Gosbecks Archaeological Park, Colchester:

an archaeological evaluation of the north-west area, 1998

on behalf of Colchester Museum Service

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Summary

The investigation revealed late Iron Age and early Roman occupation of the 1st century across the whole of the evaluation area. This took the form of pits and ditches (with one post-hole), but no stratigraphy was found to survive between these features having been entirely ploughed away. This modern ploughsoil is consistently about 0.3m thick. Finds from the features include a range of pottery: some samian, mortaria, Gallo-Belgic type wares and amphorae. One or two fragments from querns and triangular loomweights were also found, and several brooches. Only a small amount of bone survived, mostly in the deeper pits, but this was in poor condition. More common were finds of animal teeth, but even these were poorly preserved. A strap-end, horse-harness fitting and a number of hob-nails, found on the south-west of the site are probably military items.

A very few sherds from the upper levels of one or two of these features attest some limited activity into the 2nd century (or later), but it is clear that by this time the nature of the area had radically changed, and only two features can be ascribed to this period. A water-main, previously seen on a site just to the north, continues across the eastern side of the evaluation area. This was constructed by jointing lengths of timber pipe with iron collars, which were hammered into the ends of each length. A short section of the main was excavated in one of the trenches, where two of the collars were exposed, upright in their original positions, 1.66m apart. The line of this water-main has now been traced for about 300m, and it appears to be heading toward a large L-shaped cropmark south-east of the evaluation area, near the Roman temple complex. A test pit, excavated into this cropmark feature, showed it to be about 1m deep, and though it had been dug into here in the 19th-20th century (possibly a previous unrecorded excavation) it appears to be of Roman date. A reasonable quantity of Roman tile was recovered, including two combed flue-tile fragments, together with a small quantity of other building materials. If supplied with water from the main, then this feature could represent a lowered floor area in a building to accommodate a hypocaust, suggesting a Roman bath-house. A waterworks is another possibility.

Though only a very small quantity of probably prehistoric material was

found in residual contexts, in the form of worked and burnt flint, a large pit of late Bronze Age date was located towards the centre of the evaluation area. Recent excavations have shown that prehistoric features are rare to the north of the park, and only one was found during that work: a probable late Neolithic pit close to Olivers Lane. The late Bronze Age pit here contained a small assemblage of pottery and worked flints, with pieces of burnt flint including one large nodule. The fill of this feature was a pale brown sandy silt, similar to the subsoil, and contrasting with the darker fills of the late Iron Age and Roman features. This probably reflects the soils of this period in the Gosbecks area. The implication seems to be that, as the general soil structure of the pit fill had been little altered from that of the present subsoil, the soils in the area at that time had been subject to little or no cultivation in relation to those of the late Iron Age and Roman periods.

No other features of archaeological significance were found during the evaluation.

Although the stratigraphy across the site has been entirely ploughed away, it was demonstrated that there is some archaeological potential in the topsoil, as finds have not been significantly moved from the position of their original context. Therefore any finds material which is not subject to complete destruction when exposed to agricultural processes and weathering could indicate areas of activity and features which have otherwise been obliterated.

A problem was identified in excavating within the subsoil as the features are mostly of very poor visibility in this material, and often only clearly reveal themselves where they are cut into the natural sands and gravels below. This subsoil deposit varies in thickness, but is generally up to 0.3m over most of this area, though it can be as much as 0.5m. Excavation below the surviving field boundary bank on the west of the area showed that the subsoil outside of this protected strip has been reduced by up to 0.2m. Much of the surviving archaeology of the site is preserved in this deposit (some features were found to be entirely contained within it), and despite the difficulties it should not be removed other than by archaeological excavation and recording. In order to understand the subsoil deposit better, and to investigate the potential of scientific aids in locating and defining features, it has been subjected to a short programme of scientific evaluation, both on site and with the collection of samples (from the subsoil deposit and features) for phosphate and pollen analysis. The results of some of this work are still awaited.

Many of the linear features present on the site can be successfully defined using a magnetometer (gradiometer). However, several ditches found during the evaluation are not visible on the magnetometer survey. The reason for this is not clear, but they appear to be features which are mostly contained within the subsoil, with little penetration into the natural sands and gravels below. The certain correlation of pits found during the evaluation, and small anomalies on the magnetometer plot which may represent them, is more difficult, but the large Bronze Age pit (see above) appears to be clearly visible on the magnetometer survey.

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Introduction

The evaluation was commissioned by Colchester Museum Service, on behalf of Colchester Borough Council and English Heritage. It was initiated to assess the archaeology in the north-west area of the park in relation to proposals to utilise part of this for the construction of an interpretation centre and visitor access facilities.

General archaeological background

Overall the archaeology of the park and the surrounding area is reasonably well known. This is mostly derived from air photographic evidence, for which there is extensive and detailed coverage, but also supplemented by excavation and some geophysical survey (Fig.1). Much of this work is summarised in *Roman Colchester* (Hull 1958) and *Camulodunum 2* (*CAR* 11). However, in the absence of more extensive excavation, much of the detail remains obscure. The considerable importance at an international level of the concentrated late Iron Age and Roman period archaeology, and its historic background, helped promote ideas for the inception of the Archaeological Park which came into being in 1995. This removed the sites of some of the major Roman period monuments from agricultural use, and the present park encompasses the Roman temple and theatre complex, with a considerable length of Roman road. Also within its boundaries are part of an extensive area of cropmark ditches from fields and trackways, mostly of the late Iron Age and Roman periods, and several ring ditches which are probably Bronze Age. Cropmarks show these ancient field systems extending west beneath present agricultural areas, which also contain the site of a large late Iron Age enclosure, and a Roman fort of presumed Claudian or Neronian date. All of the cropmark areas both in and outside of the present park are protected by legislation (Scheduled Ancient Monument number 57).

Archaeological background to the evaluation area

The area requested for evaluation encompasses the north-western part of the park, between the Roman temple complex and Cunobelin Way, and includes the park's western boundary in this area (Fig.1). Cropmark evidence over this particular part of the Scheduled Site is rather poor, and the density of surviving archaeological features difficult to gauge. However, in contrast to much of the archaeology at Gosbecks, the area immediately north of the 1998 evaluation has seen more extensive excavation. The excavations at Gosbecks site B and site C (Fig.2) followed assessments by Colchester Archaeological Trust of the line of Cunobelin Way and a housing development area to its north (Benfield 1994; Benfield and Brooks 1994; Brooks *et al* 1995). Though a few inhumation burials from the later Roman period (3rd-4th centuries) were found, the overwhelming evidence for use of this area was from the late Iron Age to Neronian periods. So the period of intensive use of the area corresponded with the Colchester Sheepen site and just slightly later. Other periods were represented by some residual prehistoric sherds and flintwork, and two post-medieval ditches. The only prehistoric feature was a probable later Neolithic pit, close to Olivers Lane, which contained fragments of Grooved Ware pottery.

The archaeological evaluation

Background to the evaluation

Prior to the commencement of this stage of the evaluation, Colchester Museum Service commissioned a magnetometer (gradiometer) survey of the area (Fig.2) which was carried out by Peter Cott (Cott 1998). Based on this, a series of three anomaly sets were selected by English Heritage and Colchester Museum Service for archaeological investigation. These were the park's western boundary bank (Fig.2 B-B), a series of small anomalies (Fig.2 C-C-C), and a possible ring ditch (Fig.2 D). During the course of the evaluation work certain of the parameters set out in the original archaeological brief were slightly altered after consultation with English Heritage and Colchester Museum Service. These changes were directed at three objectives: to facilitate the investigation of all of the archaeological features encountered within the existing framework of trenches, to enable additional work to explore the nature and archaeological potential of the upper subsoil, and to look at the environmental potential of deposits into the small valley at the southern end of the evaluation area. As a consequence the number of planned trenches on the field boundary bank was reduced from six to four, Trench 8 was re-orientated to a north-south direction and placed across a known Roman ditch, and four test pits (Trenches 14-17) were dug down the slope into the

small valley. The resultant arrangement of trenches is shown in Figure 3.

The topsoil and subsoil for Trench 8 and Trenches 14-17 was excavated by hand. In the other trenches this was removed by machine until features could be recognised in the subsoil or natural gravels, except for the field boundary bank where only the top was mechanically cleared. The spoil from all features and hand-excavated material was sieved, except where finds were subjected to plotting in three dimensions. The spoil from all of the trenches was also metal-detected. In addition a further magnetometer (gradiometer) survey was carried out by Peter Cott to trace the line and possible destination of the Roman water-main (Fig.2).

Though all of the work carried out is inter-related, the evaluation can be divided into two main sections. Section 1 covers investigations into the nature and potential of the soil deposits, and their relationship to the survival of the archaeology in the area. Section 2 deals more generally with the archaeology.

Section 1: archaeology of the topsoil and subsoil

When Trenches 1-7 were opened (Fig.3), it immediately became apparent that the features they contained could not be recognised until most or all of a subsoil deposit had been stripped away. This material (L2) is generally present below the modern topsoil (L1), and is sandwiched between it and the natural sands and gravels (L3). It is generally a yellowish brown sandy silt, with moderate amounts of small-medium stones, but the lower part is often a pale brown colour. This lower part is similar to deposits of cover loam previously encountered on other sites in the Colchester area. The deposit here varies in thickness between only a few centimetres and in excess of 0.5m, though in most of the evaluation area it is about 0.3m thick (Fig.28). It was strongly suspected that this material was of late or early post-glacial origin, and that in removing it, part or all of the surviving archaeology was being machined away, as features were not usually visible until the lower subsoil was reached. This would mean that in some areas only features originally over 0.6m-0.8m in depth would be recognised at all.

In order to assess the archaeological impact of any future work it was important to establish the archaeological potential of this deposit. Questions that needed to be considered were:

- what was the chronological relationship of the subsoil (L2) to the archaeology?
- if, as seemed almost certain, L2 was cut by the archaeological features, what potential was there to locate and excavate them without removing this material?
- what was the relationship of L2 to the present surface topography in terms of ground levels and the thickness of the deposit?
- were there any areas, for example into the small valley, where later coluviation may have masked archaeological features?
- how had this subsoil deposit been formed, and what might the variations in its composition signify?

In addition to the work on the field boundary bank, where the subsoil would have been protected from modern agriculture, three other approaches were made. Trench 8 was positioned over the line of a known Roman feature and hand-excavated to the top of the upper subsoil. This surface was then allowed to weather. Later the subsoil was reduced in 5cm-spits, and the finds plotted. Four test pits (Trenches 14-17) were used to examine the relationship of the deposit to the modern topography. The deposit was also examined and sampled by soil and environmental specialists.

Partly as a product of this work some investigation of the topsoil also took place, and this is summarised first.

The topsoil

Both in the park and in the present agricultural field to the west, the topsoil is a modern agriculturally derived dark brown sandy loam soil about 0.3m thick. This is much deeper than would be produced by usual ploughing and must represent a series of different agricultural activities. At the western ends of Trenches 9 and 10, in the present arable field, two phases of modern agricultural activity could be differentiated. Here some probable cultivation or harvesting rows surviving in the base of the topsoil showed recent ploughing to have penetrated to about 0.15m (Figs.11 & 15). The exact agricultural process

which produced these features is unknown, and David Barbour (the farmer) could not positively identify them. But if they are broad rows from a crop such as potatoes, or their harvesting, they are possibly twenty years old.

The archaeological potential of the topsoil was demonstrated in Trench 8. Here it was removed by hand and the finds retained from 1.0m-square areas along its length (Fig.20). Post-medieval pottery (for which no corresponding features were present) probably derives from agricultural surface scatters and is evenly distributed along the whole length of the trench. The Roman pottery is concentrated in one short section above the features of the same date from which it must derive (Fig.22). Despite extensive cultivation this has not destroyed the potential to relate archaeological material (hardy enough to survive) in the ploughsoil to its original contexts.

The subsoil

This material (L2) is generally present below the modern topsoil (L1), and is sandwiched between it and the natural sands and gravels (L3). It is generally a yellowish brown sandy silt, with moderate amounts of small-medium stones (L2A), but the lower part (L2B) is often a pale brown colour, and is similar to deposits of cover loam previously encountered on other sites in the Colchester area. The total thickness of this deposit varies between only a few centimetres and in excess of 0.5m, though in most of the evaluation area it is about 0.3m thick (Fig.28).

The upper part of the subsoil (L2A)

The top 5-10cm contains a moderate to common frequency of archaeological material which includes finds of recent origin (Fig.21). This suggests that the upper part of this layer is subject to greater disturbance, probably primarily from agriculture as plough-marks can be distinguished in its surface. This is also reflected in the section of F81 and F84 in Trench 8 where there is a change in the visibility of the cuts for these features recorded, beginning in spit 3 (Fig.19). However, this change was not readily apparent during excavation. During the excavation of the spits in this trench a close inspection of L2 was made at each level. A slightly darker colouration could just be distinguished in the surface, where the Roman ditch was expected, but this became only slightly more clear as excavation progressed (Fig.21).

The lower part of the subsoil (L2B)

The lower subsoil is often patchy in appearance (Figs.23 & 24) and is not always present. Where it can be defined it is always the lower part of L2. It is much paler, the major constituent being a pale brown sandy silt (often giving a greyish-white appearance) with some small-medium stone inclusions. In places it is penetrated by darker vertical and horizontal striations, the cause of which is not positively known, but they are almost certainly a mixture of worm and root action (Fig.24). This material is similar in appearance to that which fills the natural glacial hollows and channels which are common on the site. It is probably the same material often described as cover loam, found in patchy sheets of varying thickness across other gravel sites in the area, and which often inhibits the visibility of archaeological features.

Finds other than small fragments were found in L2B, and this material was preponderantly or almost exclusively late Iron Age or Roman, the most notable example being a small amount of dispersed Roman tile and pottery from the base of Trench 4. Occasional prehistoric, late Iron Age and Roman finds are made in the tops of the natural glacial features.

The subsoil: conclusions from excavation

Although ancient features are now often very poorly defined in L2, this subsoil deposit certainly pre-dates the late Iron Age/early Roman period. This can be demonstrated by the recorded distribution of finds in Trench 8 (Fig.22). These finds fill and define the upper parts of the features which are no longer clearly visible as archaeological cuts, but are still present. Also the Roman pits excavated in Trench 9 (F82) and Trench 16 (F71) were contained entirely within L2 and did not penetrate into the lower gravel subsoil at all (Figs.12 & 26). The relationship is also revealed by the ill-defined soil colour changes in L2 resulting from this fill of features (Fig.21). The only prehistoric feature, a late Bronze Age pit (F5) in Trench 7, could not be clearly related to L2 as all the finds came from its lower part, cut into the gravel, and its fill was not distinct from L2 (Fig.33). However, there seems little doubt that it is not later than the accumulation of this deposit.

The relationship of L2 to present surface topography is probably complex, but it appears to be generally thicker in present surface depressions and valleys. It was hardly present in much of the west end of Trench 1, and was less substantial in Trench 5 than in trenches either side of it, even though the surface topography there is beginning to slope down into the small valley (Fig.28). However, the test pits on the northern slope into the valley all contained the greatest depth of this material (up to 0.5m), which probably relates to coluviation (Fig.28, Trenches 14-16). Indications from the excavation of the Roman pit (F71) in Trench 16 suggest that much, if not all of this process, is pre-Roman, and it is probably a late or early post-glacial development.

Under the field bank on the park boundary, where L2 had been removed from cultivation in the post-Roman period, the top of this deposit was up to 0.2m above that of surrounding areas (Figs.5, 7, 12 &16). This could suggest that agricultural practices have denuded and lowered the ground by as much as this depth since the Roman period, consequently removing shallow archaeological features. However, it remains difficult to assess accurately how the ancient ground surface level related to that of the present day.

That the more usual cover-loam material L2B is always the lower component of L2 suggests that L2A may be derived from the same material, having been altered by a combination of natural and human agencies. The vertical, and less common horizontal, striations observed in L2B probably result from worm and root action which may be a continuation of this conversion process. If this is the case, then this was possibly effected by changes in the use of the area, for example from pasture to arable, affecting the overall soil structure, and especially that nearer to the surface. The fill of the late Bronze Age pit (F5) could well indicate that much of this process has taken place after that date. That of the late Iron Age and Roman features is generally darker and probably represents a more developed soil structure by that time. The often low visibility of these features in L2 may indicate that the process of change has continued into more recent times. The reasons for L2B being only clearly present in some areas, possibly protected from this process, cannot be explained at present. However it was more apparent in deeper deposits of L2, and in one section beneath the bank, which may imply that protection afforded by depth or by surface features can play a significant role.

Examination and sampling

The upper subsoil deposits (L2) and features were examined on site by Peter Murphy, Martin Bates (Appendix 1) and Patricia Wiltshire (see below). Phosphate samples were collected by Martin Bates from the areas and fills of a Roman pit (F9), the late Bronze Age pit (F5) and deposits in Trench 4 (sample locations and numbers marked on relevant section figures). This was done with the idea that as features were difficult to see in L2, it might prove possible to test areas of its surface in a horizontal plane to help locate or identify them. These samples await processing and analysis. Samples to assess levels of pollen preservation and potential for further environmental work were taken for analysis by Patricia Wiltshire. Some results of this work are still awaited at this time. In addition two bulk samples were collected: one from the dark layers of the Roman pit (F9) in Trench 2 (sample 1) and another from the Bronze Age pit (F5) in Trench 7 (sample 2). These are currently held in store. Sampling of this kind carried out on Gosbecks site B showed that where there are relatively carbon-rich (dark) deposits, these may contain charred plant remains (results from this included identifications of a range of cultivated and wild species from late Iron Age and Roman deposits); otherwise, generally plant macrofossils are absent. This would indicate that the sample from the Bronze Age pit is unlikely to produce any significant results from this sample. A substantial box-column sample of a complete soil profile was removed from Trench 4 to enable further possible detailed examination (see Fig.24).

Pollen analysis by Patricia Wiltshire

There are sparse palynomorphs throughout the profile, including pine and hazel from the base of one of the sections. In general the material is so sparse that further analysis is not warranted. However, there will be further information from assessment scanning, which Patricia intends to do by the end of the year, and she will produce a report at that time.

Section 2: archaeology of the north-west area of Gosbecks Archaeological Park

There are 277 finds groups from the features, of which 71 are small finds, and approximately 800 further finds were individually plotted. All of the finds from features have been looked at, while the individually recorded finds from three trenches (Trenches 2, 8 & 9) have also been identified, and some of these have been plotted out. Much of this material has had to be looked at prior to cleaning, but this does not adversely affect the identifications here. Pottery form numbers prefixed by *CAM* refer to the Camulodunum type series (Hawkes and Hull 1947).

Prehistoric

Apart from a very small amount of possibly worked flint in residual contexts (see main finds list), only one prehistoric feature was located.

Trench 7 (Figs.32 & 33):

A large pit (F5) at the west end of Trench 7 contained a small assemblage of pottery of late Bronze Age type, flint-work, and burnt flint including a large burnt nodule (Figs.32 & 33). Although there is little doubt that the pottery is of the late Bronze Age, the flint-work is of good quality with several blades suggestive of an earlier date. However, the fresh appearance of this material indicates that both the flint and pottery are contemporary. The fill of this feature was unusual in relation to that from later periods as it was pale and silty. This probably reflects the nature of early soils of that date in the Gosbecks area, which at that time may have seen little or no transformation towards a more developed agricultural soil.

Previous excavation has so far shown subsoil features of pre-late Iron Age to be quite rare in the northern area of Gosbecks, and so the feature was half sectioned within the trench and the remainder of the fill left undisturbed for possible future study. Phosphate samples were collected by Martin Bates (Fig.32) and pollen samples were taken by Patricia Wiltshire. A balk sample was also taken from the fill (sample no 2).

Late Iron Age and early Roman (1st century)

The majority of features encountered during the evaluation appear to date from this period, and comprise ditches, pits, and one post-hole.

Trench 2 (Figs.4, 7 & 10):

Two pits (one very deep and rectangular) and a section of ditch were located in Trench 2. The deep rectangular pit (F59) contained early Roman material, and may be pre-Flavian. Unfortunately it could not be bottomed due to the small work space and its depth. The finds included two probable military items, both of ?unusual design: a bronze strap-end and a horse-harness fitting. Small iron studs (probably hob-nails) were also found in the fill. Recognisable items in the range of pottery include part of a large store jar (*CAM275*), sherds from a *terra rubra* vessel and a samian bowl (Ritterling 12), with some sherds from a Dressel 20 amphora. Pieces of a chamfered-base bowl of black-burnished ware type, dating from the 2nd century or later, were recovered from L2 above F59 (designated F56). This is part of the very small quantity of finds from the evaluation which indicate any activity later than the 1st century. Its position probably results from sinkage caused by settling-in material filling F59. Some animal bones in very poor condition were also found in the fill of this feature.

The ditch (F31) appeared to cut the deep pit above and contained pottery indicating an early Roman date. However it is possible that the black-burnished ware type bowl (see above) derives from this context. The finds included part of a wall-sided mortarium (*CAM*191), sherds of Dressel 20 amphorae, and a sherd from a samian plate (*form* 18). There was also a quantity of dispersed small iron studs which are almost certainly hob-nails. This linear feature is present on the magnetometer survey plot.

At the west end of the trench was another pit which contained late Iron Age-early Roman pottery including a small piece of a *terra rubra* vessel (pre-Flavian) and a Gallo-Belgic style platter datable to the 1st century. A fragment from a colour-coat picture lamp was also found, together with a Disc brooch (both of 1st-century date), and some animal bone which was in very poor condition.

Trench 5 (Figs. 29 & 31):

Running diagonally across much of the length of this trench were the shallow remains of a probable Roman

ditch (F12). This feature produced few finds, and may turn toward the north where it meets the north side of the trench. This linear feature is not visible on the magnetometer survey.

Trench 6 (Figs. 30 & 31):

Across the centre section of this trench were two small Roman ditches (F3 & F4) running almost parallel to each other in a north-south direction. Both produced only a small amount of finds, which include a fragment from a Roman toilet set (F3), Roman glass and daub (F4). Their stratigraphical relationship could not be discerned as this was contained entirely within L2. They are certainly the same features as the lengths of ditch F2 and F24 in Trench 7, but which continues as which is not known. Neither of these linear features are visible on the magnetometer survey plot.

Trench 7 (Figs. 32, 34 & 35):

The two Roman ditches above (F3 & F4) continue as F2 and F24 at the east end of this trench, which was extended to allow their excavation. Again the relationship between them is not known, nor which relates to which ditch in Trench 6. Finds in these ditches were limited, as in Trench 6, but include a fragment of lava quern from F2. Presumably one of these features is a re-cut of an existing boundary line previously defined by the other. As stated above neither of these linear features is visible on the magnetometer survey plot.

Just to the west of this ditch pair was a small pit (F6) which may be late Iron Age in date, or just into the early Roman period. It contained among the pottery sherds from a Butt-Beaker (*CAM*113), some from a Gallo-Belgic platter, and a brooch of Nauheim derivative form. Some limited quantity of animal bone in poor condition also survived in this feature.

In the central area of this trench was an area of finds in L2, which originally were thought to represent a single large feature (F1). On excavation this was resolved into a series of small, mostly ill-defined features (F20-F23), which hardly penetrated the lower gravel subsoil. Features 20-23 only extended a short way into the trench from the north section, and with limited investigation it is difficult to classify them, though they may represent small pits. It is possible that F20 and F21 are part of one feature, of which F22 may also be part, though F23 definitely seemed to be a separate cut. The only finds from these were some Roman pottery sherds from F22, and some daub from F23.

A small post-hole (F39) lay just to the east of this group but entirely within the area of the trench. Charcoal staining within this feature appears to outline the post, indicating that the lower part probably rotted *in situ*. A small quantity of daub was recovered from the fill.

Trench 8 (Figs. 18 & 19):

An enclosure, of which feature F81 forms the south side, has been partly excavated previously on Gosbecks site B, and the finds here, which include a triangular loom-weight, an Iron Age silver coin (yet to be identified), a Rosette brooch, late Iron Age pottery and some pre-Flavian Roman wares, confirm its dating as ?late Iron Age-early Roman. The relationship of this ditch to the smaller parallel one just to its south (F84) is not known, though the small amount of finds from F84 would indicate a near-contemporary date. This linear feature is present on the magnetometer survey plot.

Trench 9 (Figs.11 & 12):

Below the existing field bank (F54) in Trench 9 was an early Roman pit (F82) entirely contained within L2. This feature projected only a short distance into the trench and produced relatively few finds (Fig.14). In consequence its presence within L2 was not recognised until excavation to the gravel subsoil was almost complete. The small amount of pottery finds included sherds of Dressel 20 amphorae and a 1st-century (?Neronian) mortarium in coarse red fabric.

Trench 11 (Figs. 36 & 37):

Almost the whole length of this trench was filled by a Roman ditch (F64), which is the southernmost of a pair forming a trackway. Excavation was halted over the central area of the trench just below the topsoil when several finds of Roman tile indicated a feature, and only the ends were reduced to allow the line of

the ditch to be recorded (Fig.36 profile). No full section of the ditch was obtained, and the northern edge (F63) was difficult to establish. Finds from the ditch included sherds of Dressel 20 amphorae, a samian bowl (*form* 29) and a fragment of lava quern. This linear feature is present on the magnetometer survey.

Trench 12 (Figs. 37 & 38):

At the southern end of this trench was a Roman ditch (F80). This appears to be just too far north to be the northern ditch of the trackway most clearly visible on the magnetometer plot, however there is a faint line beyond this which corresponds to the position of feature F80, and it may be that the trackway ditch was recut on a slightly different line. No full section of this feature could be obtained. Amongst the pottery from the fill were sherds of unidentified amphorae, a Gallo-Belgic platter and a samian bowl (*form* 29). A fragment of clay pipe purported to come from the fill is certainly intrusive.

Trench 13 (Figs. 38 & 39):

A ditch across the central area of this trench (F68) is probably late Iron Age in date, and contained many sherds from a large flagon of *CAM*163A type, as well as part of a Gallo-Belgic cup. The feature is not visible on the magnetometer survey.

Trench 16 (Fig.26):

This trench was one of four test pits dug into the slope of the small valley to the south of the main evaluation area. During excavation it was noticed that the central area of the pit was producing quantities of Roman pottery and tile, though no feature could be seen. Careful further excavation revealed parts of the edge of this feature (F71) which could just be distinguished in L2B (Fig.26 section). It appeared to be a small pit entirely contained within L2.

Later Roman (2nd century+)

Trench 13 (Figs. 38 & 39):

Only one feature could be identified as belonging to this period, though a second feature partly explored in Trench 17 is probably, by association, of the same date. This was a Roman water-main (F65) a short length of which was excavated at the north end of Trench 13. A more substantial length of this feature was previously uncovered on Gosbecks site B in 1995 where it could be shown to date to the 2nd century or later.

The main is constructed by joining hollowed-out lengths of timber with iron collars forced into the ends of each length. The timber has since entirely rotted away, but the iron collars remain in their original positions. Two of these collars were exposed in this section, spaced at 1.66m apart. The one revealed in section was left *in situ* (Fig.39). The line of this feature into the park area was followed by magnetometer for at least a further 200m (Fig.3), and the water-main has now been certainly traced for a distance approaching 300m.

Trench 17 (Fig.26):

This was the furthest south of the series of four test pits, and was excavated inside a large L-shaped cropmark north-east of the Roman temple complex (marked **A** on Fig.1) close to the reported find-spot of the statuette of Mercury. Nothing was previously known about this cropmark, though it was considered to be probably Roman in date, representing a sub-surface feature, perhaps to accommodate a hypocaust. The upper fill below the topsoil (L22) contained quite a lot of small to medium-sized pieces of Roman tile and a few peg-tile fragments. A piece of clay-pipe stem and a sherd of pottery datable to the 17th-19th century also came from this layer. Other Roman finds included mortar fragments, septaria pieces, *tesserae* cubes, a combed flue-tile and samian counter. Below about 0.6m (L23), only Roman material was found, again mostly tile, with one piece from a combed flue-tile, but also some pink *op.sig*. mortar and ?chalk or stone lumps. The base of the feature (at about 1.0m) was very uneven, and dark yellowish brown sandy silts (L24) filled a number of ill-defined hollows or depressions in the top of the gravelly subsoil (L25). Given the limited area available it was difficult to interpret these, and only one was defined as an archaeological feature: a small ?post-hole (F73) against the east section. However, whether this, or any of the other features, are archaeological or natural in origin cannot be said for certain at present.

Overall this large feature appears to be probably of Roman date, possibly a bath-house or waterworks, as the evidence from cropmarks, supported by the magnetometer survey, suggest that this may be the destination of the Roman water-main (F65). In this case the area of the trench has been disturbed by being dug into previously (L22) in the post-medieval or modern era. This may be supported by an impression from the finds that a certain amount of sorting had taken place, with smaller and ?less interesting material having been returned to the fill. This feature is only poorly defined in the magnetometer survey.

Post-Roman

Very few post-Roman features were encountered other than the field bank along the west-ern boundary of the park. A post-medieval ditch was found to run along its eastern side.

The field boundary bank and ditch (Trenches 1-2 & 9-10):

The bank is between 0.2m-0.3m above the surrounding areas, and about 4.0m across. This feature was sectioned by four trenches (above) which were excavated by hand, after the top had been stripped by machine, and the finds were individually plotted (Figs.4-17).

The bank was composed of a dark brown sandy loam which in section appeared to be mostly undifferentiated. It is essentially equivalent to the topsoil (L1) in the other trenches. However, during excavation slight changes were noted in the composition of this material in all of the sections of the bank. These appeared in two ways: a generalised change between the upper and lower parts of the bank material, and between the eastern and western sides of the bank. This can be seen in comparing the final section drawings with changes recorded during excavation (Figs.5-8 & 12-13). The excavated sequences are supported where finds have been plotted for two of the trenches (Figs.9 & 14). Here the finds distribution can only be explained in relation to the changes recorded during excavation.

The soil on the top of the bank (up to 20cm thick) is heavily penetrated by small roots, and is not noticeably different to L1. Most of this was removed by machine. Below this, though little different, it is slightly lighter in colour and distinctly sandier. Also there is often noticeably more gravel-sized stone toward the centre and western half of the bank (Figs. 5 & 12). Attempts to excavate these slightly more stony areas as separate layers proved difficult, and was generally abandoned as no real edges or consistent differences in the material could be maintained.

In two sections (Trenches 1 & 2) darker material similar to L1 persisted in the eastern side of the bank. This was reasonably clear in Trench 1 (Fig.5, L2 & Fig.6, L4), but less so in Trench 2 (L7), though its existence here is strongly supported by the distribution of finds in that area (Fig.9 A). These two layers, which are later in date than the post-medieval ditch in this area (see below), appear to be cut into the east side of the bank and would be consistent with modern ploughing into the bank edge. On the same level as the base of this ploughing in Trench 1, under the centre of the bank, were a series of narrow linear features (F16-19) orientated north-south in line with the bank itself (Fig.4). These cut into the surface of L2 and are of the same appearance as plough-stripes. Careful examination during excavation was made in all of the other trenches across the bank, but no others were found in any of these sections.

Archaeological finds from the field bank consist mostly of small undistinguished fragments of brick/tile; some of this can be identified as Roman and peg-tile. There are also sherds of late Iron Age and Roman pottery, with some small amount of post-medieval sherds. All of this material is found throughout the soil making up the bank.

Along the eastern side of the field bank was the back-filled cut of a field ditch (Fig.3). This was present in all of the trenches here, and was best defined in Trench 1 where it showed clearly as a dark area directly following the machine clearing. In the other trenches the fill was similar to that of the bank itself, and it was much harder to distinguish. In these section it is most probably derived from the bank. Though no complete section of this feature was obtained there is no doubt that it represents a former ditch as such a feature might be expected in this area, and it was present in the same relation to the bank in all four trenches. Finds from the section in Trench 1 (F8) included a large fragment of frogged brick as well as post-medieval to modern pottery, and some pottery of this same period was obtained from some of the other sections. This feature is not clearly defined on the magnetometer survey.

The field boundary bank and ditch: summary

No good indication for the date of the creation of this boundary feature was found, only that it is clearly post-Roman as the bank material seals several Roman features. Also as it is a relatively low feature it cannot be said that it is necessarily a deliberate creation. An old photograph of excavations by Lieut.-Col Appleby in the area of the large Iron Age enclosure, taken in 1949, shows a thick hedged boundary in the background made up of continuous small trees and bushes (Colchester Museum Service photographic archive). This hedge is almost certainly the boundary here, and this would have accumulated some soil material at its base, while the areas to each side would have been under continuous cultivation. Soil from digging or cleaning out the ditch to the east could have added to this effect, and later when the hedge was removed a slight bank would be left. It seems possible that the mechanical grubbing-out of the hedge line could also account for the small group of features (F16-19) beneath the bank in Trench 1, though it is also possible that they are from ploughing prior to the creation of the bank. Disturbance from the removal of the hedge could also explain the difficulty in following coherent layers of slightly differing soil within the bank itself. The fact that, removed of its hedge, the bank was not then ploughed down might be related to the presence of a bridle-way on its west side (now transferred to the park) which would have inhibited its incorporation into that field. A wooden post (F38, not illustrated) found on the west side of the bank in Trench 2 may indicate that a boundary fence existed here along this side of the feature. The post-medieval ditch on the east presumably marked the field boundary on that side, which has persisted with only slight encroachment. The presence of the bank as a raised feature may also be enhanced by its isolated position between two cultivated areas. The subsoil (L2) beneath it is up to 20cm above that in the surrounding fields, and to an extent it may be as much a subsoil feature as it is an upstanding earthwork. There was no indication that the bank had preserved any earlier stratigraphy beneath it.

Other post-Roman features

Most of the other post-Roman features have already been dealt with above; those that have are also briefly re-stated here.

Trench 1 (Fig.5):

A small pit or post-hole (F27) considered during excavation to be post-medieval in date (3D finds yet to be plotted) was found sealed by L2/L4 beneath the east side of the field bank in Trench 1.

Trenches 9 & 10 (Figs.11 & 15):

Several very recent cultivation rows were found at the west end of these trenches in the lower part of L1. Their origin is not certainly known, but they indicate that within the last few years ploughing here has normally penetrated to about 15cm, which is only half the total depth of the L1 ploughsoil in this area.

Trench 17 (Fig.26):

The upper-middle fill of this test pit (L22) contained a few peg-tile fragments, a piece of clay-pipe stem and a sherd of pottery datable to the 17th-19th century. The test pit had been excavated into a large cropmark feature (Fig.1 A), which is almost certainly Roman in date, and this late material probably relates to previous, but unrecorded, exploration or robbing.

Archaeological conclusions from the evaluation

The archaeology

Almost all the significant archaeological features encountered in the evaluation area date to the late Iron Age and early Roman periods, with the majority of these dating to the 1st century. These now survive only as isolated features, and no stratigraphy exists on the site outside of their individual fills or inter-cutting.

The 1st-century features are all ditches or pits, but one post-hole was also identified. The quantities and range of material finds entering these features - pottery, animal bones (more poorly represented due to the soil conditions), loom-weights, quern fragments, and small metal artefacts - indicate that these were in close proximity to settlement. Some probable military items (a cruciform horse-harness fitting, a ?strap-end and hob-nails) were also found in these features in the south-western area of the evaluation (Trench 2).

There is a very small amount of pottery indicating some limited activity into the 2nd century; however, this comes from later silting of some of the earlier features, and by this time the whole nature of the area seems to have changed. Only one feature is certainly known to have been constructed in this period, a wooden water-main, possibly servicing a Roman building (?also constructed at this time) which had a large recessed floor area, and was situated just to the north-east of the temple site. The water-main, which has now been certainly traced for nearly 300m, was constructed of lengths of wooden pipe, each about 1.7m long, joined by iron collars hammered into their ends. These collars still occupy their original positions, upright in the bottom of the construction trench. The building which appears to be its destination was previously known only as a large L-shaped cropmark. In the area of the evaluation test pit it was unfortunately found to have been dug into in the 19th or 20th century, probably representing an unrecorded excavation. Here the feature (if not deepened by the previous excavators) was about 1.0m deep, and the fill produced a reasonable amount of Roman tile fragments, with two pieces of combed flue-tile and some tesserae cubes. There was also a small quantity of other building materials including septaria and op.sig. mortar fragments. The limited depth of the lowered floor area could accommodate a feature such as a hypocaust, and if the proposed building is serviced by the water-main, would suggest a bath-house, or possibly a waterworks.

The only other significant archaeological feature was a single large prehistoric pit, almost certainly dating to the late Bronze Age. It contained a reasonable assemblage of pottery with a quantity of worked flint (some of surprising quality for this period), and burnt flints including a large nodule. The pale silty fill of the pit suggests that the soil here at that time had not been much developed by cultivation, certainly not to the extent of that filling the later features of the 1st century AD. A small quantity of prehistoric pottery and worked flint has been recovered from residual contexts during this and other recent excavations at Gosbecks, but this is only the second prehistoric feature to be found. The other was a probable late Neolithic pit containing some small sherds of Grooved Ware, excavated during the 1994 evaluation, beneath the road line of the present Cunobelin Way near Olivers Lane.

The magnetometer surveys (Fig.2)

Although the magnetometer (gradiometer) shows a number of the linear features on the evaluation area quite clearly, some of the smaller linear features found during excavation cannot be seen on the plot. These are the ditches in Trenches 5, 6 and 7, and the ditch in Trench 13. The reasons for this are not immediately apparent. Though these ditches were not generally very substantial features, and overall contained only a limited amount of finds, it is difficult to appreciate how they differ significantly from the ditch F31 (Trench 2) which can be seen quite clearly on the original data plots (though not in the poorer reproduction here as Fig.2). The water-main (F65) could be followed quite successfully with the magnetometer, and the amount of cultural debris incorporated into this back-filled feature is also not particularly large, however it is rather more substantial. The only correlation which can be suggested at this time is that the linear features which do not appear on the magnetometer plot are generally those which are mostly contained within the subsoil, and have little penetration into the natural sands and gravels below.

Identifying pits is a rather more difficult procedure than with linear features, as their precise position is not easy to ascertain between the magnetometer plot and the evaluation trenches given the background of small anomalies present. However the large Bronze Age pit (F5) is substantial enough to allow a correlation, and it appears to be identifiable on the magnetometer survey.

Considerations for future archaeological work

Although there is no surviving stratigraphy in the site area there is some potential in the ploughsoil (L1) for the recovery of finds distribution. This has been shown to relate to existing subsoil features (see above), and by analogy should relate to features and former concentrations of material whose contexts have otherwise been entirely destroyed.

The subsoil (L2) is a late or post-glacial deposit and, though it is often difficult to see the features within this until the natural gravels below are reached, it contains much of the surviving archaeology. Indeed some features are contained entirely within this deposit, which can be up to 0.5m thick in this area, though is commonly about 0.3m in thickness. This material should be archaeologically excavated, though the

difficulty of seeing the archaeology obviously creates a problem here. Linear features (such as the ditches in Trench 8) would probably be more visible over longer distances, while some darker fills and concentrations of material would indicate the presence of others (for example the small pit F71 in Trench 16). Even so it is probable that the location and excavation of features would still prove difficult, especially in locating the edges during excavation. Leaving the surface to weather appeared to make little difference here for the small area of the features in Trench 8. It is not know as yet whether scientific aids, such as soil analysis for chemical (phosphate) changes, would be useful in locating the surviving archaeology, as the samples collected are yet to be processed. Some features can be defined by magnetometry, but the evaluation showed that only a proportion of those present, even for linear features, are detected by this method here.

Though no evidence was found for any significantly better archaeological preservation beneath the present western boundary field bank, the subsoil deposit here appears to be less eroded than in surrounding areas by up to 0.2m. It therefore seems possible that some shallow features, which would have been destroyed by ploughing elsewhere, could still survive in this area.

written by Stephen Benfield for: Colchester Archaeological Trust **Abbreviations**

CAR 11 C F C Hawkes and Philip Crummy, Camulodunum 2

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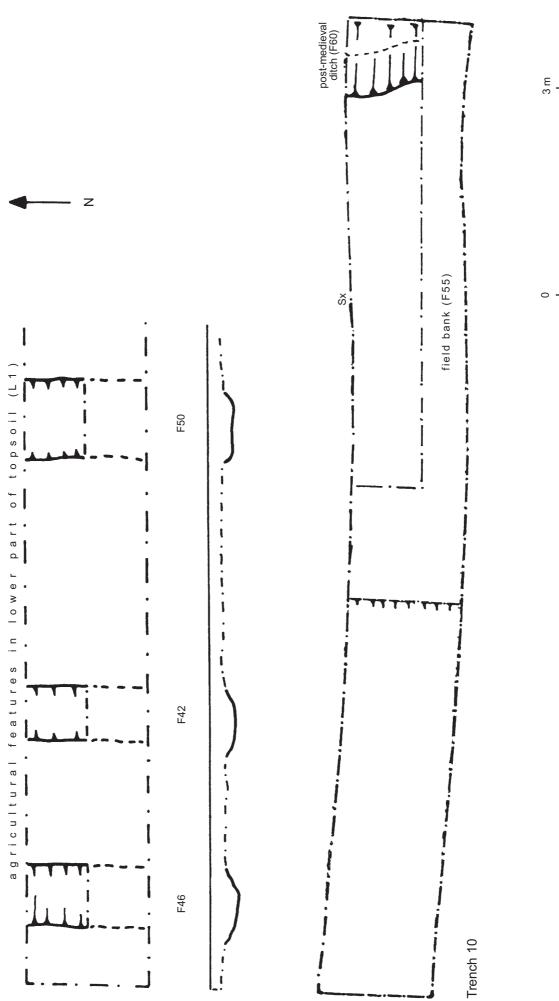


Fig 15 Trench 10: plan