	.	+
	Hordeum vulgare	six-row hulled barley	.	.	.	.	.	.	.	.	+	+
	H. vulgare	six-row barley	.	.	.	.	.	.	+	.	.	.
	Hord um sp.	naked barley	.	+	.	.	.	.	.	.	.	.
	Hordeum sp.	hulled barley	.	.	+	.	.	.	.	+	.	.
	Hordeum sp.	barley	.	.	.	.	.	+	.	.	.	.
	Avena sp.	oats	.	.	.	+	.	+	+	.	+	+
	Cereal indet		+	.	.	.	.	.	.	.	.	.
	Vicia faba	field bean	.	.	.	.	.	.	.	.	.	+
	Pisum / Vicia sativa	pea / cultivated vetch	.	.	.	.	.	.	.	.	.	+
	Prunus spinosa	sloe	.	.	.	.	.	+	.	.	.	.
w	*P. avium*	cherry	.	.	.	.	.	+	.	.	.	.
w	*Apium graveolens*	celery	.	.	.	.	.	+	.	.	.	.
w	*Juglans regia*	walnut	.	.	.	.	.	+	.	.	.	.
	Corylus avellana	hazelnut	.	+	+	+	+	+	.	.	.	.

w waterlogged

Table 200: Concentration of Charred Seeds and Chaff as a Percentage of the Total Samples Containing Material from Each Period

Number of items	Neolithic + ?Neolithic	Late Neolithic / Early Bronze Age	Late Bronze Age / Early Iron Age	Iron Age	Late Iron Age/ Early Roman	Roman	Late Roman / Early Saxon	Saxon	Saxo-Norman	Medieval
1 - 10	100	100	100	67	100	50	100	100		
11 - 100						18			67	33
101 - 1000						18			33	67
1000+				33		14				
No. of samples	2	4	4	3	3	22	3	3	3	3

Table 201: Presence of Charcoal by Period

Species by Period		Neolithic + ?Neolithic	Late Neolithic / Early Bronze Age	Late Bronze Age / Early Iron Age	Iron Age	Late Iron Age/ Early Roman	Roman	Late Roman / Early Saxon	Saxon	Saxo-Norman	Medieval
Alnus / Corylus sp.	alder / hazel	+		+			+	+	+		
Fraxinus excelsior	ash	+							+	+	
Quercus sp.	oak	+	+	+	+	+	+	+	+	+	+
cf. Pomoideae	hawthorn etc	+		+	+		+	+	+		+
cf. *Prunus* sp.	sloe etc	+		+	+		+		+	+	
Rhamnus catharticus	purging blackthorn						+				
Ulmus sp.	elm						+				+