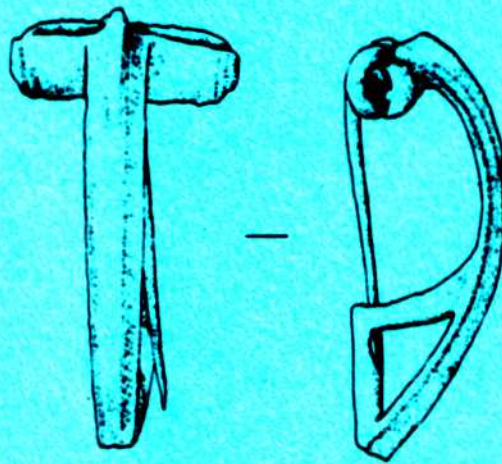


*An Archaeological Evaluation
at Hollard's Farm
(Mimram Valley Golf Course)
Codicote, Hertfordshire.*



An Archaeological Evaluation
at Hollard's Farm
(Mimram Valley Golf Course),
Codicote, Hertfordshire

by

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with contributions by

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North Hertfordshire District Council Museums
Field Archaeology Section
Department of Engineering and Leisure Services

Commissioned by Richard Daniels Developments Ltd

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Hollard's Farm (Mimram Valley Golf Course), Codicote, Hertfordshire.
Preconstruction archaeological evaluation.
April 1990.

NHDC Museums site reference: COD-2

Abstract

An enclosure known from aerial photographs at Hollard's Farm, Codicote, was partially examined by trial trenching in advance of construction work for the Mimram Valley Golf Course. The site is prominently situated on the edge of a plateau overlooking the valley of the River Mimram. With structures and an enclosing bank and/or palisade, it would have dominated the river valley which may have formed a route linking the Welwyn area with settlements to the north-west.

The enclosure may have been sited in relation to an earlier field system, parts of which were known from the aerial photograph and examined in the trial trenching. However, the relationship between the enclosure and field boundaries was not examined at this stage to prevent the loss of potential information. There are hints from the aerial photograph that the site extends eastwards into a neighbouring field, and although fieldwalking here failed to reveal a concentration of finds, it is clear that at least one of the field boundaries crosses into this field.

The enclosure seems to have been used during the first half of the first century AD as a settlement site, evidently of some pretension to judge from the size of its ditches and the incidence of imported pottery. A short period of silting in the ditches (reflecting either abandonment, or, more likely, a period during which the ditches were not cleaned) was followed by the levelling of the site some time around AD c70.

In its immediate vicinity the settlement would have had control over arable land, probably largely confined to the upland plateau, and pasture suitable for a variety of animals on the slopes and in the valley bottom, as well as access to wildlife in the river. The presence of Romano-British pottery and tile from the field surfaces around the enclosure suggests that the land continued to be exploited for agricultural use after the abandonment of the enclosure, the ceramic material making its way onto arable field surfaces with manure.

Comparison with other sites in the Welwyn area - none excavated to scientific standards - suggests that this class of settlement was relatively common in the first century AD, and that all were abandoned at roughly the same time, perhaps as a result of a local government decision. The limited work at Hollard's Farm has been the most detailed to date, but clearly much more can be learned from this site, and it is recommended that it be either preserved or more fully investigated before any development takes place on the site.

Fieldwalking elsewhere on the proposed golf course area revealed traces of mediæval and later farming practices and the lines of former field boundaries.

The cover illustration shows a detailed drawing of a copper alloy brooch dating to AD c60-70 recovered during excavation.

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Contributors

The main body of the text was written by David Went; Gilbert Burleigh and Keith Matthews also contributed to the introduction and recommendations (sections 1 and 2); Christine Colley wrote the sections on fieldwalking methodology and results (sections 3.2 and 4.2); Keith Matthews contributed to the excavation conclusions (sections 5.1 and 5.3) and wrote the sections on the local background (section 5.4) and the metalwork (section 6.3); Faith Pewtress wrote the animal bone report (section 6.2); Christine Colley, Adam Garwood, Tony Offord, Faith Pewtress and Stephen Player drew the illustrations.

Gilbert Burleigh and Keith Matthews also edited the text, which was produced on a word-processor by Keith Matthews and printed by North Hertfordshire District Council's Print Room.

NB The views expressed in this report are those of the authors and they take full responsibility for them. They are not necessarily the views of the North Hertfordshire District Council.

1: Introduction

1.1 An aerial photograph taken in 1967 by Dr J K St Joseph of Cambridge University revealed traces of ditches forming a large rectangular enclosure in the centre of field 5721, part of the land belonging to Hollard's Farm, Codicote, Hertfordshire. The site was considered ancient, and tentatively identified as belonging to the Iron Age or Romano-British periods on the basis of comparisons with other, dated sites. The enclosure was subsequently entered in the County Council's Sites and Monuments Record (SMR 2388) and also designated as an Area of Archaeological Importance (AAI 193; see figure 1).

1.2 In 1989, proposals to convert the agricultural land and farmhouse at Hollard's Farm into a golf course and club-house raised the possibility of extensive landscape alterations posing a threat to the archaeological remains, and causing major changes to the surrounding fields.

1.3 Following negotiations between North Hertfordshire District Council Museums Field Archaeology Section and Planning Department with B Hull Associates, the agent for the developer, agreement was reached with the developer, Richard Daniels Developments Ltd and the landowner, Mr John Ansell, to allow an archaeological evaluation once planning permission had been gained. Planning permission was granted in February 1990 and a small team of archaeologists from North Hertfordshire District Council Museums undertook an investigation of the known ancient enclosure and surrounding fields during March 1990. The investigation concentrated on the Area of Archaeological Importance with a very rapid survey of the remainder of the golf course area in order to record other visible archaeological landscape features. The results are reported here.

1.4 The purpose of the detailed evaluation of the enclosures within the Area of Archaeological Importance (an area of about 12 acres) was to identify their type and character; period of occupation; and state of preservation. This was to be reported on to the developer, landowner and North Hertfordshire District Council Planning Department, with recommendations for further action, if necessary, including the possibility of protecting the site from damage by the golf course construction. Similarly, recommendations are made regarding the archaeology of the golf course in general.

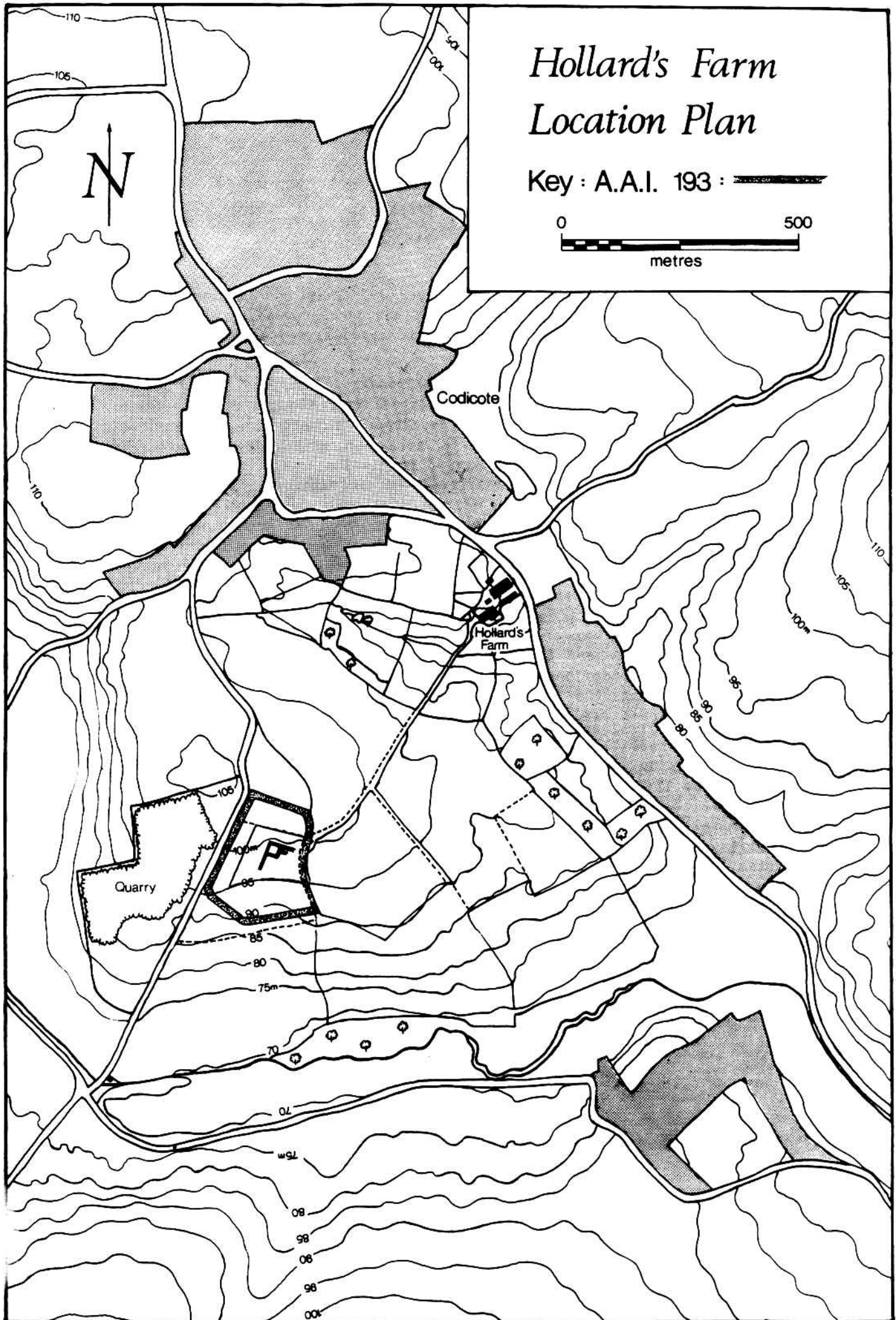
1.5 The total area in question (see figures 1 and 7) forms a two hundred acre triangle bounded by the St Alban's and Welwyn roads to the east and west, and by the River Mimram to the south. To the north, near the village, the farm buildings are surrounded by small pastures which extend along the Welwyn road, skirting Catchpole and Longston Woods. Further south, towards the scarp of the Mimram Valley (see figure 2), the fields are currently under plough and have been amalgamated into larger units.

1.6 The Area of Archaeological Importance is situated on the top of the scarp, at the edge of the upland chalk plateau overlooking the valley (see figure 3), to the south of a footpath which links the St Alban's roads with the main farm access track. The large fields to the south, running down the slope to the river, are all used for arable cultivation. The ploughsoil is a uniform type over the entire area: a light calcareous rendzina A horizon with numerous flints, denuded on the upper fields by ploughing and weathering, with a corresponding accumulated depth at the foot of the slope.

Hollard's Farm Location Plan

Key : A.A.I. 193 : 

0 500
metres



2: Results and Recommendations

2.1 The Area of Archaeological Importance The features on the aerial photograph have been shown by the evaluation to be a late Iron Age to early Romano-British period (late first century BC to mid first century AD) ditched domestic enclosure, probably a high-status farmstead with associated paddocks and fields. By analogy with similar sites elsewhere, one may expect traces of ancient building foundations within the main enclosure if the whole interior were stripped archaeologically. In addition, there would no doubt be other features such as storage/rubbish pits.

2.2 Due to the very shallow topsoil (0.23m average depth) on the plateau on which the enclosure is situated (a result of centuries of ploughing and the movement of soil down the slope into the valley bottom), any stripping of topsoil or disturbance by construction work for the golf course will damage the very fragile archaeological remains.

2.3 It is therefore recommended that the area of the main enclosure site (as delineated in red on figure 2) should not have its existing ground level reduced in any way by the golf course construction, although the level could be built-up with topsoil instead.

2.4 This same defined area should be seeded with grass and not be planted with trees, since the latter can be very destructive of archaeological remains.

2.5 If it is not possible to protect all of this defined area from damage or disturbance (whether for design or other reasons), further archaeological excavation should occur on those parts which will be disturbed.

2.6 In any event, an archaeological geophysical survey should be carried out of the defined area. This is recommended because of the archaeological importance of the site and because of the necessarily limited investigation which has been undertaken. A geophysical survey would answer outstanding questions regarding the layout of the enclosure ditches and should give some information about the plan of the interior of the main enclosure. This would be a relatively quick and cheap way of getting such information, and the opportunity should be taken since, once the golf course is constructed, such an opportunity could not recur for many years. It would certainly be a much-appreciated additional gesture by the developer.

2.7 Construction work in the Area of Archaeological Importance should be monitored archaeologically to record any so-far unknown features which may be revealed.

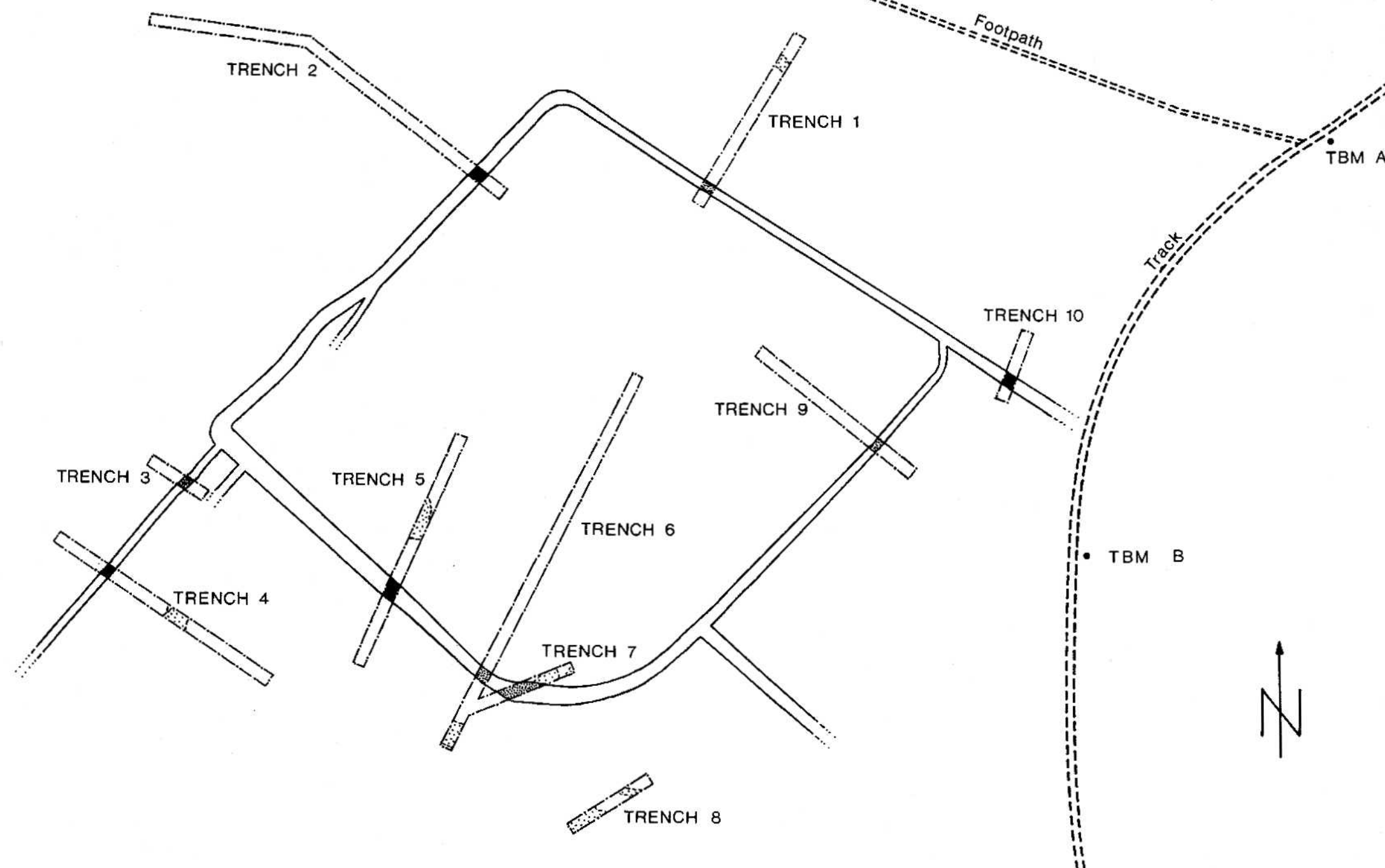
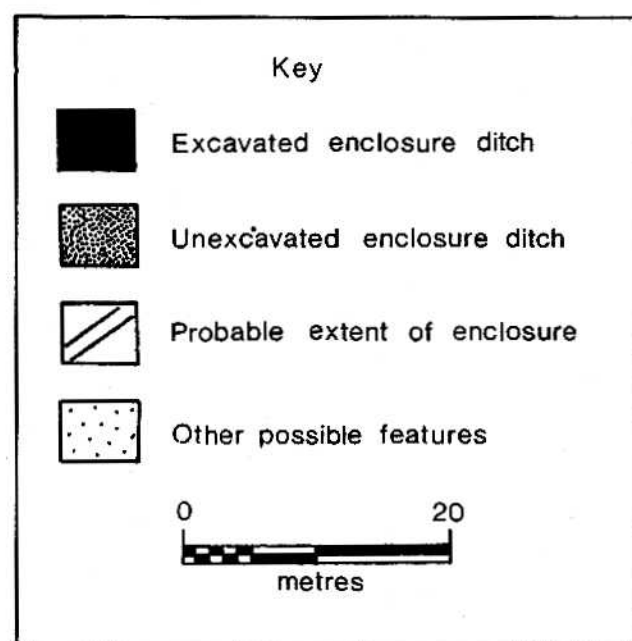
2.8 The archaeology of the remainder of the golf course If machines are used to excavate or move soil in the part of the field to the east (7195) immediately adjacent to the known archaeological remains, such work should be monitored archaeologically to investigate the possibility of the ancient enclosures continuing along the ridge.

2.9 General archaeological observation should be undertaken of the golf course construction in order to record any so-far unknown archaeological remains which may be revealed.

2.10 The developer and the Local Planning Authority's nominated archaeologists shall come to an agreement over the above recommendations, and the developer shall make agreed financial provision to allow them to be carried out.

Hollard's Farm, Codicote

Location Of Trial Trenches 1990



3: Methodology

3.1 The trial trenches (see figure 2).

The purpose of the excavation was to determine, with the minimum degree of disturbance, the date, function and exact position of the enclosure. A programme of shallow trial trenching followed by limited detailed manual excavation was considered the most appropriate method to achieve these aims.

The initial stage required that the general location of the enclosure should be extrapolated from the aerial photograph and marked out in the field. A möbius network plotting technique was employed to transfer the information from the oblique photograph to a plan; however, owing to the obliqueness of the photograph and lack of recognisable landmarks incorporated into the frame, only a rough approximation of the enclosure's position could be obtained.

Once the location obtained in this way had been measured and marked out in the fields, a JCB mechanical excavator (using a 1.5m wide ditching bucket on its back actor) was used to strip the ploughsoil in four trenches, taking care not to truncate the subsoil. Each trench was orientated to locate one side of the enclosure at an estimated right angle to the ditch. It was hoped to identify the upper fills of the ditches as anomalies in the subsoil.

It soon became apparent that the original plotting of the cropmark was inaccurate, as no trace of the enclosure ditches could be found, so the original trenches were elongated, and six further trenches cut. It turned out that the enclosure was approximately twenty metres south of the predicted position.

In all, ten trenches were dug. Trenches 1, 2, 5, 6, 7 and 9 were positioned over the main enclosure; trenches 3 and 4 were located to investigate a linear feature seen on the aerial photograph running south-west from the south-western corner of the enclosure. Trench 10 was positioned over an easterly extension to the north-eastern enclosure ditch. Trenches 1, 2 and 4 also served to sample the exterior of the enclosure, while trench 8 was located specifically for this purpose. Trenches 5, 6 and 9 exposed the subsoil within the enclosed area, which was closely examined for evidence of archaeological activity.

The trial trenches were carefully cleaned by hand and the surface of the subsoil recorded on plans with detailed descriptions, indicating the positions of the ditches and other probable features. The trenches were surveyed and their exact locations recorded.

Four of the ditch sections exposed during cleaning were then selected for further investigation. The deposits within each section were excavated manually, removing each layer systematically. All deposits and features were given context numbers and fully described using pro-forma record cards. All finds were collected for analysis. Field drawings were made of all surfaces and sections (see figures 4 to 7) and a photographic record was maintained.

The heights of all aspects of the site were recorded in relation to two temporary bench-marks established along the farm track to the east of the site (see figure 2). These points were subsequently measured in relation to the bench mark on Pulmer Water Cottage (TL 212167) on the St Alban's road, and the absolute heights above Ordnance Datum calculated.

Finally, the trenches were backfilled and the field surface harrowed, drilled and returned to crop.

The finds and records were checked and analysed, and a draft report prepared. Field drawings were checked and from these, final illustrations drawn to accompany the excavation section of this report. Further plans were added as this text was written.

3.2 The fieldwalking

The purpose of the fieldwalking survey was to establish, by a systematic process of finds recovery related to location, any further area of potential archaeological activity either associated with the Area of Archaeological Importance (see figure 2) or hitherto unsuspected.

The fieldwalking survey was conducted field by field. Two fields were surveyed more intensively than the remainder: that containing AAI 193 (field 5721) and the adjacent field to the east (7915).

To reinforce the accuracy of the transects walked, the lines crossed the fields along the shortest length (the width) rather than the length. A compass bearing was sited parallel to the straightest long boundary and distances along a base line field boundary were measured from it. As the field boundary was rarely straight, an imaginary baseline was established, allowing transects to be projected at twenty or forty-metre intervals.

The field surfaces were either harrowed or under crop, the presence of which does not appear to have affected the results to any great extent as the plant growth was minimal. The weather was mild and fair, encouraging good recovery rates.

Due to the quantities of mediæval and post-mediæval tile present, a representative sample of the types present was collected in each field, and concentrations noted. However, in the lower fields, very little tile was present, and all tile was collected. For all other finds a complete collection policy was adopted for all but recognisably modern (i.e. late twentieth-century) finds such as plastic containers and shotgun cartridges.

3.3 General survey

As part of the overall investigation, the whole area due for development was inspected for remnant landscape features such as disused quarry pits and former field boundaries. In particular, the area of woodland and pasture were thoroughly investigated, since they had not been subjected to the destructive effects of modern ploughing.

Identified features were rapidly surveyed by triangulating bearings from two points and by offset measurement from reference points on the 1:2500 Ordnance Survey map (see figure 7). Detail was kept to a minimum due to pressure of time. This survey was conducted on the final day of the evaluation.

The results of this survey were added to this report and the implications discussed below (sections 4 and 5).

4: The results

4.1: The recorded archaeology from the trial trenches

4.1.1: Trench 1 23.3m by 1.5m.

Orientation 32½° magnetic (see figure 2).

Average depth of ploughsoil 0.22m.

Trench 1 was located to establish the position of the north-eastern side of the enclosure.

The ploughsoil was carefully stripped away to reveal the surface of the weathered chalk subsoil beneath, with large bands of periglacial solution material (a reddish brown silty clay) running approximately east-west. The position of the ditch was obscured by these natural veins, as the ditch fill and the solution material were composed of very similar matrices, possibly made more homogeneous by processes of chemical weathering. The most likely position of the ditch was within a patch of solution silts 1.8m from the southern end of the trench, identified as a band of mid yellowish/reddish brown silty clay 1.2m in width, oriented north-east to south-west, with a more friable and organic texture than the surrounding natural. Another possible feature, a 1.9m wide band of material was identified 2.9m from the northern end of the trench.

Neither feature was excavated.

4.1.2: Trench 2 47.9m by 1.5m.

Orientation 310° magnetic (see figures 2 and 3).

Average depth of ploughsoil 0.15m.

Trench 2 was originally dug to investigate the area of the field outside the enclosure, towards the St Alban's road. The ploughsoil in this area of the field was extremely shallow (less than 0.15m deep) and the underlying subsoil proved to be a featureless mid red-brown silty clay. Consequently the trench was extended eastwards at a more southerly angle in order to investigate the north-western ditch of the enclosure. The extended trench revealed a change in the natural subsoil to a more chalky weathered horizon, also featureless apart from a 1.6m wide band of mid yellow brown, slightly stony, silty clay loam, two metres from the eastern end of the trench. This was assumed to be the fill of the enclosure ditch, and excavation was continued by hand.

The exposed layer ([4]) was excavated, yielding abraded sherds of grog-tempered pottery and revealing the surface of the underlying layer ([9]) contained within the sides of a ditch cut. As the feature appeared to extend deeper than originally anticipated, the extent of the remainder of the excavation was limited to half the width of the trial trench (approximately 0.75m). Context [4] was 0.2m deep and appeared to be a layer of accumulated weathering deposits (Phase IV), probably considerably truncated by later ploughing (see fieldwalking results, section 5.3). The layer below ([9]) was a friable, slightly stony mid red/brown clay loam with 15% small chalk flecks. This was 0.16m deep and contained fragments of animal bone as well as a large number of abraded, grog-tempered pottery sherds, including a large rim sherd datable to the early first century AD. The next layer ([14]) was composed of a very similar matrix with a high proportion (80%) of large angular flints (average dimensions 110x80x80mm), possibly deriving from the demolition of a nearby structure (see section 5.2). The pottery recovered again derived from fine and coarse grog-tempered vessels. Fragments of one grain jar in Fabric 2A (see figure 10) were present in both this layer and layer [9], suggesting that deposition of both layers occurred within a very short space of time. Both were interpreted as deliberate backfills, based on the pattern of the pottery and coarse components within the fills (Phase III).

Layer [14] was 0.15m deep, and was removed to expose [15], a layer of light to mid yellow-brown sandy clay loam 0.32m deep, forming the primary fill of the ditch. The matrix was composed of weathered material derived from the surrounding natural subsoil and contained some grog-tempered pottery sherds, the majority of which were recovered

Trench 2

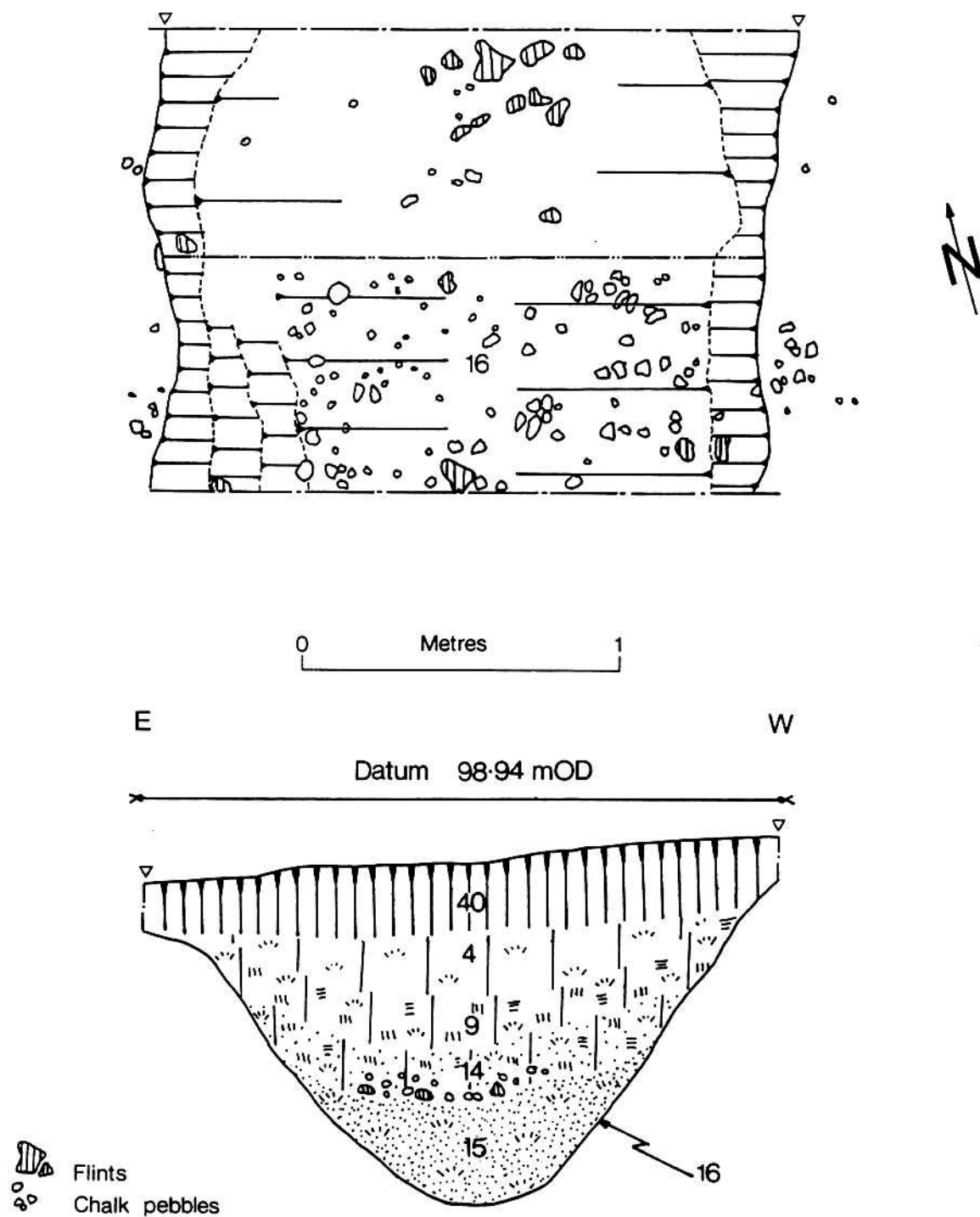


Figure 3: Trench 2

from the interface with layer [14]. This layer was interpreted as a weathering horizon reflecting a period during which the ditch was in use, but allowed to silt up (Phase II) and consequently containing occupation debris of pottery and animal bone.

This layer was in turn removed to expose the profile of the ditch ([16]), forming a V-shaped cut 1.7m wide at the surface of the subsoil, and cut 0.92m into it, with a rounded bottom. It was aligned north-east to south-west.

4.1.3: Trench 3 7.5m by 1.5m.

Orientation 303½° magnetic (see figure 2).

Average depth of ploughsoil 0.26m.

Trench 3 was positioned in conjunction with trench 4 to establish the position and alignment of the south-westerly extension to the main enclosure seen on the aerial photograph. This trench was dug after the ditch had been located in trench 4, so only a short length was required to determine its position.

The subsoil formed a mottled pattern of large patches of light red/yellow weathered silty chalk and dark brownish-red clay. Two metres from the south-eastern end of the trench, a 0.95m wide band of reddish brown silty clay loam containing 20% small flints displayed sufficient differentiation from the natural, and appeared in the expected position at the correct angle, to be interpreted as the ditch fill. This was not excavated.

4.1.4: Trench 4 30.1m by 1.55m.

Orientation 305° magnetic (see figures 2 and 4).

Average depth of ploughsoil 0.2m.

This trench was sited in order to locate the linear feature seen running in a south-westerly direction from the western corner of the enclosure on the aerial photograph, vanishing at a point north of the large quarry pit situated on the former boundary between fields 5721 and 5200 (see figure 7). Projected, this runs towards the ford on the St Alban's road where it crosses the River Mimram.

The subsoil was once again very mottled, with patches of mid to dark reddish brown clay loam separating areas of weathered light yellowish brown chalky silt. A long trench was required in order to locate the ditch and to uncover a large sample of the variegated natural so that distinctions between periglacial and archaeological features could be made.

Two probable features were identified. A large area of mid red/yellow clay loam 1.6m wide, slightly more friable and organic than the surrounding natural, was visible 12m from the south-eastern end of the trench. This area was cleaned by hand, and had the appearance of a sedimentary ditch fill. However, no finds were seen in the surface, and this feature was not investigated further.

The second feature was a narrow, well-defined band of clay loam 1m in width running north-east to south-west across the trench, 7.1m from the north-eastern end. This layer ([2]) was interpreted as a fill of the ditch in question, and excavation was continued by hand (see figure 4).

Layer [2] was 0.1m deep, contained within the cut sides of the ditch, and from its matrix (a friable, slightly stony mid reddish brown clay loam) and deposition was assumed to be a layer of weathered material reflecting gradual erosion and silting up of the ditch (Phase IV). This layer contained one very abraded fragment of coarse flint-tempered Late Bronze Age or Early Iron Age pottery. The following layer ([5]), a mid yellowish red loamy clay 0.08m deep, contained one abraded sherd of Late Iron Age grog-tempered pottery, and was also interpreted as natural weathering (Phase IV).

Below layer [5] lay [8], a very similar matrix to [5], but with a much higher proportion of coarse components (80%) medium to large angular flints, 60mm to 80mm in diameter). This was at first considered to be the result of natural weathering from the sides of the ditch and the surrounding surface filling the bottom of the cut. However, the amount of flint was much higher than in the surrounding natural, and

Trench 4

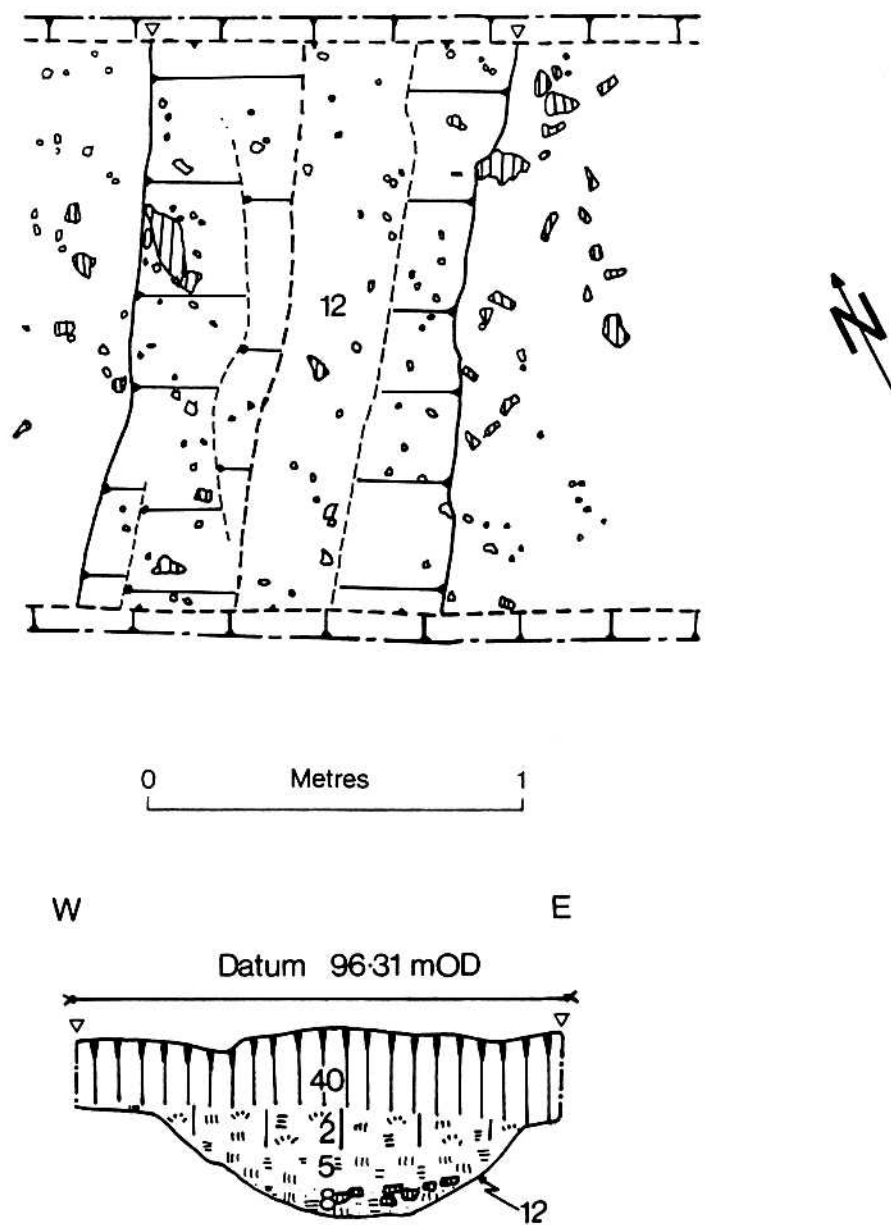


Figure 4: Trench 4

discrete to this one layer. A more likely explanation is that layer [8] is a deposit of demolition material (Phase III) indicating the presence of a nearby structure, as suggested in trench 2 (see conclusions). Layer [8] produced no finds and was removed to a depth of 85mm to expose the profile of the ditch ([12]), a shallow v-shaped cut 0.3m deep, oriented north-east to south-west, and cut into the weathered chalk subsoil.

4.1.5: Trench 5 30m by 1.5m.

Orientation 234° magnetic (see figures 2 and 5).

Average depth of ploughsoil 0.28m.

Trench 5 was located to uncover the middle of the south-western side of the enclosure, following the tentative identification of the ditch fill in trench 6, and thereby corroborate the earlier interpretation and illustrate the ditch alignment.

The subsoil in trench 5 was less variable than that encountered elsewhere; it was composed predominantly of friable weathered chalk lumps in a chalky silt matrix. The regular marks of ploughing were visible in the surface, and a further single furrow ran most of the length of the trench, possibly indicate the recent use of a subsoil-breaking coulter blade (see conclusions). The distinctions between the natural subsoil and the archaeological features were not very pronounced, so the trench was deliberately elongated to expose a wider sample of the subsoil variations to allow comparisons to be made.

Two features were apparent in the cleaned trench. A large area, four metres from north to south, of mid red brown clay loam was interpreted as the fill of a subrectangular negative feature, possibly a pit or the butt end of a ditch. This feature was recorded (see figure 2) but not excavated due to the lack of time, and because the investigation of internal features of the enclosure lay outside the work programme. The second feature, a band of clay loam crossing the trench diagonally, eight metres from the southern end, was interpreted as the ditch fill, and a trial slot 0.6m wide was excavated through this by hand against the western face of the trench.

After cleaning the surface of the ditch fill, a distinct narrow band of flinty mid reddish brown clay loam 0.48m wide was identified crossing the deposit at a more acute angle. This material ([3]) appeared to be the most recent deposit and was consequently excavated first. It was 0.22m deep and contained small abraded fragments of Late Iron Age pottery together with a sandy, hard-fired mediæval sherd as well as fragments of oyster shell and animal bone and a fragment of daub. [3] was removed to reveal a shallow v-shaped cut ([6]) oriented north-east to south-west, truncating an earlier ditch fill ([37]). The cut was interpreted as a minor boundary ditch, possibly mediæval, the weathered fill containing material redeposited from the disturbed enclosure ditch fills (Phase V). At the point of excavation, the late ditch ([6]) seemed to be contained within the earlier layer ([37]) although it was apparent that the two features, if projected, would diverge.

Layer [37] was 0.4m deep and composed of slightly stony mid reddish brown clay loam. No pottery was recovered from this layer, although it did contain a complete, unabraded copper alloy bow brooch of the period AD c55-70 (see section 6.3, figure 13). Layer [37] was assumed to be a sedimentary deposit, and when removed proved to be contained within a round-bottomed recut 0.6m wide, running parallel with, and within, the earlier ditch, whose fills it truncated. [19] was therefore considered to be a recut of the earlier ditch (Phase IV).

Ditch [37] truncated two earlier fills with differing matrices. The southernmost fill, [11], was a mid red-brown moderately flinty clay loam; the northernmost, [17], was a mid yellowish brown silty clay with 60% small chalk lumps. The stratigraphic relationship between the two layers had been removed by ditch [37] which cut through the base of both. However, the two fills shared common characteristics of random stone patterns and a lack of sedimentation lines which identified them as deliberate backfill material. In addition, both layers contained contemporary (mid to late first century AD) pottery, shared fragments of the same vessels (eg. the Fabric 20 ring-necked flagon) and contained similar animal bones. Consequently, the two layers

Trench 5

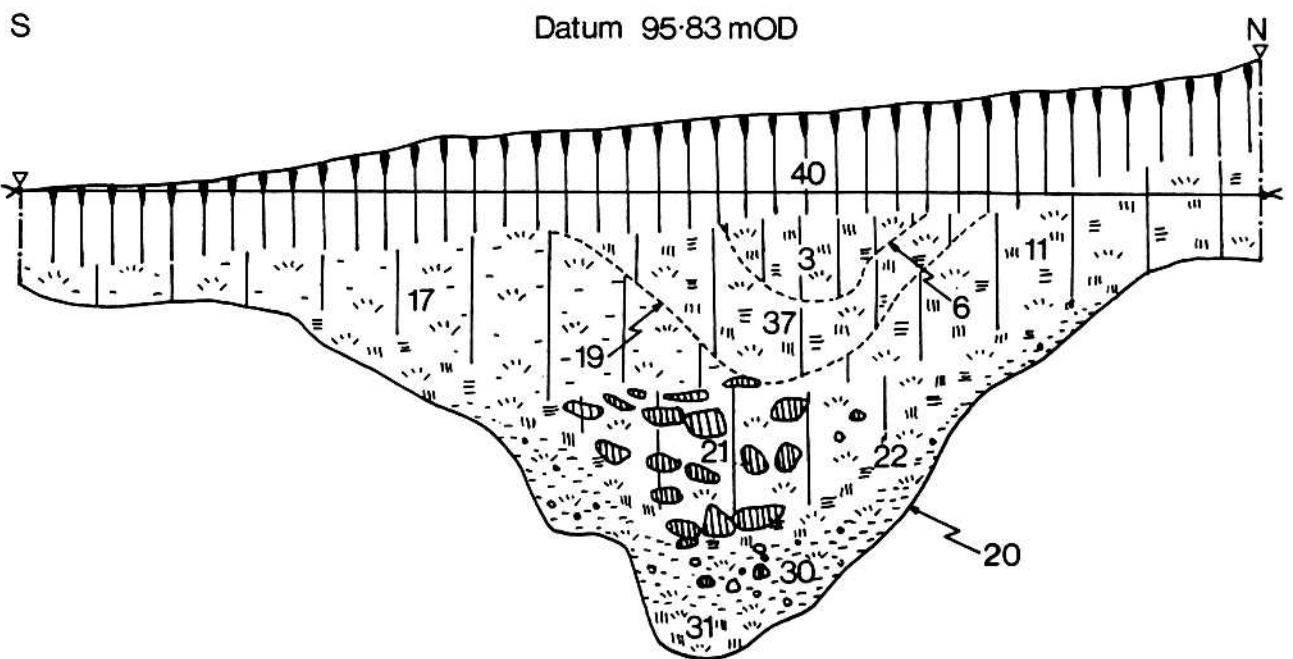
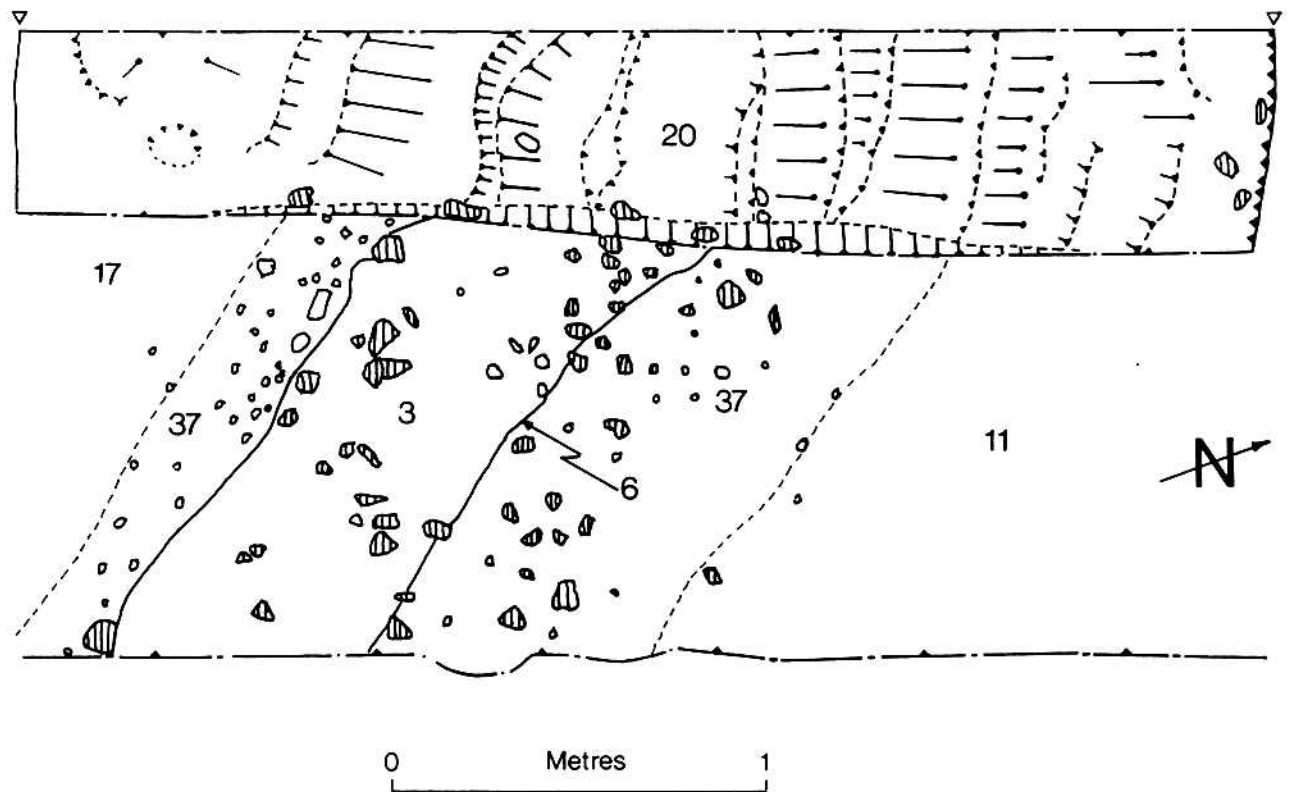


Figure 5: Trench 5

were interpreted as stratigraphically contemporary, representing aspects of a single phase of backfilling (Phase III) contained within the main ditch cut. The difference in soils may possibly reflect successive deposits over a short time span or the destruction of a positive feature itself composed of different layers. This variation in backfill source is further discussed below (section 5.1).

Beneath layers [11] and [17] lay a mid yellowish brown clay loam containing 80% large angular flints (60mm to 80mm in diameter) ([21]). The volume and size of the flints suggested a layer of demolition material (Phase III) rather than a sedimentary deposit, comparable with layers in trenches 2 and 10. Layer [21] yielded pottery datable to the mid to late first century AD with abraded sherds of a butt beaker shared with layer [11], as well as fragments of domestic animal bone and a fragment of tile, which, as the only securely-dated tile fabric from the site, was to be of use in determining the presence of Romano-British tile in the fieldwalking exercise.

Stratified below [21], layer [22], a red/yellow brown clay silt containing charcoal flecks, produced one abraded sherd of Late Iron Age grog-tempered pottery and some domestic animal bone. This layer was interpreted as a weathering horizon preceding the period of demolition (Phase II). [22] was removed to a depth of 0.15m exposing an earlier layer of erosion material ([30]), of a similar matrix to [22] but containing no pottery, and several fragments of ?hare bone. This layer, 0.01m deep, was in turn removed to reveal the complete ditch profile [20], a V-shaped cut 1.14m deep into the chalk subsoil and with sides sloping at 45° from horizontal. The southern face of the ditch displayed a ledge-like irregularity of profile with no corresponding recut visible in section. This possibly reflects earlier cleaning cuts during the life of the settlement (Phase I).

4.1.6: Trench 6 50m by 1.4m.

Orientation 27½° magnetic (see figure 2).

Average depth of ploughsoil 0.21m.

Trench 6 was positioned to investigate the south-western side of the enclosure, and was subsequently elongated northwards to sample its interior. The machine stripping was carefully executed, removing the topsoil without truncating the subsoil in order to reveal features present without causing damage to the deposits below the level of ploughing.

The subsoil was predominantly a light red/yellow brown silty loam with 50% chalk rubble in the northern twenty metres of the trench, merging with a central twenty metres of light red brown silty loam with less chalk, which in turn merged into an area of light reddish brown clay loam extending approximately ten metres from the southern end of the trench. Two features were identified in this southern section. An area of yellowish friable silty loam extended 3.4m from the southern end, and may have been the fill of a negative feature. The enclosure ditch fill was identified as a three-metre wide band of friable silt loam (noticeably more organic and stone-free than the surrounding subsoil), 9.1m from the southern end of the trench. Neither feature was excavated owing to pressure of time. The alignment of the enclosure ditch was confirmed by excavation in trench 5.

No interior features were recognised, but this was hardly surprising given the nature of the investigation and the subsoil. Minor traces of occupation – postholes, floor surfaces etc. – would require more detailed excavation to detect, especially given the extent of plough damage (see conclusions).

4.1.7: Trench 7 13.5m by 1.5m.

Orientation 67° magnetic (see figure 2).

Average depth of ploughsoil 0.18m.

This trench was intended to be outside the enclosure, sampling beyond its south-eastern corner.

The subsoil was very mottled, with areas of yellowish red clay and yellow/brown weathered chalk. A curving area approximately three metres wide was identified in the

centre of the trench as the fill of a probable feature; it was composed of a friable mid red/yellow loamy clay. After further investigation in trenches 5 and 6, it became apparent that this feature was part of the south-eastern corner of the enclosure ditch. The trench was extended in order to join with trench 6 and provide a larger interpretative are. The ditch material appeared to superimpose over another small area of silt loam immediately to the north-east, possibly the fill of a feature predating the ditch.

The features were recorded but not excavated, since such limited excavation of a potentially important part of the site could not be justified. No damage to the features was caused by the topsoil stripping.

4.1.8: Trench 8 11m by 1.4m.

Orientation 58½° magnetic (see figure 2).

Average depth of ploughsoil 0.42m.

Trench 8 was located to fulfil the function intended for trench 7: to sample an area outside the enclosure, to the south of its south-eastern corner. Only a short trench was excavated due to the pressure of time and the depth of topsoil, which was greater here than higher up on the plateau on which the enclosure is largely situated.

The subsoil was similar to elsewhere, a variegated mixture of predominantly light red/yellow silty clay loam with a high proportion of weathered chalk lumps. Two areas were identified and recorded as probable features; one, a narrow band 0.7m wide, about two metres from the northern end of the trench, the other a broad patch extending for four metres from the southern end of the trench. Both were composed of friable organic mid reddish brown silt loam similar to the fills of the enclosure ditches. Neither produced finds from their surfaces, and neither was excavated.

4.1.9: Trench 9 23.1m by 1.5m.

Orientation 301° magnetic (see figure 2).

Average depth of ploughsoil 0.19m.

Located in order to establish the south-eastern side of the enclosure, the original trench was 17.9m long, but after examination, the eastern end was extended by 5.2m.

The subsoil was extremely variable, displaying numerous bands of periglacial clay deposits superimposed on the weathered chalk. Approximately 2.2m from the western end of the trench a narrow band of dark clay silt was provisionally identified as the ditch fill and excavated. This feature proved to be a natural solution run-off channel filled with solifluction material. Details were recorded (but not included in this report) and the findings used to assess other potential features on the site.

The trench was extended westwards, exposing the true location of the ditch, indicated by a band of friable yellowish/reddish brown silty clay loam 0.9m wide, directly comparable with the excavated ditch fills from trenches 5 and 10. It was oriented north-west to south-east, four metres from the extended western end of the trench. This section was not excavated.

4.1.10: Trench 10 8.8m by 1.5m.

Orientation 20½° magnetic (see figures 2 and 6).

Average depth of ploughsoil 0.17m.

This trench was situated to the east of the estimated area of the enclosure in order to investigate the continuing line of the north-eastern enclosure ditch on the aerial photograph beyond its eastern corner.

In this instance the estimated location was accurate, and only a short trench was required to locate the fill of the ditch. The subsoil, as elsewhere, was a mottled mixture of yellowish brown weathered chalk silt and yellowish red clay loam, with a broad band of mid yellowish/reddish brown clay loam 2.3m wide indicating the position of the ditch. Further manual excavation was limited to a narrow trial slot 0.48m wide aligned against the western face of the trial trench (see figure 6).

Trench 10

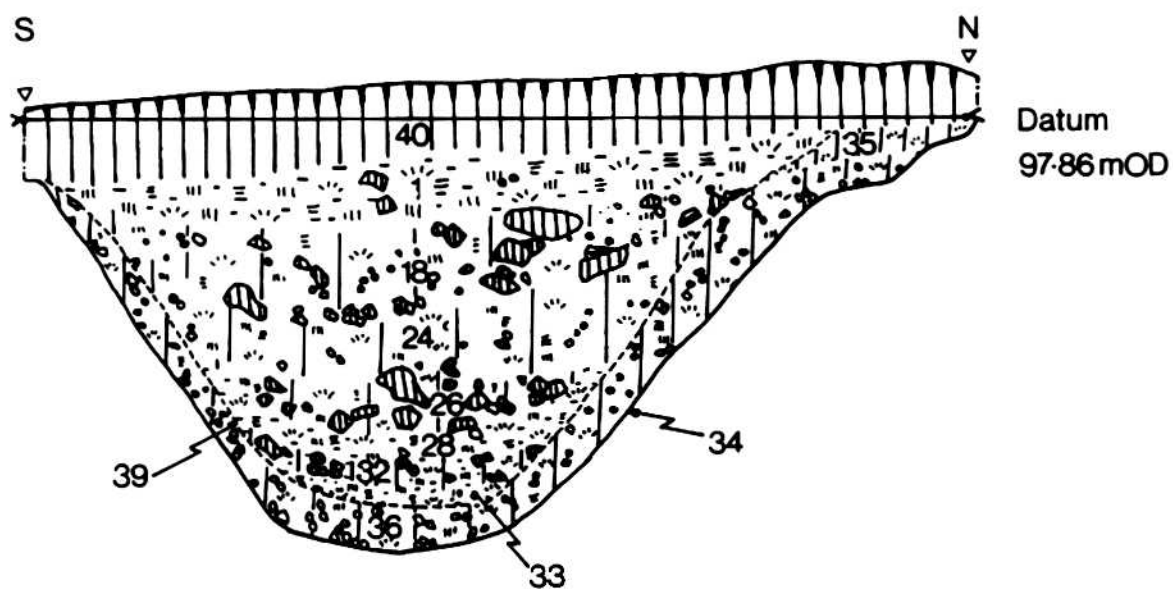
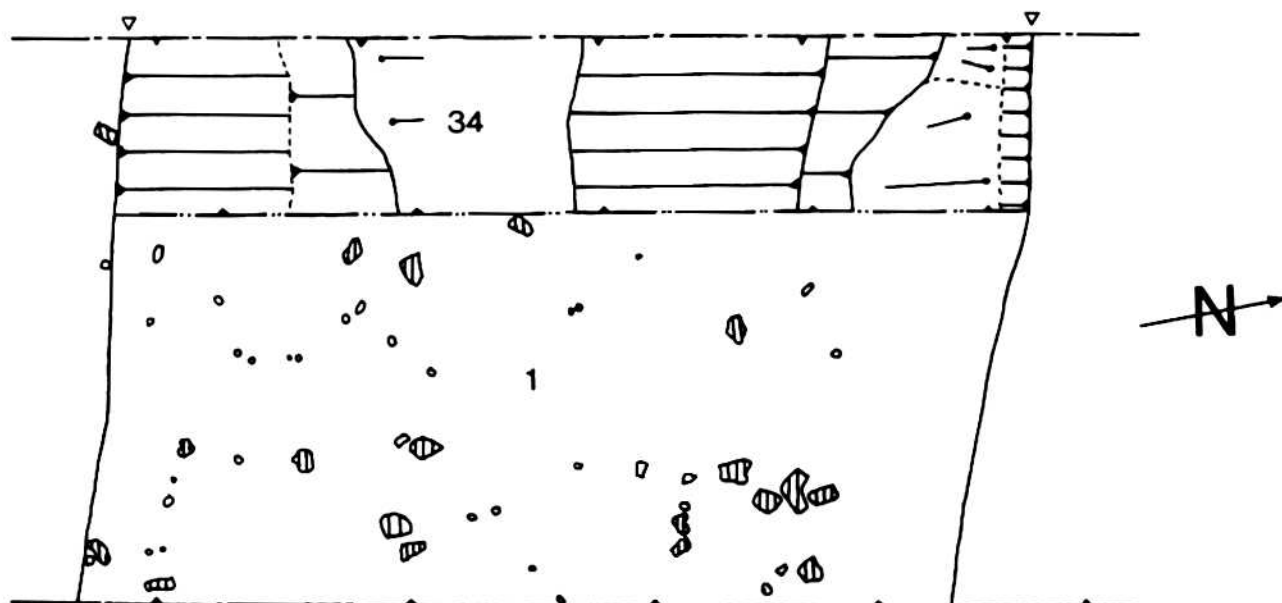


Figure 7: Trench 10

The upper ditch fill exposed by the JCB ([1]) was a shallow layer of a moderately stony clay loam 0.14m deep. This was removed and found to contain three sherds of abraded Late Iron Age pottery and a fragment of animal bone. Layer [1] was interpreted as a natural sedimentation deposit containing residual occupation debris (Phase IV), probably truncated by later ploughing. Beneath layer [1] were four layers of apparently backfilled material (Phase III). The uppermost layer ([18]) was of a very similar matrix to layer [1], but with 80% very large angular flints (see conclusions). This layer produced numerous sherds of grog-tempered pottery and two fragments of Romano-British grey ware (produced from the mid first century AD to the end of the Roman period). A large number of grog-tempered sherds was collected from this layer as a single context ([23]) since they appeared to derive from a single clustered deposit representing only two or three vessels, abraded as though broken elsewhere and redeposited as part of the deliberate backfill of the ditch (see figure 10).

Layer [18] was very shallow - only 0.08m deep - and covered a layer of similar backfilled material ([24]) containing considerably less flint, but sharing fragments of vessels from cluster [23], thereby indicating a roughly contemporary date of deposition. This layer contained a cluster of six abraded sherds from a single vessel ([25]), probably also a redeposition. One fragment of daub was recovered from this layer, suggesting that a standing structure was demolished at the same time as the enclosure.

Layer [24] was again very shallow (0.04m), and was removed to expose layer [26]. This was also composed of mid reddish brown loamy clay, but with 60% medium to large angular flint inclusions. This layer contained numerous fragments of fine grog-tempered pottery as well as pieces of domestic animal bone, and was interpreted as an earlier layer of backfill in the demolition sequence. Layer [26] was 0.04m deep and was removed to reveal layer [28], another backfill deposit 0.13m deep, comprising a mid red/yellow silty loamy clay with 15% small flints and 5% charcoal flecks. This layer produced a fragment of micaceous sandy ware (Fabric 17) datable to the mid to late first century AD, and fragments of grog-tempered pottery, one of which matched a sherd from layer [26]. Two clusters of pottery from this layer were given specific context numbers: [27], a group of twenty abraded, redeposited body sherds, probably from a single vessel, and [29], a single decorated grain jar broken *in situ* and datable to the first half of the first century AD, but probably old when broken, as it had been pierced for hanging and shorn of its rim (see figure 10).

The lowest layer in this Phase III demolition/backfill material was layer [32], a similar matrix to [28], but containing 45% medium angular flints. This layer also contained one abraded rim sherd of grog-tempered ware similar to a vessel from Baldock (Stead and Rigby 1986, no. 125), datable to the early first century AD, and fragments of ox scapula.

Layer [32] was 0.04m deep and was excavated to reveal a shallow layer of weathered fill (Phase II). This layer ([33]) was composed of similar coloured silty clay with a few flint inclusions and 50% small chalk lumps. One fragment of Late Iron Age grog-tempered pottery was recovered.

The section revealed a considerable distinction between layer [33] and the preceding layers [35] and [36]. These latter layers appear to be earlier weathering horizons, truncated by a later recut ([39]) containing fills [33] and above. This postulated recut was neatly contained within the outline of the original cut ([34]), and was interpreted as the result of a ditch cleaning (a periodic necessity on such sites). Layers [35] and [36] were interpreted as sequential deposits of mid red/yellow brown clay loam sediments within the primary ditch cut. Layer [35] was situated high on the northern edge of the cut and was assumed to be the latest weathering deposit truncated by recut [39]. It survived to a depth of 0.2m above layer [36], which in turn survived to a depth of 0.18m above the primary ditch cut. Both layers were composed of mid red/yellow brown, slightly stony clay loam; unfortunately, neither layer produced finds.

The lowest silting layer, [36], was removed to expose the complete profile of the ditch ([34]). This was 2.48m wide at the top of the subsoil, cut 1.08m into it, and had

a V-shaped profile with a slight ledge in the upper northern side. It was oriented west north-west to east south-east.

4.2: The fieldwalking results

4.2.1 In total, eight fields were walked during the survey from which artefacts collected were assessed according to period and type, and the distribution analysed (see figure 7). The datable finds were classified into five categories by period (Modern, Post-Medieval, Medieval, Romano-British and Late Pre-Roman Iron Age/Early Romano-British). No other periods could be positively identified from the material recovered.

Post-medieval material (tile and pottery) accounted for 66% of the artefacts recovered during the survey, with the majority of material consisting of red ceramic tile. Medieval tile and pottery accounted for 29.5% of the total number of finds. Roman tile at 3.5%, and Late Iron Age/Early Roman pottery at 1%, were of greatest interest, although they represent only a small proportion of the finds.

Tile was difficult to date accurately, so general principles of identification were used. Post-medieval and medieval tile can be compared with well-stratified groups from nearby, such as Knebworth (Matthews 1990), although no exact parallels can be found. A reference collection of tile from this survey has been established, and further work in Codicote may enable a closer dating of fabrics to be established.

A well-stratified sherd of Romano-British red ceramic tile, found during excavation in context [21] (trench 5), associated with grey ware pottery (Fabric 11) and gritty-textured grog-tempered wares (Fabric 8) datable to the mid to late first century AD, was employed in comparison of tile fabrics from the fieldwalking in conjunction with a binocular microscope.

The complete assemblage consisted of four hundred and thirty-seven finds scattered throughout the fields surveyed (see figure 7).

4.2.2: Field 5721 7.150ha (total area including 5721b)

The field was harrowed, with the soil very dry despite the light rain. In all, thirteen transects were crossed at a slow walking pace in a west to east direction at twenty-metre intervals, parallel to the path forming the northern boundary of the field. Finds were collected in ten-metre sections along each transect. A concentration of post-medieval and medieval tile was noted and sampled at the western end of the field. The Romano-British finds, five tile sherds and three pot sherds, were concentrated in the immediate vicinity of the enclosure.

4.2.3: Field 7915 5.532ha

This field, adjacent to the enclosure and on approximately the same contours, was walked in twelve transects at twenty-metre intervals with finds collected in ten-metre sections. The transects ran north-east to south-west at right angles to the track forming the north-eastern border. The field was under densely-packed crop 0.1m to 0.15m high, which hindered the fieldwalking. The team compensated for this by setting a slower pace. The crop was at its most dense for the first fifty to sixty metres from the north-eastern boundary, accounting for the paucity of finds in this section. The area around the eastern corner of the field contained noxious slurry, so it was not included in the survey. A few pieces of Roman tile were found scattered throughout the field.

4.2.4: Field 5721b 7.150ha (including 5721)

The field surface was harrowed and very dry. The southern boundary of field 5721b was designated by the east-west path. Five transects were walked parallel to the path at forty-metre intervals with finds collected in twenty-metre sections. Red tile was again sampled and a slight concentration was noted at the western end of the field.

4.2.5: Field 6752 10.013ha

Eleven lines were walked in a north-east to south-west direction at forty-metre intervals parallel to the track forming the field's eastern boundary. It was under crop 0.06m to 0.1m high, but this was thinly-spaced and did not affect the survey. Samples of mainly post-medieval red ceramic tile were taken and two concentrations noted, one in the lower reaches of the field to the north, and a second along the brow of the scarp. The field produced three pieces of red Romano-British tile and one piece of Late Iron Age/Early Romano-British pit, but there was no apparent patterning to this material.

4.2.6: Field 0029 10.422ha

This large field, previously amalgamated with Field 1623, was walked in twelve transects forty metres apart with collection in twenty-metre sections, in a south-west to north-east direction parallel to the track forming the north-western boundary. The field was under a sparse crop 0.06m to 0.1m high. A slight concentration of post-medieval and medieval tile was noted in the north-western corner of the field near the track. A single sherd of Romano-British pottery was discovered. Two flint waste flakes were also found, possibly datable to the Bronze Age (c2500-1000 BC).

4.2.7: Field 2300 7.535ha

Field 2300 was drilled and rolled, making the field surface very flat and the soil fine and dry. The field was walked in nine lines forty metres apart, from the boundary alongside the River Mimram to the northern boundary. A general dearth of any kind of finds was immediately apparent, so a complete tile collection was made.

4.2.8: Field 0003 8.336ha

Ten transects were walked towards National Grid north from the River Mimram to the northern boundary. A general dearth of finds, similar to that in field 2300, was immediately noticed, and again, all tile was collected. One piece of Romano-British tile was recovered.

4.2.9: Field 5200 10.151ha

This field was finely drilled, rolled and very dry. It was walked in eight transects from the River Mimram parallel to the St Alban's road. The northern boundary had been ploughed out but was still visible as a colour change in the soil. A slight cluster of post-medieval and medieval tile was seen in the lower reaches of the field (see figure 7).

4.3: The field survey

4.3.1 Three categories of landscape feature were recognised and recorded on the 1:2500 Ordnance Survey map (see figure 7): quarry pits, traces of former field boundaries and cultivation patterns.

4.3.2: Quarry pits

Quarry pits were noted in fields 5200, 5721, 6752, 7915 and 8880. All exhibited shallow side angles and rounded bases. Those in 6752 and 7915 were contained against field boundaries, possibly indicating that they post-date the present layout of the fields.

The most likely explanation of these pits is that they were used for the extraction of chalk to make lime, a tradition continued at the modern quarry on the western side of the St Alban's road. The possibility also remains, however, that some of these pits may be considerably older – mediæval or earlier (see section 5.4) – and that extraction of flint for building was practised either primarily or as a by-product.

4.3.3: Field boundaries

Two of the field boundaries indicated on the 1973 Ordnance Survey 1:2500 map had been subsequently removed. Traces of the boundaries between fields 5200 and 5721 and containing field 1623 were still visible despite being ploughed out to improve field size.

In the low, bright sunlight traces of older redundant field boundaries were visible in the pastures towards the north of the proposed golf course site. Field 4967 displayed an uneven bank-boundary defining a large platform 0.4m higher than the surrounding pasture. This was tentatively identified as a later mediæval (?) stock enclosure, the height differential resulting from a period of ploughing beyond its boundary whilst it was retained as pasture. This feature had been largely truncated by the modern St Alban's road.

Field 8800 showed residual evidence of several field boundaries, apparent as slight ridges in the otherwise regular surface of the pasture. One of the lines, forming a large subrectangular area in the north-west of the pasture, possibly reflects the former extent of field 6080 before the intrusion of housing from Coward's Lane (The Riddy). The corner of this boundary joins with several other lines indicating an earlier field system related to the farm. Although these boundaries (see figure 7) may only reflect field patterns established during the last century, the fact that one appears to contain an area of earlier earthworks (see below, section 4.3.4) may indicate an earlier date, possibly the change in land practices of the eighteenth to nineteenth centuries.

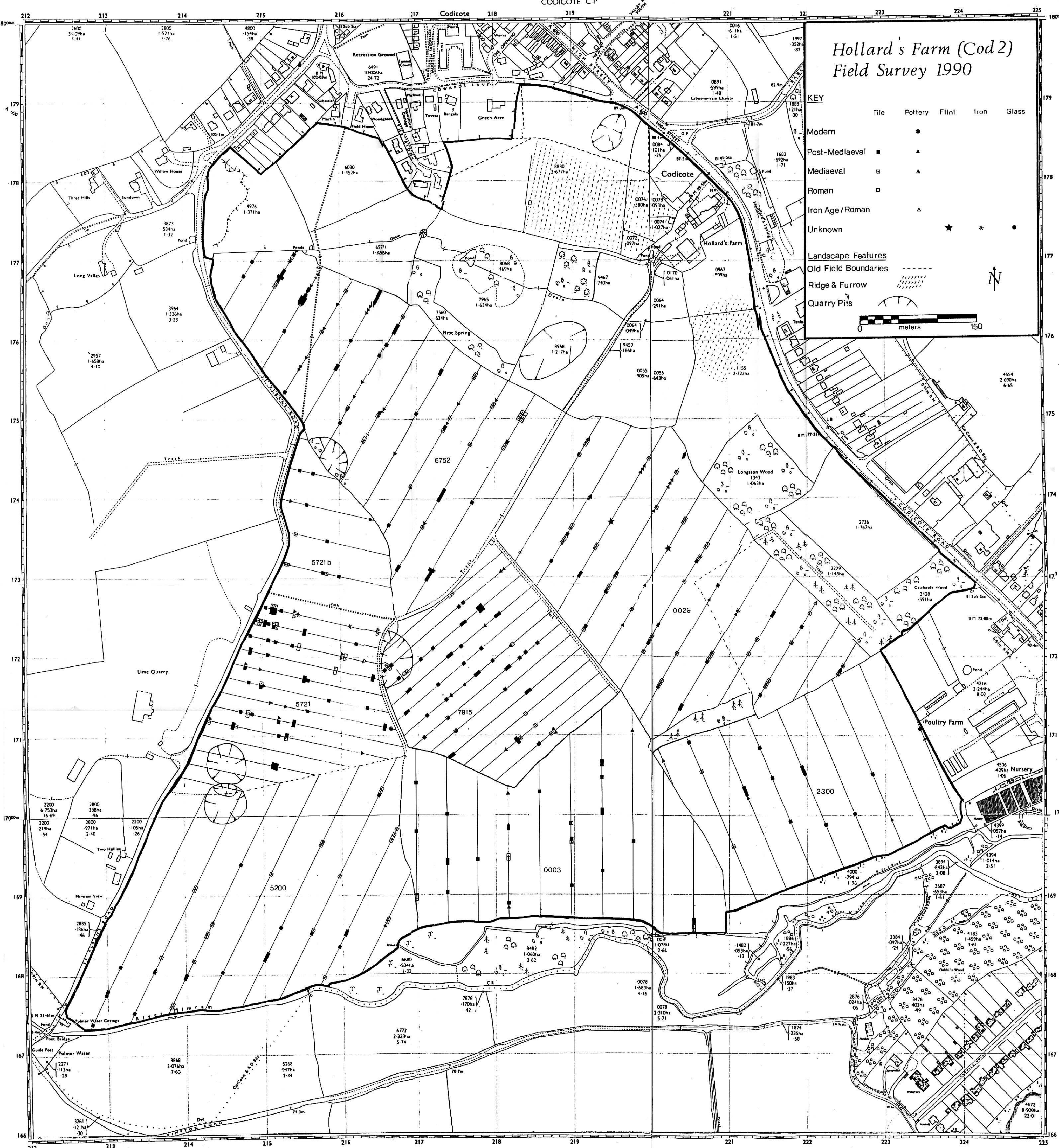
4.3.4: Cultivation patterns

In field 8880, the low afternoon lighting conditions enabled the team to identify, locate and measure a broad pattern of ridge-and-furrow earthworks. These marks continued through fields 0076, 0078 and 0074 towards the main farm buildings (see figure 7), also appearing in field 1155, next to the Welwyn road. A very rapid survey was conducted, measuring the angle, extent and mean separation of the furrows.

Ridge-and-furrow marks are a product of the ploughing techniques and land division pertaining to the mediæval open field, strip farming system. These earthworks may date from the early mediæval period up to the time of the eighteenth and nineteenth century Enclosure Acts (which may be indicated by the boundary line mentioned above).

Further investigation would be required to establish more precisely the date of these features (see recommendations, section 5).

No features were observed in the wooded areas of Hollard's Farm.



5: Discussion of Results

5.1: The Phasing

The pottery recovered during excavation enabled a general assessment of the dating of the site. The overwhelming proportion of Late Pre-Roman Iron Age Fabric 2 (A and B) and the small, stratigraphically later, proportion of later first century AD forms provided an overall time scale (see Appendix 1).

By matching the pottery dates and stratigraphy relating to each excavated feature, a more specific, phased interpretation of the site, was produced. Due to the limited nature of the excavation, the phasing must remain tentative, and date ranges rather than precise dates employed; for the earlier phases, this lack of precision has made a degree of overlap in date ranges necessary.

The latest phase (Phase VI) covers recent alterations to the landscape, the ploughsoil ([40]), and the effect of ploughing, truncating the archaeological deposits. The date range for this activity must be very wide, as it encompasses all activity since the final abandonment of the site.

Phase V was represented by a small linear cut ([6]) in trench 5, the fill of which contained redeposited Iron Age and Romano-British pottery, presumably derived from the truncated ditch, as well as a fragment of mediæval pottery, which provides a *terminus post quem* for the feature. The cut was diverging from the earlier enclosure ditch, and may represent a mediæval (or later) property division, either unconnected with the enclosure, or using the denuded earthworks as a guideline, if these still existed. The possibility that the feature may be contemporary with other field boundaries recorded in the pasture to the north was noted.

The previous phase (Phase IV) represented the final stage of the enclosed occupation site. In trenches 2, 4 and 10 layers of accumulated sediments suggested abandonment and erosion following the subsidence of the earlier backfilled deposits in the ditches. The pottery from these layers ([1], [2], [4] and [5]) consisted of abraded grog-tempered wares (Fabrics 2A and 2B), apparently residual. The date established for Phase III provides this phase of slumping and sedimentation with a *terminus post quem*, but later ploughing has truncated all the layers of this phase, and further dating evidence could well have been lost to the plough.

A recut within the earlier deposits (cut [19]) was recorded in trench 5. This obviously post-dates Phase III but its relationship to the sedimentary horizons of Phase IV was not altogether clear, due to truncation by ploughing. The fill of this cut ([39]) contained a mid first century AD copper alloy brooch in perfect condition (see Appendix 3), dating the deposit to AD c70±5. This ditch cut should therefore be included in Phase IV, and the phase dated to the period from AD c70 onwards. The purpose of this recut is not entirely clear. Dug soon after the backfilling of the enclosure ditch, it shares the same alignment. One possibility is that it represents a traditional field boundary, restored for the continual agricultural use of the site.

Phase III provided a great wealth of information. Layers of comparable rubble and backfill were present in three trenches (2, 5 and 10), all of which contained contemporary pottery datable to the mid to late first century AD. In the individual ditch sections vessel fragments were shared between sequential layers, indicating broadly contemporary deposition. The general dating of this phase to the second half of the first century AD was indicated by the presence of Romano-British grey ware (Fabric 11) sherds, albeit in small quantities. More specific dating was afforded by sherds of two vessels; a ring-necked flagon in Fabric 20 (trench 5, [11]–[17], illustrated in figure 10), and a reed-rim jar, also in Fabric 20 (trench 4, [24]). The date range established for this phase was AD c70±5, the upper limit being set by the brooch in the Phase IV recut.

The layer of large flints in trench 4 ([8]) probably also belongs to this phase of destruction, although the lack of datable finds from this layer means that this cannot now be proved.

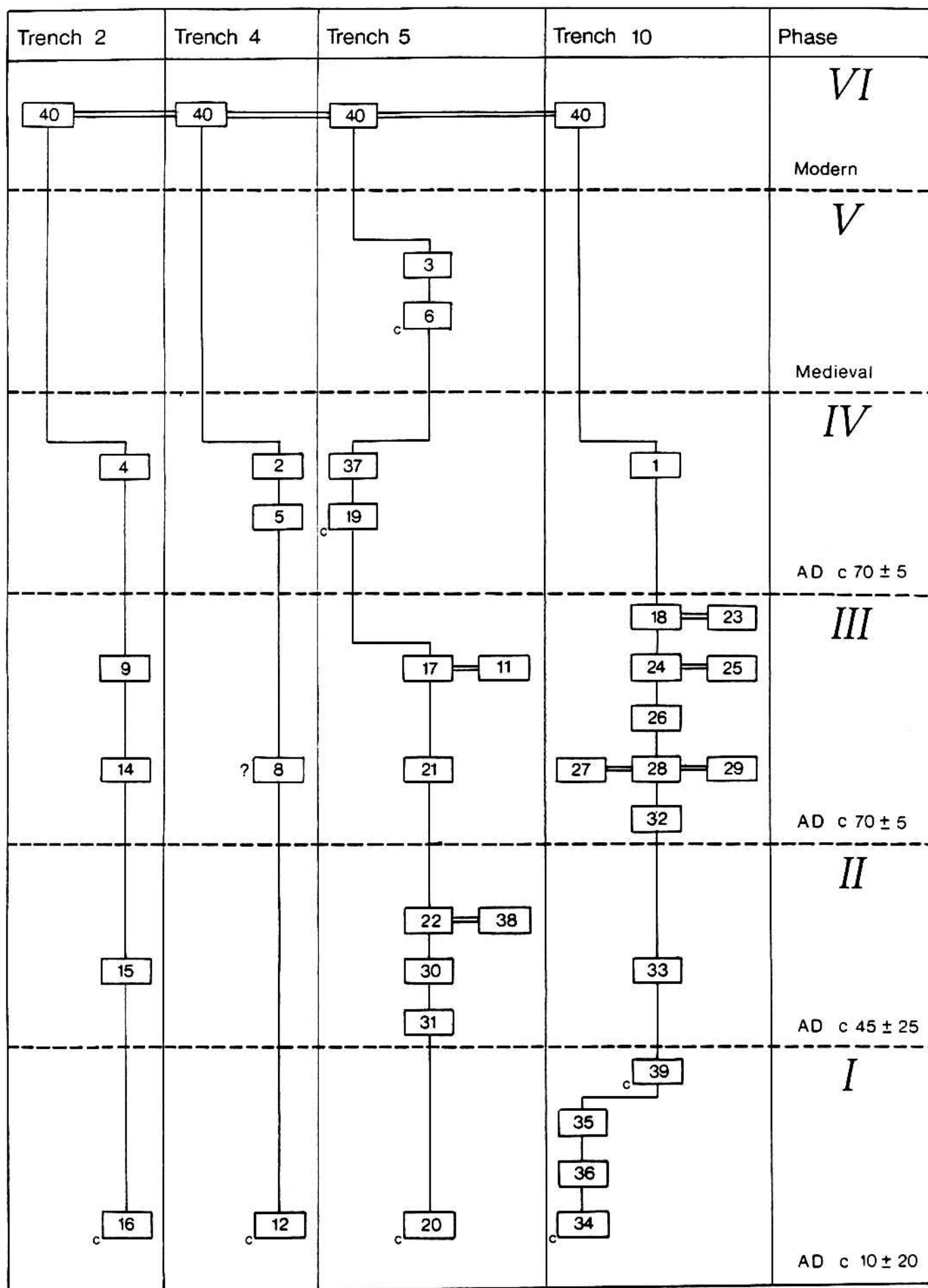


Figure 8: Phased site matrix

Phase II was represented in all the ditch sections by layers of weathered sedimentary material preceding the demolition phase. Romano-British pottery fabrics such as Fabric 11 were not present in these layers, and the pottery was restricted to versions of early first century AD grog-tempered wares (Fabrics 2A and 2B). The pottery was abraded, and consequently an approximate date of AD c45±25 may be suggested for this phase.

The primary phase (Phase I) was indicated by the construction and cleaning of the enclosure ditches. The profile of the cut in trench 5 suggests that the ditch may have been partially recut at least once, presumably whilst cleaning out accumulated sediments. This interpretation is confirmed by the profile of trench 10, where some of the primary weathering deposits ([35] and [36]) in the ditch were not completely removed by the later cleaning ([39]). There is no direct dating evidence for this phase, but the lack of pottery of Fabric 1 from the site strongly suggests that the enclosure was not in use during the first century BC. One vessel (trench 2, [14], illustrated in figure 10) has decoration more reminiscent of the first century BC, but this cannot be pressed too far.

The north-western enclosure ditch (trench 2) may not have been cleaned after construction, there being no evidence of a recut, and a greater depth of silting. On the other hand, it is possible that the ditch was cleaned and other factors led to more rapid silting.

The pottery deposited in the layers contained by these cuts indicates that activity on the site was probably not begun until the very end of the first century BC or the early first century AD, and that recleaning of the enclosure ditches was no longer taking place before the middle of the first century AD. A date for the construction and repeated cleaning of the enclosure may therefore be set around AD c10±20.

5.2: The fieldwalking

The purpose of the fieldwalking was to ascertain through the analysis of the distribution of datable materials whether or not further archaeological investigation was needed in the fields affected by the development of the golf course. Very few finds of the Late Iron Age and Romano-British periods were found in the fieldwalking in comparison with the quantities of pottery excavated from the enclosure ditches.

The general paucity of finds does not reflect the fieldwalking technique, which was certainly adequate for the task. The lack of material contemporary with the enclosure suggests that there was little occupation activity elsewhere on the site. Archaeological deposits could well have been sealed by later hillwash, particularly in the fields sloping towards the River Mimram (0003, 2900 and 5200), where the northern bank is noticeably higher than the southern.

Post-medieval and medieval tile and pottery proved ubiquitous and accounted for the vast majority of finds (95.5%). Concentrations of tile probably indicate the direction of manuring. Muck heaps in farmyards are liable to become contaminated with building materials and other occupation debris prior to deposition in one part of a field – often close to the entrance – from which they are then dispersed.

Two fields were more intensively surveyed; that containing the Area of Archaeological Importance, and the adjacent field (7915) into which it was thought the site may have extended.

The results of the exercise were inconclusive. The extremely small quantity of finds other than medieval and later tile (only eight Iron Age/Romano-British sherds over the enclosure area) suggests that former occupation has left very little in the way of surface finds, and that it is impossible to discount the possibility of further archaeological activity in the immediate vicinity. The use of a sub-soil stripping coulter blade, noted in trench 5, may have exposed a disproportionate number of finds in field 5721, causing distortions to the fieldwalking pattern.

5.3: Hollard's Farm Late Pre-Roman Iron Age and Early Romano-British enclosure

The site has been known since 1967 as a cropmark, and resembles other enclosures from the district which may generally be datable to the Late Pre-Roman Iron Age and Romano-British periods (ie. c100 BC to AD c420). It forms a roughly sub-square shape, with sides about 60m in length, and the corners aligned very roughly on the cardinal points. It has not been possible to identify an entrance from the aerial photograph, although several places where the cropmark is less distinct are likely candidates. The site is prominently situated on the edge of a plateau overlooking the valley of the River Mimram (which may have been navigable at the time) and would have had control over arable land, probably largely confined to the upland plateau, and pasture suitable for a variety of animals on the slopes and in the valley bottom, as well as access to wildlife in the river.

The ditch which formed the main enclosure was substantial, surviving to a depth of up to about 1.5m from the modern ground surface, and showing a steep V-shaped profile. With the now-vanished banks, this would have presented a formidable barrier and dominated the river valley to the south. The banks appear to have been deliberately demolished, the material being used to fill the ditches. When standing, they may have had a timber revetment and palisade, but this can only be elucidated by larger-scale work.

The main enclosure is clearly related to a much more extensive ditch system, part of which is visible on the 1967 aerial photograph, and parts of which were exposed in the trial trenches. One section was dug through the long straight ditch continuing south-westwards from the western corner of the enclosure, and this proved to be quite different in character from the enclosure ditches: only half a metre deep from the modern surface, it had a rounded u-shaped profile and exhibited none of the deliberate backfilling to which the enclosure had been subjected. It is clearly a field boundary, which may predate the settlement, although the relationship between the two was not examined, as the limited work of trial trenching could destroy such potentially important information.

The ditch extending south-eastwards from the eastern corner of the enclosure may also have had a similar history, having been a field boundary in origin, and subsequently expanded and utilised in the construction of the enclosure. This ditch probably extends into the neighbouring field to the east (7915), where a large quarry pit largely obscures this area. Traces of a rectangular structure near the quarry pit seen on the aerial photograph are in fact the remains of a recently-demolished agricultural building shown on Ordnance Survey maps. Fieldwalking here did not reveal a concentration of finds, but allowing for the general rate of finds recovery, this does not rule out the possibility of further enclosures extending into this field. A second, parallel ditch extension running from the south-eastern side of the enclosure, seen on the aerial photograph also suggests that the main enclosure may have had subsidiary enclosures or annexes, exploiting the length of the scarp overlooking the river. Comparison with other sites in southern Britain indicates that domestic enclosures were often a small part of a much more extensive system of enclosures incorporating fields, pastures and burial grounds (Cunliffe 1974): the pottery from Hollard's Farm indicates that, if it is part of a larger system, the part examined is a domestic component.

The enclosure appears to have been dug at the very end of the first century BC or the beginning of the first century AD as a habitation site, perhaps of some pretension to judge from the size of its ditches and the incidence of imported pottery. It is possible that traces of structures may still exist within the enclosed area, although post-abandonment erosion and modern ploughing could have removed all traces of what would have been relatively flimsy structures. The small areas opened by the trial trenches are not suitable for the detection of timber-framed buildings, and the lack of evidence of structures from this evaluation should not be taken as conclusive proof that no traces remain.

During the first decades of the settlement's existence, the enclosure ditches appear to have been cleaned out on several occasions, sometimes altering the original

profiles of the ditches by over-digging. However, from perhaps the middle of the century, no further cleanings were undertaken, and a short period of silting in the ditches (reflecting either abandonment, or, more likely, a period during which the ditches were not cleaned) was followed by the levelling of the site some time around AD c70. The presence of Romano-British pottery and tile from the field surfaces around the enclosure suggests that the land continued to be exploited for agricultural use after the abandonment of the enclosure, the ceramic material making its way onto arable field surfaces with manure.

After the destruction of the enclosure, securely dated to within a few years of AD 70, some of the ditches were recut. This seems to have happened almost immediately after the demolition, and certainly not more than ten years later. The most likely explanation for this activity is that the land was converted to agricultural use, and that some of the former property boundaries continued in existence as field boundaries. Certainly, the recut ditch was much shallower than the enclosure ditch had been, and its fill lacked domestic pottery other than sherds redeposited from the earlier ditch.

The general spread of Romano-British pottery and tile throughout the areas of fieldwalking are probably indicative of the continued use of the area for agriculture after the abandonment of the enclosure as a habitation site. Such débris would have reached the field surfaces via manure collected from farmyards and domestic rubbish heaps. This intensive agriculture is indicative of the density of settlement of North Hertfordshire during the first three or four centuries AD, and of the extent of exploitation of the land's resources.

5.4 The Codicote area in the first century AD

The Late Pre-Roman Iron Age enclosure at Hollard's Farm, Codicote, is only one of a number of similar sites to have been partially examined in the Welwyn area (Hughes 1938; Arnold 1952-4; Rook 1968a; Rook 1968b; Rook 1970a; Rook 1970b). There are a number of parallels between these sites, particularly in their dating, which deserve a close examination.

None of these sites has been fully excavated, and most have been salvaged during building work, with the result that the enclosures themselves are better understood than the areas enclosed. It is evident that they are habitation sites: the pottery and animal bone from Hollard's Farm are clearly of domestic origin, while the presence of daub and tile indicates that buildings of a substantial nature existed in the vicinity. Furthermore, there are traces of buildings from Welwyn Garden City Grammar School (Arnold 1952-4), hearths from the enclosure at Crookhams (Rook 1968a), and hearths and other occupation debris from Grubs Barn (Rook 1970b). It has also been noted that the sites are concentrated on the plateaux overlooking the Rivers Mimram and Lea (Arnold 1952-4; Rook 1968a).

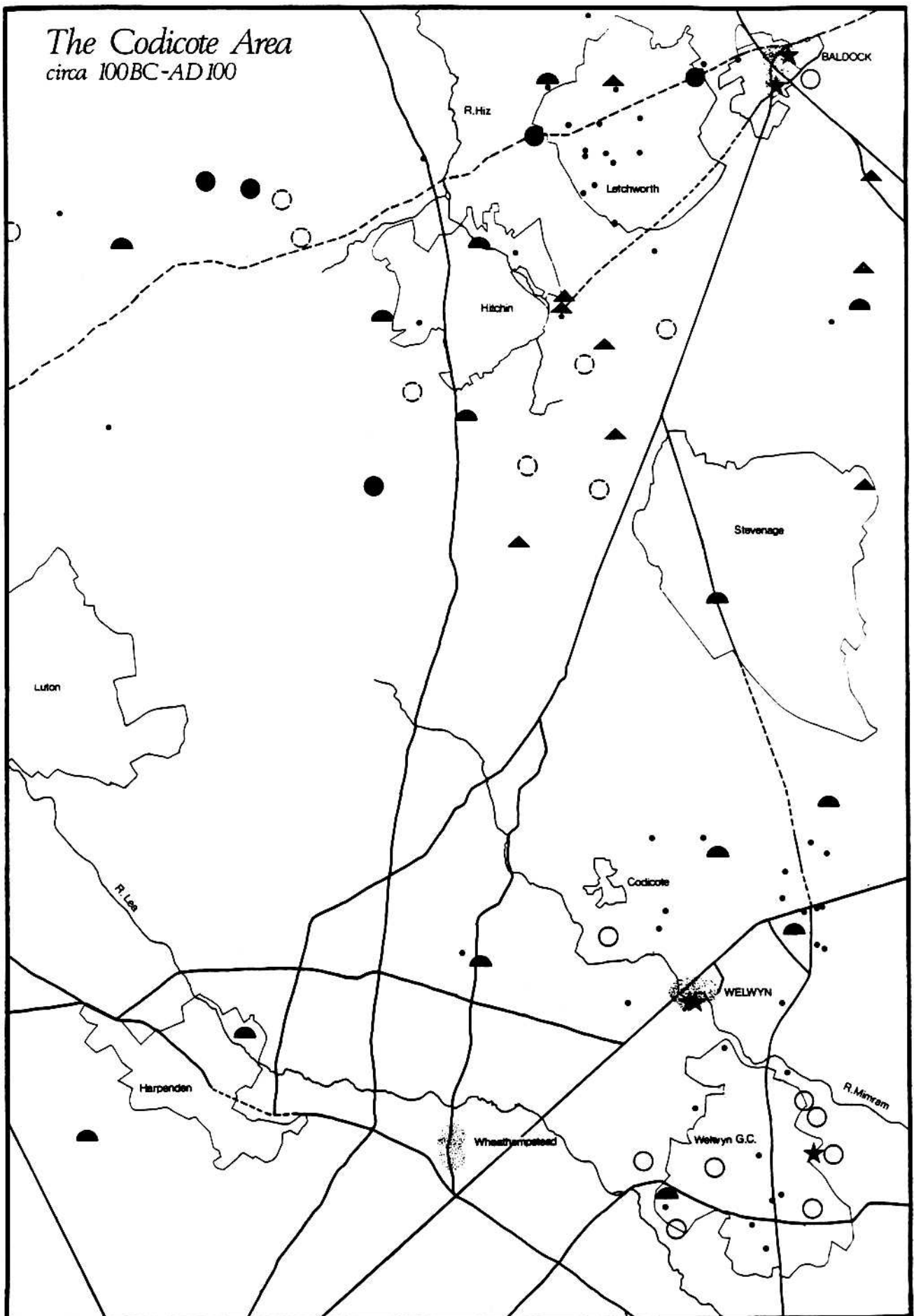
The ditches of these enclosures are substantial, and it must be assumed that banks commensurate with them must once have existed, although these have all long since disappeared. At Hollard's Farm, the ditches appear to have been deliberately backfilled, some of the material perhaps deriving from the banks. The flint rubble is particularly suggestive of the demolition of standing structures. The excavation reports of the other sites do not describe the ditch fills in any detail, although the description of the ditch at Crookhams as having a "uniform" fill above a shallow layer of silting (Rook 1968a, 51) does perhaps imply deliberate backfilling. The mention of complete, though crushed, vessels from Ditch 2 at Brickwall Hill (Rook 1970a, 25) also sounds very like the situation at Codicote.

This class of site appears to have been predominantly high-status. The provision of substantial ditches and banks cannot have been a small undertaking, and it must be assumed that a reasonably-sized labour force was available to work on the construction of the enclosures. Furthermore, the amphora and butt beaker sherds indicate that imported goods were being consumed at Hollard's Farm: wine or oil in the first instance, and good quality continental pottery on the other. The association of the Grub's Barn enclosure with the Welwyn Garden City "chieftain's burial" (Rook 1970b) is also very suggestive of the high-status nature of occupation in the vicinity. It is tempting to speculate that other burials of similar type may be found in association with these enclosures, but this cannot be proved without further discoveries.

The dating of the pottery from all these sites falls, without exception, into the first three quarters of the first century AD. It may therefore be suggested that the abandonments of the enclosures were roughly contemporary, perhaps in the period AD c65±10. Tony Rook has suggested that at least one of the sites, Crookhams, was abandoned following the rebellion of Boudica in AD 61 (Rook 1968a), but this cannot be proven, and the pottery from Hollard's Farm suggests a date up to fifteen years later. That the sites were abandoned, and possibly demolished, at roughly the same time does suggest that some deliberate and external decision was made to discontinue the occupation of these enclosures.

At this period, such a decision could have been taken at Provincial level by the governor, although it is more likely that the council of the local *civitas*, based at *Verulamium*, the Romano-British equivalent of a local authority, would have been responsible. It is notable that there are few suggestions of a nucleated settlement at Welwyn before the middle of the first century AD, and the abandonment of the enclosures may reflect a move from a dispersed settlement pattern towards a more nucleated, "urban" settlement. Comparisons with Baldock, where a nucleated open settlement existed from at least the first century BC, and where there is no similar concentration of enclosed occupation sites of the Late Iron Age, present an interesting contrast.

The Codicote Area circa 100BC-AD 100



KEY:

	Town areas		Modern towns
	Open settlements		Farmsteads
	Enclosures		Chieftain burials
	Possible enclosures		Other burials
	Other finds		Roads

0 1 5
km



As a class of site, these enclosed settlements give every appearance of having been intended for defensive purposes. However, what little we know of the political situation in North Hertfordshire at the beginning of the first century AD suggests that conditions were relatively peaceful. Indeed, the local rulers are known to have been among the most powerful – if not actually the most powerful – in southern Britain. Why, then, were farms with such substantial defences constructed?

Perhaps the best comparisons for this class of site are the mediæval moated farms which occur in vast numbers throughout lowland England. These were mostly constructed around AD 1300±25, and it has been suggested that they were often located in areas of new forest clearance and agricultural colonisation (Platt 1978). There are also suggestions that some, at least, were constructed almost as "status symbols", often by newly-prosperous peasant farmers anxious to copy the fortified manorial sites of their social superiors. These mediæval enclosed sites were not a response to political instability, and defended for these reasons, but were often an expression of social change.

This situation of social change with a rising élite can be paralleled in south-eastern Britain at the end of the Iron Age. From the first century BC, particularly after the Roman annexation of Gaul in the middle of the century, contacts with the Mediterranean world must have proliferated. Coinage began to be used for transactions with the advent of potin coins, and there are signs of an increasingly standardised method of production of pottery, one of the necessities of every household. The number of occupation sites increases dramatically, and agricultural expansion must have gone hand-in-hand with this. In addition, the first true "urban" sites, such as Baldock and Braughing, are found in Britain.

These changes used to be attributed to an invading continental tribe, the Belgae, but it is now clear that the economic changes were not suddenly introduced, but took place gradually over a period of a century or more. This strongly suggests an indigenous economic growth. The increasing prosperity at all levels of society seems to have been exploited by a rising class of aristocrats, whose elaborate burials at places such as Welwyn and Baldock (Smith 1912; Stead and Rigby 1986) attest to their wealth and status. In this connection, it is interesting to note the proximity of the Welwyn Garden City "chieftain's burial" to the enclosure at Grub's Barn (Rook 1970b).

We should therefore regard the enclosure at Hollard's Farm as belonging to a family of some pretension, perhaps anxious to assert its prosperity in very visible terms. The provision of a massive earthwork enclosure around its residence would have been one expression of this. That the house itself was of substantial construction can perhaps be implied by the presence of tile from the enclosure ditch. The possibly political decision to demolish sites of this class around AD c70 can perhaps now be seen in the light of the Roman authorities' attempts to pacify a newly-conquered province, following a period of major unrest a few years earlier.

6: Appendices

6.1: The pottery from the trial trenches

Pottery is one of the main diagnostic aids in the examination of archaeological deposits. The volume of sherds from Hollard's Farm can be compared with assemblages from more fully-investigated sites in the district which shared common local manufacturers and trading links. A chronological fabric series based on Valery Rigby's pottery series from Baldock (Stead and Rigby 1986) has been extended by Helen Ashworth, whose help in identifying the pottery from this site has been invaluable. By comparing the Codicote material with the Baldock fabric series and vessel forms, specific date ranges can be suggested. A few vessels from Codicote can be dated very closely in this way.

By establishing the date ranges for various fragments of vessels, the layers containing the material can be assessed. Of course, a vessel may be old, if not antique, when broken and cast aside; the vessels life may be extended by conversion to a secondary use (eg. [29], the grain jar converted to a hanging vessel). Alternatively, a vessel may be broken, discarded and then disturbed from its primary deposit and redeposited in the excavated layers. These possibilities can be quantified by the degree of abrasion displayed by the sherds and by comparisons with the overall pattern of pottery date ranges from the same or contemporary deposits; this has been taken into account in the date assessments.

Dating using individual fragments is fraught with problems: however, by using the range of pottery found within a layer, it is possible to suggest an earliest date of deposition (the *terminus post quem*) by using the very earliest possible date for the latest vessel or fabric form present. Layers dated in this way can then be used to date or corroborate dates in a stratigraphic sequence.

The majority of the pottery recovered from the trial trenches falls into the category of locally-made wheel-turned (or wheel-finished) coarse wares (Fabrics 2A and 2B) which used crushed waste pottery ("grog") to temper the pottery and prevent excessive shrinkage during firing. This type of pottery, commonly in the form of globular jars or urns with everted rims and displaying burnished or incised decoration, was current throughout much of south-eastern Britain from the mid first century BC to the mid first century AD (Thompson 1982).

Although the variety of decorative elements and coarse inclusions demonstrates a non-centralised mode of production (typically local clamp kilns supplying domestic demand and neighbouring settlements within a small radius), the basic fabric and technology are common to the region, while demand created a uniformity of overall design. The potteries at the major Eocene clay source at Much Hadham, near Bishop's Stortford, became increasingly important in the region from the later first century AD onwards as they adapted to new demands and increasingly industrialised modes of production. Even before the Roman conquest of AD 43, though, they seem to have been an important supplier to a wide market.

Other local pottery industries were created, or at least stimulated, following the Roman conquest. *Verulamium*, in particular, produced fine wares which were traded to surrounding communities as well as acting as a focal point for the importation of exotic fine wares, a function which had probably been served by Braughing before the conquest (Potter and Trow 1988).

Analysis of the various pottery forms present allows some assessment of the nature of the site. The pie chart below (figure 11) shows that the majority of the pottery recovered was of locally-made grog-tempered wares, mostly domestic cooking or storage vessels, predominantly made from the finer fabric variant (Fabric 2B). However, the finest vessels, such as the Fabric 20 ring-necked flagon and the Fabric 6 butt beaker (see figure 10), were often traded considerable distances, the latter having been manufactured in northern Gaul. Layer [11] in trench 5 also produced three amphora

sherds, imported from the Mediterranean region, and originally containing a luxury such as wine or olive oil.

The pottery fabric series

Fabric 2 Grog-tempered wares

Sandy-textured ware, heavily tempered with grog; also some organic inclusions. Grey or brown core – though colour can vary from buff to black – with darker grey or brown surfaces. Bonfire-fired, but often with a short period of oxidation. Handmade and wheelthrown vessels.

Forms: 'fine' wares and combed cooking-pots.

Locally made, some from the Much Hadham potteries.

Mid first century BC to mid first century AD.

2A Grain jars.

2B Finer wares; also with some shell tempering.

Fabric 3 Mixed grog and shelly wares

Sandy textured matrix, tempered with coarse quartz sand, some grog, organic, flint or shell inclusions, some pebble-sized. Usually oxidised to orange or orange-brown surfaces with blue or grey core. Usually handmade and bonfire-fired. Colours range from red to grey.

Forms: mostly cooking pots.

Late Pre-Roman Iron Age.

Fabric 6 Fine white sandy wares

Fairly iron-free clay matrix, tempered with fine quartz sand. Occasional grog grits and clay pellets. Wheelthrown, usually white, sometimes with smoky grey or mauve haze over exterior, or with pink tones. The grog inclusions streak the surfaces with a burnished finish.

Forms: butt beakers (Camulodunum Form 113).

Imported from northern Gaul.

Early to mid first century AD.

Fabric 8 Gritty-textured grog-tempered wares

Sandy matrix with coarse sand tempering, with additional grog temper and occasional translucent brown quartz grits. Usually fired grey or brown, frequently with a very dark grey core; also some lighter red-brown versions. Handmade or handmade/wheel-finished vessels.

Locally made.

Mid to late first century AD.

Fabric 11 Fine sand-tempered wares (includes Romano-British grey ware)

Even-textured fine sand-tempered micaceous ware. Usually self-coloured grey or blue-grey, more rarely grey-black and orange. One version fired to produce a dark sooty finish, similar to Black Burnished Ware type 1 (Fabric 38). Also with various slips used to produce different coloured finishes:

11A with thin white slip on exterior only;

11B with dark blue micaceous slip over exterior only;

11C with grey-black slip over whole vessel.

Forms: wheel-thrown vessels, but not cooking pots.

From the Much Hadham area.

Late first to fourth century AD.

Fabric 17 Highly-micaceous red wares

Fine-grained oxidised sandy ware, highly micaceous. Self-coloured and also with thick cream slip overlying thin red under-slip over exterior.

Forms: flagons.

Imported?

Late first century AD.

Fabric 20 Cream sandy wares

Sand-tempered ware; gritty textured surfaces. Cream or off-white with grey or orange core. Wheelthrown.

Forms: mainly flagons, but also decorated bowls and beakers.

Probably from the *Verulamium* region, although possibly from the Nene Valley and Oxfordshire potteries.

Late first to mid second century AD.

Catalogue

Trench 2

[4] Sherds. Fabrics 2A, 2B. Early first century AD.

[9] Sherds. Fabrics 2A, 2B. Early first century AD.
Rim sherds. Fabric 2B. Early first century AD.

[14] Sherds. Fabrics 2A, 2B. Early first century AD.

Grain jar (cp. Stead and Rigby 1986, no. 125). Fabric 2A. Figure 10.1. From contexts [9] and [14]. Early first century AD.

[15] Sherds. Fabrics 2A, 2B.

Trench 4

[2] Sherd. Early Iron Age (c700-500 BC).

[5] Sherd. Fabric 2B. Early first century AD.

Trench 5

[3] Residual sherds. Fabrics 2B, 3, 6.
Sherd. Mediæval sandy ware.

[11] Sherds. Fabrics 2A, 2B, 3, 11. Mid to late first century AD.
Amphora sherds.

[17] Sherds. Fabric 2B. Early first century AD.
Ring-necked flagon, rim and neck. Fabric 20, from *Verulamium*. Figure 10.2. Mid to late first century AD.

[21] Sherds. Fabrics 2A, 2B, 8, 11. Mid to late first century AD.
Butt beaker, base and lower body. Fabric 6. Figure 10.3. Mid first century AD.
Tile fragment.

[22] Sherd. Fabric 2B. Early first century AD.

Trench 10

[1] Sherds. Fabrics 2A, 2B. Early first century AD.

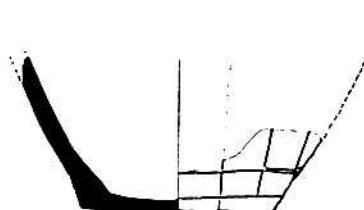
[18] Sherds. Fabrics 2A, 2B, 11. Mid to late first century AD.

[23] Sherds. Fabric 11. Mid to late first century AD.
Jar, rim and upper body. Fabric 2B. Figure 10.4. Early first century AD.

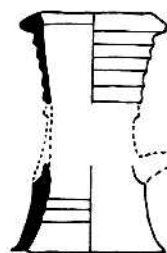
[24] Sherds. Fabrics 2B, 20. Mid to late first century AD.

[25] Sherds. Fabric 2B. Early first century AD.

[26] Sherds. Fabric 2B. Early first century AD.



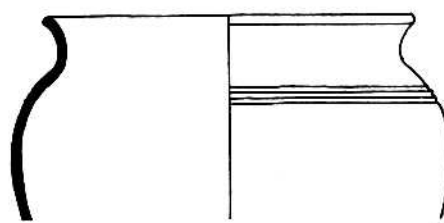
1 Context 14
Fabric 2A
Form Grain Jar (125)?



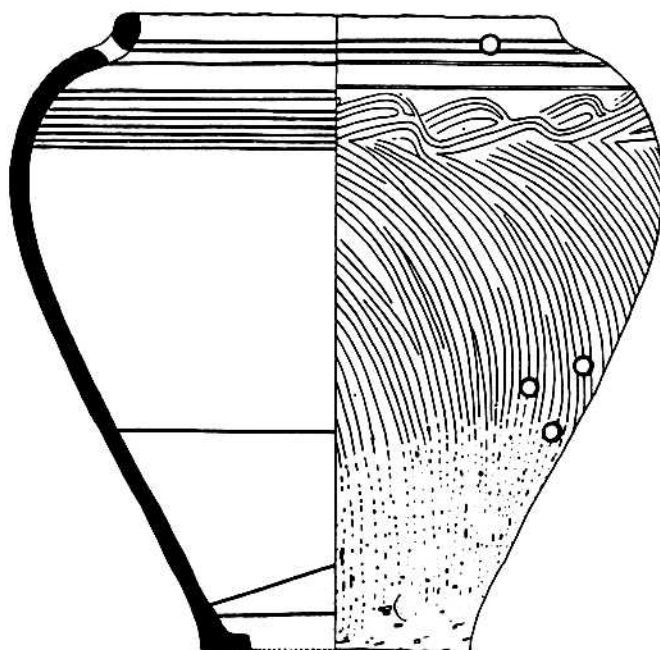
2 Context 17
Fabric 20
Form Flagon



3 Context 21
Fabric 6
Form Butt Beaker



4 Context 23
Fabric 2b
Form 125



5 Context 29
Fabric 2 B
Form 128 ?

Figure 10: Diagnostic pottery forms (scale 1:4) (bracketed form numbers refer to Stead and Rigby 1986)

- [27] Sherds. Fabric 2B. Early first century AD.
- [28] Sherds. Fabrics 2B, 17.
- [29] Grain jar (Stead and Rigby 1986, no. 128). Fabric 2B. Later pierced for hanging, probably in an inverted position (for smoking meat?). Figure 10.5. Early first century AD.
- [32] Sherd. Fabric 2B.

Fabric	Weight (g)	Percentage
2A	1080	17.6%
2B	4825	78.6%
3	20	0.3%
6	30	0.5%
8	5	0.1%
11	80	1.3%
17	5	0.1%
20	95	1.5%
Totals:	6140	100.0%

Table 1: Pottery weight by fabric

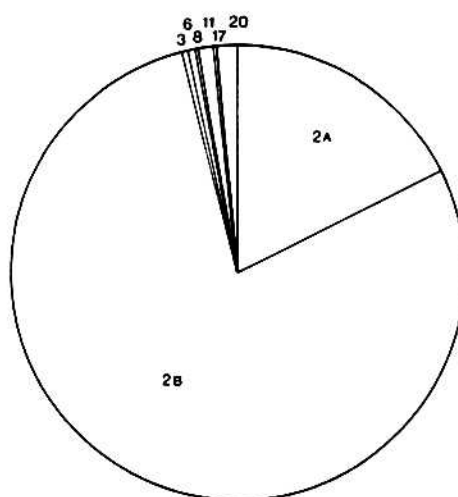


Figure 11: Pottery fabrics

6.2: The animal bone from the trial trenches

The majority of the bone (69.5% by weight) found in all the trenches derived from animals in the ovicaprid group, it being difficult to distinguish between sheep and goats on the basis of bone structure alone. A fair amount of bovine and porcine bone was also present (18.3% and 11.9% respectively), as well as a smaller amount of fowl bone (0.2%). If these proportions are converted to allow for the meat yield of individual animals (ovicaprids providing 25lbs of meat per animal, cattle 300lbs and pigs 50lbs (Stead and Rigby 1986, 412)), then the proportions of meat sources become cattle 70.2%, ovicaprids 22.2% and pigs 7.6% (the fowl represents a very tiny proportion of meat and has not been taken into account).

All the ovicaprid bone seemed to originate from adult animals, possibly indicating that these animals were kept largely for their by-products such as wool and milk, rather than for meat alone. That they were eventually killed for consumption is shown by cutting and fleshing marks on roughly one third of the bone in this group, the slaughtering taking place when the animals no longer produced milk or wool.

Sheep would have been kept on upland pasture, not needing water as such, whilst oxen require a water source, in this instance readily available from the River Mimram to the south. Adult bovine bones were predominant, as opposed to juveniles. They were perhaps as likely to have been kept for their use as working animals (for instance, for ploughing) as for supplies of milk, meat and hide.

The presence of woodland in the vicinity of the settlement is suggested by the presence of pig bones, these animals foraging in woodland as their means of subsistence. Apart from providing a further source of meat, the by-products such as skin and blood would also have been put to good use.

No horse bones were found in the enclosure ditch, perhaps because horses were a more expensive – and consequently uncommon – commodity, used more for transport or traction. This does not rule out their presence, however, as the overall sample was small. Being a moderately high-status settlement, it is possible that horses were indeed kept, but not for consumption.

The small quantities of fowl bone merely attest the presence of such animals, perhaps more as a source of eggs than of meat. Similarly, the oyster shell represents an unquantifiable contribution to the diet. The other molluscs are unlikely to have been utilised as a food source.

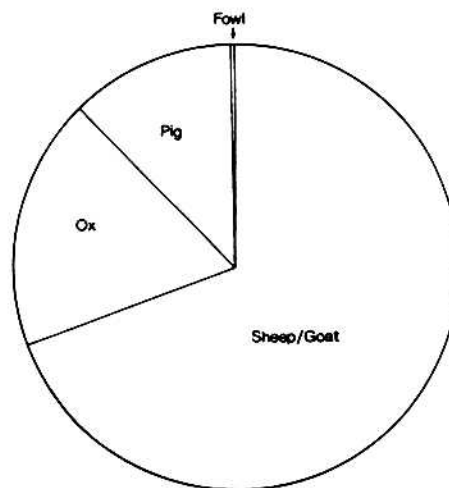


Figure 12: Animal bone weight

Catalogue of bone

Trench 2			
Context	Animal type	Number of fragments	Weight (g)
[4]	Bovine	1	75
[9]	Ovicaprid	7	52
	Pig	1	55
[14]	Ovicaprid	4	75
[15]	Ovicaprid	25	158
Trench 5			
[3]	Ovicaprid	2	12
[11]	Pig/bovine?	2	148
	Ovicaprid	2	42
[17]	Ovicaprid	6	3
[21]	Ovicaprid	2	42
[30]	Fowl	5	½
Trench 10			
[1]	Ovicaprid	1	115
[18]	Ovicaprid	1	110
[24]	Ovicaprid	1	38
[26]	Pig	2	60
	Ovicaprid	3	15
[28]	Ovicaprid	1	124
	Pig	4	20
[33]	Fowl	1	2

Table 2: Animal bone

6.3: The metalwork from the trenches

Only one item of metalwork was recovered from the trial trenches, a copper alloy brooch from trench 5, layer [37] (figure 13). This was from the fill of a recut of the ditch post-dating the destruction of the enclosure. It provides a crucial piece of dating evidence for this destruction, and will be discussed below.

The brooch is a bow brooch (or *fibula*) of Colchester derivative type IV (Hawkes and Hull 1947), dated AD c75±25 as a general type. The brooch is complete and, when excavated, showed no sign of wear and very little corrosion. These brooches were made in two pieces; the bow and clip form one piece, and the spring and pin the other. There is a very close parallel from Baldock (Stead and Rigby 1986, 125 no. 79) which, although possessing a slightly longer bow with no decoration, is so close in all other respects as to suggest that they derive from identical traditions, if not actually the same workshop or even maker.

The context of the Baldock brooch is a pit fill, datable to AD c70±10, although the brooch itself may be a little earlier. Stead and Rigby (1986) suggest a "Neronian" date (ie. AD 54-68); dating by imperial reign is a pernicious habit and without relevance to Britain except in rare and specific cases, and the date of manufacture of this brooch should be placed around AD c60±10.

If the Hollard's Farm brooch and the Baldock brooch do indeed derive from a single tradition, their dates should be roughly contemporary. Now, the brooch from Hollard's Farm seems to have been almost new when discarded or lost, so the date for its deposition can have been no earlier than AD c50 and no later than AD c75. As it comes from a recut ditch, the material from the primary ditch cut should be taken into account for dating purposes. The occurrence of pottery Fabrics 11 and 20 in the earlier ditch cannot be placed much earlier than AD c70. This suggests that the initial backfilling and subsequent recutting of the ditch occurred within a very short space of time, perhaps only a matter of days, and certainly not more than ten years. A date of AD c70±5 can therefore be suggested for the deposition of the brooch.

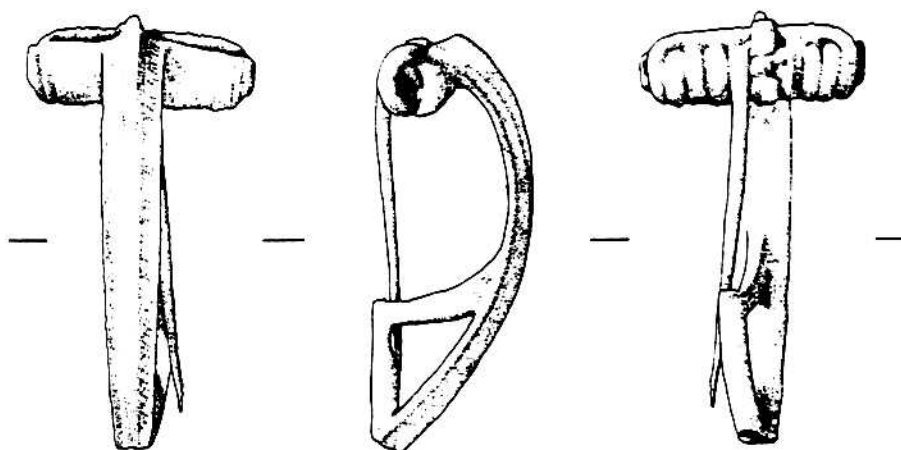


Figure 13: Copper alloy brooch (scale 1:1)

7: Acknowledgements

Our thanks must go first to Richard Daniels Developments Ltd for their generosity in sponsoring this archaeological evaluation; to Brian Hull Associates for helping to set up the archaeological work and for patiently awaiting this report; to Mr John Ansell for holding off work while the archaeologists dug holes in his land; to Graham Harle of the NHDC Planning Department for assistance; to Mike Daniells, the Archaeological Officer in the Herts County Council's Planning Department; to David Brown for his skilful handling of the JCB excavator; to Kit Westaway for processing the finds; and finally, to our archaeological team for their skilful assistance.

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