Ash Court, Girton College Cambridge

An Archaeological Evaluation

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CAMBRIDGE ARCHAEOLOGICAL UNIT
UNIVERSITY OF CAMBRIDGE

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University of Cambridge
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Summary

Three phases of archaeological investigation were undertaken at Ash Court, Girton College, Cambridge, between the 21st of February and the 11th of March 2011. In the first instance, a geophysical survey of the area was undertaken. Subsequently, the excavation of a series of five geotechnical test pits was monitored before, finally, four evaluation trenches were inserted at the site. The earliest features to be encountered during these works consisted of a series of tree-boles/tree-throws that showed no signs of anthropogenic involvement in their creation. These were overlain by a horizon of well-worked horticultural soil. As this latter deposit showed no evidence of bioturbation, it appears likely that the area was cleared prior to the commencement of agricultural activity. Overlying the horticultural soil was a compacted spread of ash and charcoal, deposited in the late 19th century during the early years of Girton College. Also dating to this period was a large gravel quarry pit, which appears to have been associated with the initial construction of Old Wing in the early 1870s. Finally, evidence of 20th century landscaping activity – in the form of a rubble spread, and an upcast gravel bank flanking Orchard Drive – was also encountered. These results clearly demonstrate that the large Anglo-Saxon cemetery that was previously identified a little way to the south during the late 19th century does not extend into the proposed development area.

A further three trenches along the western drive of the College for a gas pipeline in June revealed no archaeology again indicating that the cemetery does not extend that far to the west.

Contents

Introduction

Three phases of archaeological investigation have recently been conducted by the Cambridge Archaeological Unit (CAU) within Ash Court, Girton College, Cambridge. The Proposed Development Area (PDA) – centred on TL 4236 6105 – is situated to the rear of the college, which itself lies on the northern outskirts of the city (see Figure 1). The PDA measures 32.8m by 22.4m in extent, and covers an area of 1282.5m^2. In the first instance, a geophysical survey was conducted here on the 21st of February 2011. A second area – situated a little way to the southeast, immediately adjacent to the Mare's Run car park – was also surveyed at this time, prior to potential redevelopment, and a report of this work is included below. Subsequently, the excavation of five geotechnical test pits in the area of Ash Court was monitored on the 25th of February 2011. Finally, four evaluation trenches, covering a combined area of 40m^2, were inserted into this area on the 11th of April 2011. This project followed the specification issued by the CAU (Dickens 2011) and was monitored by Kasia Gdaniec, Development Control Archaeologist at Cambridgeshire Archaeology Planning and Countryside Advice (CAPCA). The work was commissioned by Girton College, Cambridge, in advance of redevelopment.

Landscape and Geology

Girton College is situated towards the northern end of a northeast-southwest aligned ridge of high ground (see Figure 1). In geological terms, this ridge consists of a head or drift deposit known as the Observatory Gravels (British Geological Survey, Sheet 188). Measuring between 300m and 700m wide, these gravels overlie deposits of Gault clay and solid chalk. Within the PDA itself, the present surface height ranges between 24.30m OD (on the crest of the bank flanking Orchard Drive) and 23.79m OD (across the remainder of the lawn). At present, the area is an open space that contains a number of planting beds.

Methodology

During the course of the evaluation, topsoil and subsoil layers were removed by a 360° mechanical excavator with a 1.8m wide toothless bucket; this material was then visually inspected and metal detected. Following this, all archaeological features were excavated by hand and recorded using the CAU-modified version of the MoLAS system (Spence 1994). Base plans were drawn at a scale of 1:50, whilst sections were drawn at a scale of 1:20. A digital photographic archive was also compiled. Throughout the following text, context numbers are indicated by square brackets (*e.g.* **[100]**). Specific details regarding the methodologies employed during the geophysical survey and geotechnical test pit monitoring phases of the project are presented in the appropriate sections of the results chapter, below.

Historical and Archaeological Background

The historical and archaeological background of the area surrounding the PDA has been covered in depth in two previous desktop assessments (Dickens 1999; Redfern 2001, updated 2008) and the wider background of Cambridge itself is reviewed in several published sources (see especially Bryan 1999; Taylor 1999); neither is therefore reproduced here in full. Nevertheless, it is necessary to briefly outline the background of the area in order to situate the site securely within its wider context.

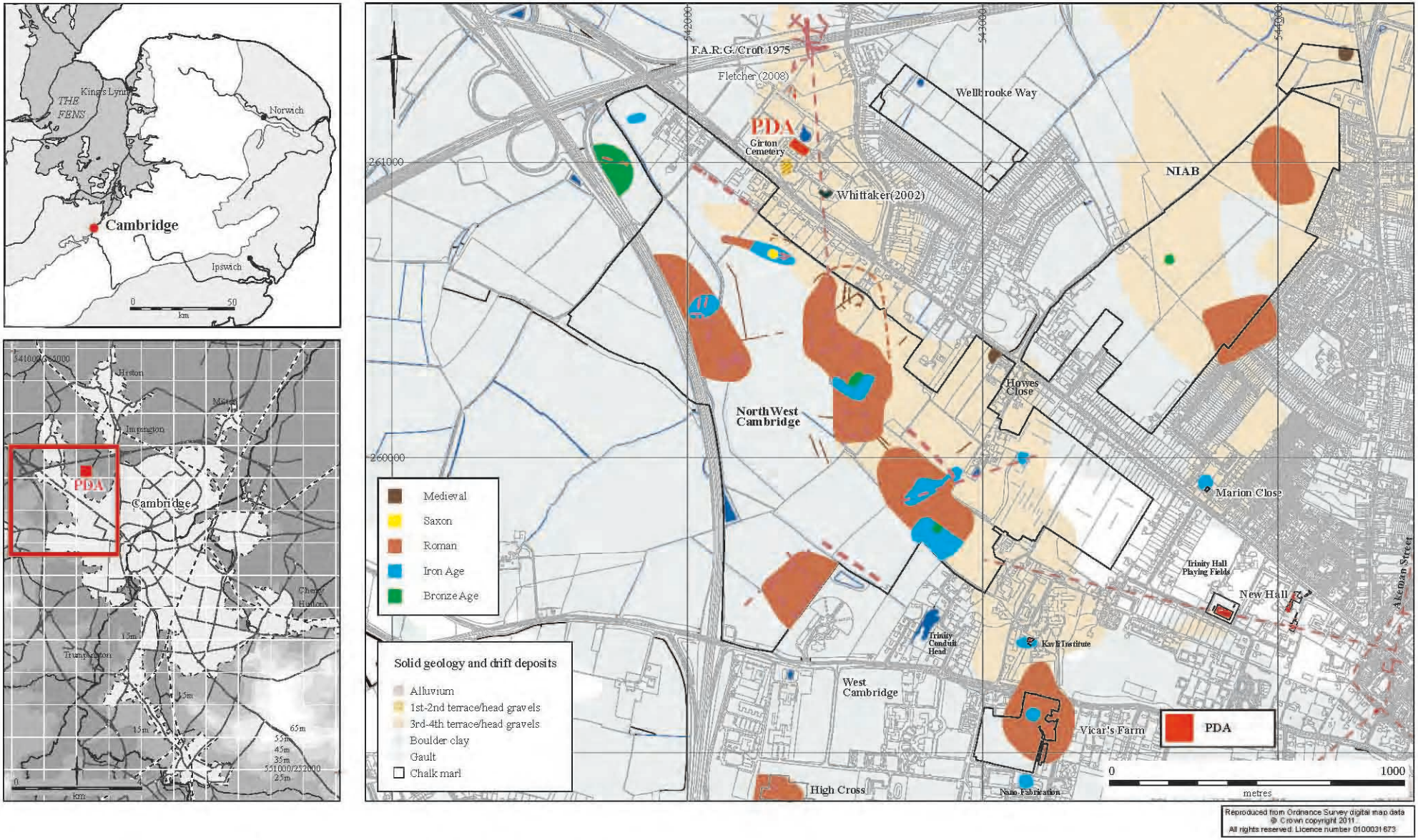

Figure 1. Location plan and known archaeological sites in vicinity of PDA

The earliest recorded material to have been recovered in this vicinity is Palaeolithic in date. A significant assemblage of Lower Palaeolithic worked flint, consisting of up to 1000 pieces, was recovered from coprolite workings at the Traveller's Rest Pit between 1911 and 1919 (*cf.* Marr 1920); additional flints were recovered from this site until at least 1938 (Clark 1938). Further stray finds of Palaeolithic date are also recorded from elsewhere within the Observatory Gravels (Griffith 1879; Babington 1883, 11-13; Browne 1974, map 10.35). In addition, small quantities of residual Mesolithic and Neolithic flint were also recovered during the recent evaluation undertaken at the North West Cambridge site, which is situated immediately to the south Girton College, on the opposite side of Huntingdon Road (Evans & Newman 2010, 137; see also Marr & Burkitt 1923). Two small Late Bronze Age sites were also encountered during this evaluation, whilst further settlement activity of this date has been identified at the Fitzwilliam College Library site to the east (Slater 2008, 6-10). The most significant later Prehistoric presence in the area, however, is Iron Age in date. Seven discrete Iron Age sites were identified during the North West Cambridge evaluation, the majority of which were clustered on the Observatory Gravel ridge (see Figure 2). Additional finds of this date have also been made at Marion Close (Mortimer & Evans 1997), within the grounds of the University Observatory (Masser 2000; Newman 2008), at Vicar's Farm (Lucas & Whitaker 2001, 17) and within the grounds of New Hall College (Evans 1996).

Nevertheless, it is the Roman period that has produced by far the most substantial number of finds in the area (see Figure 2). Directly pertinent to the present investigations, a number of Roman burials were discovered within the grounds of Girton College during the late 19th century (Hollingworth & O'Reilly 1925; Liversidge 1977, 15-16). In the first instance, two richly accompanied 2nd century AD cremations were identified in the area of Emily Davies Court during the construction of tennis courts in 1881. A small number of Late Roman (probably 4th century) inhumations were also encountered during the works conducted in this area (see Figure 2). Relatively large quantities of Roman building materials – including worked and moulded stone, as well as five fragments of statuary – were also recovered from the site. Although these were initially thought to have been associated with roadside funerary monuments (Hollingworth & O'Reilly 1925, 36; Liversidge 1977, 15-16), more recently it has been postulated that they may have been derived from a substantial building such as a villa (Scott 1993, 37; Taylor 1997, 53). A series of rectilinear enclosures identified by aerial photography lying immediately to the north of the College are also potentially of Roman date (F.A.R.G. & Croft 1977; see Figure 2). Further to the south, on the opposite side of Huntindon Road, a number of additional Roman burials have been recorded. In 1863, for example, *in situ* human remains from this period were discovered within two Barnack stone coffins (Babington 1864; Babington 1883, 35-6; Liversidge 1977, 15-16). A further stone coffin was also identified in this area during an evaluation of the land surrounding Gravel Hill Farm that was undertaken in 2002, although unfortunately it was no longer *in situ* (Mackay *et al.* 2002, 9-11). Furthermore, an unknown number of cremations 'associated with Roman pottery' were also discovered in this same area in 1861 during coprolite quarrying activity (CHER ref: 16172). Finally, a barrow 'containing Roman coins', but otherwise of uncertain date, was disturbed during the construction of Huntingdon Road in *c.* 1745 (Lysons & Lysons 1808, 44-5).

A possible context for these various burials is provided by the presence of a Roman road that appears to have lain a little way to the southwest of present-day Huntingdon Road (Fox 1923, 168-9; Margary 1973, 210; Browne 1978, 17-19). This road extended from Cambridge in the west towards Godmanchester in the east (see Figure 2). Although originally identified by antiquarians in the 19th century (Lysons & Lysons 1808, 44-5; Babington 1864, 289), a portion of this road has recently been excavated at Murray Edwards' – formerly New Hall – College (Hutton 2009, 5-12), and its ephemeral remains may also have been encountered during the North West Cambridge evaluation (Evans & Newman 2010, 121-25). This routeway appears to have remained a focus of activity during the succeeding Early Saxon period. During the 5th to 6th centuries AD, at least 100 inhumations and 200 cremations (many of them urned) were inserted into the area of the former Roman cemetery at Girton College (von Hügel 1886, lxxiv; Hollingworth & O'Reilly 1925, 2; Rogerson 2007, 28). The precise location of these burials is unclear, however, and the circumstances surrounding their discovery are detailed further in the discussion section of this report. Similar finds had previously been made at the site during the construction of Old Wing in the early 1870s (Hollingworth & O'Reilly 1925, 2), and a small collection of urned cremations, with associated grave goods, was also recovered by T. Simpson Jones – a former student at Trinity College – "in Huntingdon Road" in 1874 (CHER ref: MCB12040). Furthermore, an additional Early Saxon cinerary urn was recovered a little way to the south at Bunker's Hill during the late 19th century, whilst 'one or more' inhumations of Anglo-Saxon date are also known to have been disturbed by coprolite quarrying somewhat further to the southeast (Fox 1923, 244). Despite this wealth of mortuary evidence in the vicinity, however, no settlement evidence of Anglo-Saxon date has yet been identified (*cf.* Cessford with Dickens 2005).

Subsequently, the area was given over to open field agriculture. Across Cambridgeshire generally, it seems that "where arable cultivation appears to have been continuous since the Roman period, and/or the landscape had been relatively open by its use for pasture, open fields were laid out on a large scale from about the mid 9th century" (Oosthuizen 2005, 167). Certainly, by the time of Domesday in 1086, the PDA was situated within fields belonging to the nearby village of Girton (Wright & Lewis 1989, 116-17). The latter settlement gradually increased in size during the Middle Ages, expanding from a population of 32 peasants in 1086 to 196 adults in 1377; during the later medieval period, however, it gradually declined, and only 34 households were present in 1563 (*ibid*.). The population rose again after the 1760s, and the open fields were finally enclosed in 1808 (*ibid*., 120-22). During the latter half of the 19th century, the southern portion of the Observatory Gravel ridge became the focus of intensive open-cast coprolite mining for the extraction of artificial fertiliser (*cf.* Grove 1976; O'Connor 1998). No such activity is recorded in the immediate vicinity of the PDA, however. Then, in 1872, the site was purchased by the newly founded College for Women, which was renamed Girton College upon its opening in October 1873 (Wright & Lewis 1989, 120). Initially classed as a 'recognised institution for the higher education for women', Girton was raised to the status of a full Cambridge College in April 1948. Since its establishment, Girton has gradually expanded to become one of the largest colleges in the University. Male fellows were first admitted in 1977, and male undergraduates in 1979.

Results

The results derived from the three phases of work are presented below in chronological order. All three phases are then discussed in combination in a separate section.

I) Geophysical Survey (Rose Ferraby)

A geophysical survey was conducted in two areas of Girton College – in Ash Court and next to the Mare's Run car park – on the 21st of February 2011 to identify the presence/absence of archaeological features within the two PDAs (see Figure 2). To this end, magnetometry was chosen as the best method of survey, since it is relatively quick and easy to conduct and has the ability to locate archaeological features such as walls, ditches, hearths, kilns and pits. A magnetometer detects sub-surface changes in the earths' magnetic field, and these variations are represented in a greyscale plot (see Figures 3 and 4); the stronger the magnetic signal, the darker it is depicted. This method of survey can be affected by modern disturbance, however, especially by the presence of utilities, metal fencing, buildings, concrete, etc. Magnetometry works best covering large areas, at a landscape scale; in small areas it is more difficult to interpret the results. A series of 20m by 20m grids were established by hand in each of the survey areas; these were then walked in 1.0m transects, with readings taken every 0.25m. The grids were located so as to fit into the areas earmarked for development, as no prior archaeological orientation has been recorded. The grids were tied into the Ordnance Survey using a Leica 1200 GPS, and the survey itself was conducted using a Bartington Grad-201 fluxgate gradiometer.

Ash Court

The strip of quiet magnetic signal visible along the northeast side of the survey area represents the modern bank that runs parallel to Orchard Drive; the quieter signal is due to the increased depth of any features caused by the banking of soil. The rest of the survey area is dominated by strong, dipolar results that represent high magnetic anomalies (see Figure 3). In part, these may be caused by the presence of the Granta Backbone Network, which runs roughly north-south through the area. The rest may result from the presence of modern disturbance and detritus deposited during the levelling of this area and the construction of the adjacent squash court. Any more subtle anomalies or features have been largely lost or muted by the stronger results. However, there is one possible feature visible running east-west through the centre of the area. Its positive magnetic signal suggests it could be a wall. Other anomalies may represent pits, although the history of the site as an area of ash dumps makes these very likely to be ash related. Overall, the results of this survey are less clear than those for Mare's Run.

Mare's Run

Sub-surface features are visible in the eastern half of the survey area. There is a clear difference between the quiet magnetic response in the west, and the dipolar signals in the east (see Figure 4). These appear to be linear features running on northeast-northwest and northwest-southeast alignments. The strength of the signals suggests that these could be walls or similarly solid structures lying very close to the surface. It is not clear, however, whether these are modern/recent features or represent something much older. The strength of the signal would tend to suggest something moderately recent.

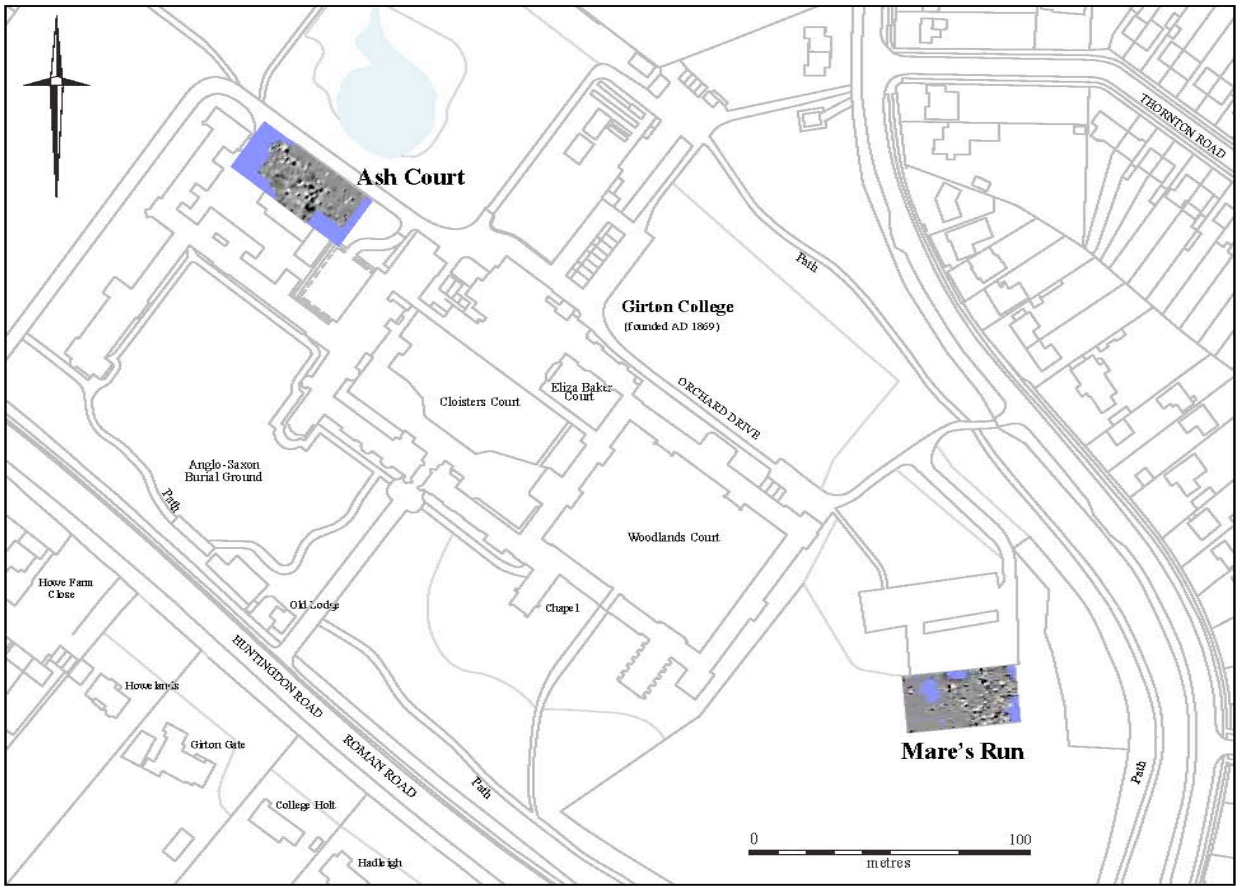

Figure 2. Location of geophysical surveys

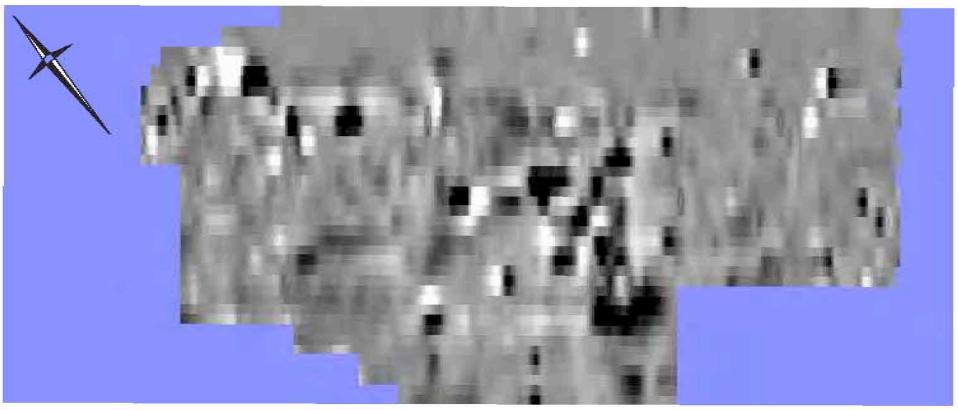

Figure 3. Ash Court results

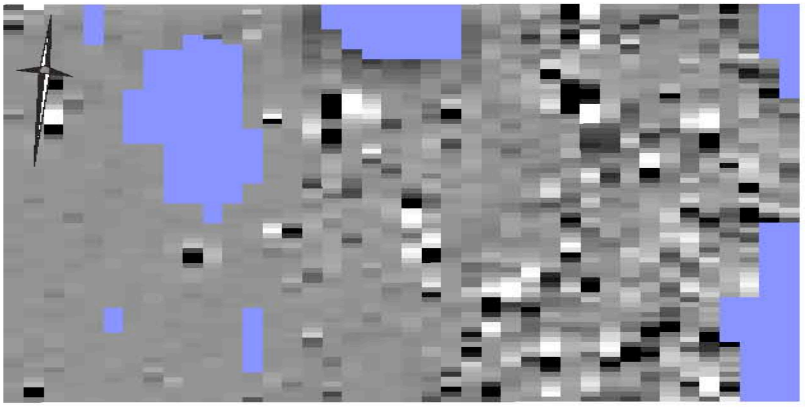

Figure 4. Mare's Run results

II) Geotechnical Test Pit Monitoring (Jacqui Hutton)

Archaeological monitoring was undertaken during the excavation of five geotechnical test pits situated upon the lawn of Ash Court on the 25th of February 2011 (see Figure 5). Three of these were dug by a mechanical excavator using a 0.60m wide toothed ditching bucket (Test Pits 1, 2 and 4) and two – Test Pits 3 and 5, which were situated immediately against the walls of standing buildings – were dug by hand. Overall, the restricted size of the test pits precluded detailed observation, and significantly reduced the likelihood of identifying archaeological remains. Furthermore, the location of two test pits immediately adjacent to the foundations of standing buildings also significantly reduced the probability of encountering undisturbed deposits in these locations. Nevertheless, a number of results were obtained. Test Pit 1, for example, was clearly situated within a 19th century cut feature of significant size, which was not bottomed. Elsewhere, Test Pits 2 and 4 both encountered modern disturbance associated with recently felled trees. No archaeological features, artefacts or human bones were identified during the course of the investigation.

Test Pit 1

This test pit was situated towards the northwestern corner of the PDA, in close proximity to the present car park. It measured 2.80m by 0.70m in extent, and was excavated to a depth of 1.75m. Here, evidence of extensive disturbance was encountered, including layers of re-deposited boulder clay. At a depth of 1.75m the loosely compacted fills began to collapse, and excavation was halted. Natural gravels did not appear to have been reached. Artefacts encountered included fragments of 19th century brick, tile and glass that are notably similar to that materials employed in the construction of the adjacent Old Wing of the college. These were not retained.

Test Pit 2

This test pit was situated towards the northeastern corner of the PDA. It measured 2.0m by 0.60m in extent, and was excavated to a depth of 1.40m. Here, evidence of extensive bioturbation was encountered, which was most probably associated with a recently felled tree. Natural gravels were encountered at a depth of 1.40m.

Test Pit 3

This test pit was situated against the external face of the northwest wall of the squash court. It measured 0.45m by 0.50m in extent, and was excavated to a depth of 1.12m. Here, hand-excavation revealed that beneath a 0.25m thick band of gravel the concrete foundations of this building rested upon natural gravels at a depth of 1.12m.

Test Pit 4

This test pit was situated towards the southeastern corner of the PDA, immediately adjacent to Orchard Drive. It measured 2.10m by 0.70m in extent, and was excavated to a depth of 1.30m. Here, evidence of a modern bank composed of upcast gravel was encountered. In addition, extensive bioturbation was also present, which was most probably associated with a recently felled tree. Natural gravels were encountered at a depth of 1.10m.

Test Pit 5

This test pit was situated against external face of the northwest wall of the swimming pool building. It measured 0.45m by 0.50m in extent, and was excavated to a depth of 2.05m. Here, hand-excavation revealed that the stepped brick foundations were extensive, reaching a depth of 2.05m, where they rested upon natural gravels.

III) Evaluation Trenching (Richard Newman)

Following on from the two preceding phases of work, four evaluation trenches were excavated at the site on the 11th of April 2011 (see Figure 5). These were carefully sited so as to avoid the large number of services – including the Granta Backbone Network – that were recorded as being present in this area. In addition, Trench 1 was positioned outside the footprint of the PDA, in close proximity to Old Wing, in order to investigate the possible continuation of the College's Roman and Anglo-Saxon cemetery. Trenches 2, 3 and 4 were therefore situated in such a way as to investigate as much of the lawn area as practicably possible. A number of results were obtained from this work. Although the sequence within Trench 2 had been entirely truncated by a large, late 19th century gravel quarry – almost certainly the same feature as had previously been encountered in Test Pit 1 (see above) – the deposits that were identified in the remaining trenches were generally well-preserved. In each case, the earliest features to be encountered consisted of tree-boles/tree-throws that showed no signs of anthropogenic involvement in their creation. These were then overlain by a horizon of well-worked horticultural soil. As this latter deposit showed no evidence of bioturbation, it appears likely that the area was cleared prior to the commencement of agricultural activity. Unfortunately, no dating evidence was recovered and it is therefore unclear when this clearance episode took place. Overlying the horticultural soil was a compacted spread of ash and charcoal that was deposited in the late 19th century, during the early years of Girton College. Indeed, the introduction of this material led directly to the naming of this area as 'Ash Court'. Finally, evidence of 20th century landscaping activity – in the form of a rubble spread, and an upcast gravel bank flanking Orchard Drive – was also encountered.

Trench 1

This trench was located within a car park that lay a short distance to the southwest of the PDA. It was positioned in as close proximity as possible to the Old Wing of the college, in order to determine whether the known Anglo-Saxon cemetery extended this far to the northeast. It measured 2.00m by 2.00m in extent, and was excavated to a depth of 1.06m. Natural gravels were encountered at 23.05m OD. The earliest feature to be encountered in this trench consisted of irregular sub-oval cut **[105]**, which had moderately sloping concave sides and a concave base. It measured 0.54m by 0.20m+ in extent and 0.18m deep and was filled by **[104]**, a mid reddish brown sandy silt deposit with occasional to frequent gravel inclusions. This feature most probably represents animal/root disturbance, and is notably very similar to the tree-throws encountered in Trenches 3 and 4. Above this feature lay **[103]**, a deposit of mid brown clay silt with occasional gravel inclusions that became increasing paler and gravellier with depth (see Figure 6). The deposit measured 0.50m in depth, and most probably comprised a well-worked horticultural soil (this same material was also present in Trenches 3 and 4). No evidence of grave cuts or cremations was encountered, indicating that the Anglo-Saxon cemetery does not extend into this area. The horticultural soil was overlain by **[102]**, a make-up layer consisting of mixed orange gravels and CBM fragments that measured 0.14m thick. This acted as bedding for tarmac surface **[101]**, which was 0.14m thick. A brick-built manhole, with an associated 0.18m wide northeast-southwest aligned service pipe, was associated with this phase of activity. The top of the pipe lay 1.3m below present ground surface, at 22.60m OD. Finally, a second car park surface – **[100]**, which consisted of a 0.10m thick orange sandy gravel deposit with CBM fragment inclusions – was also present. This had sealed the earlier manhole, which was not recorded on the service plan.

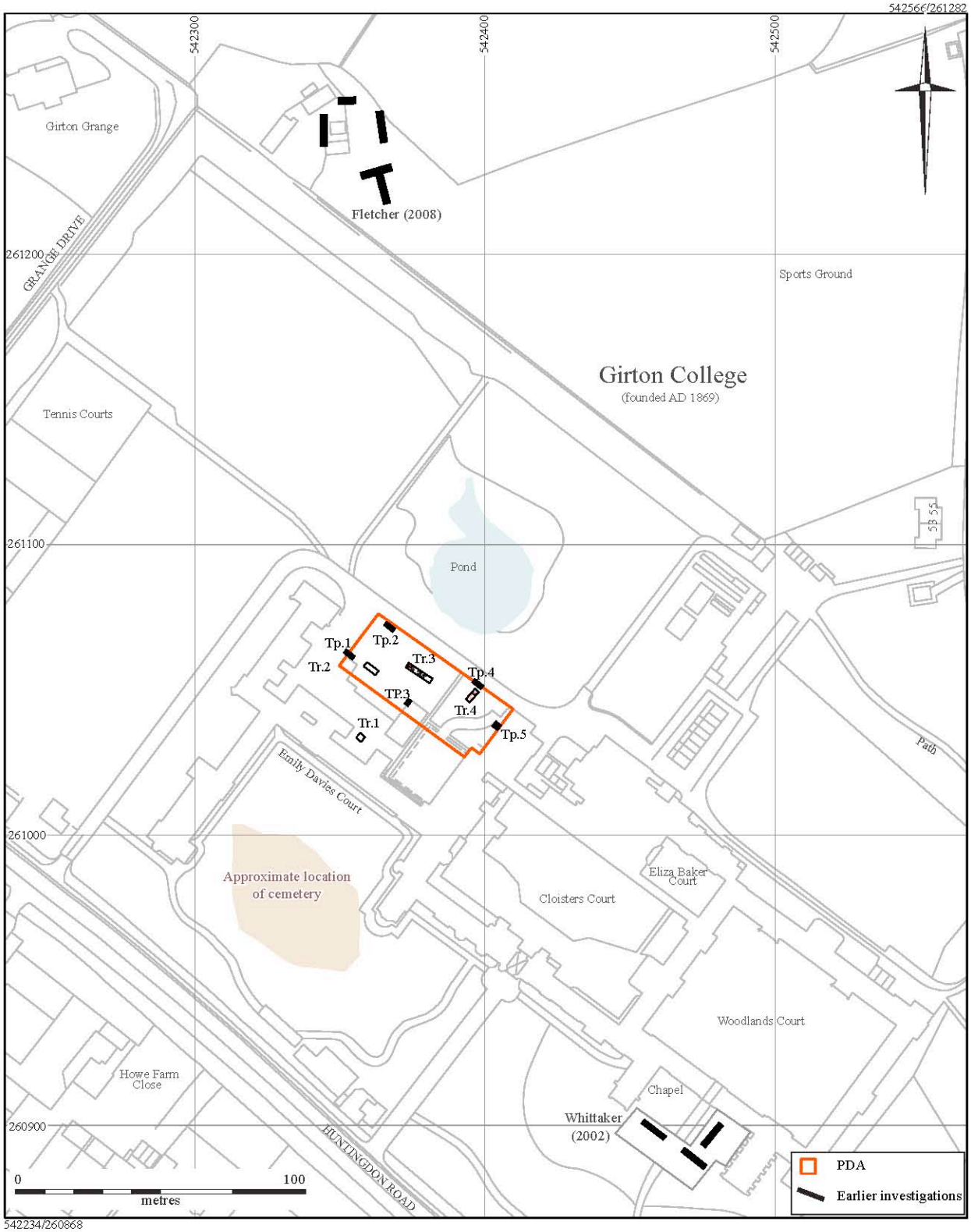

Figure 5. Location of Test Pits 1-5 and Evaluation Trenches 1-4

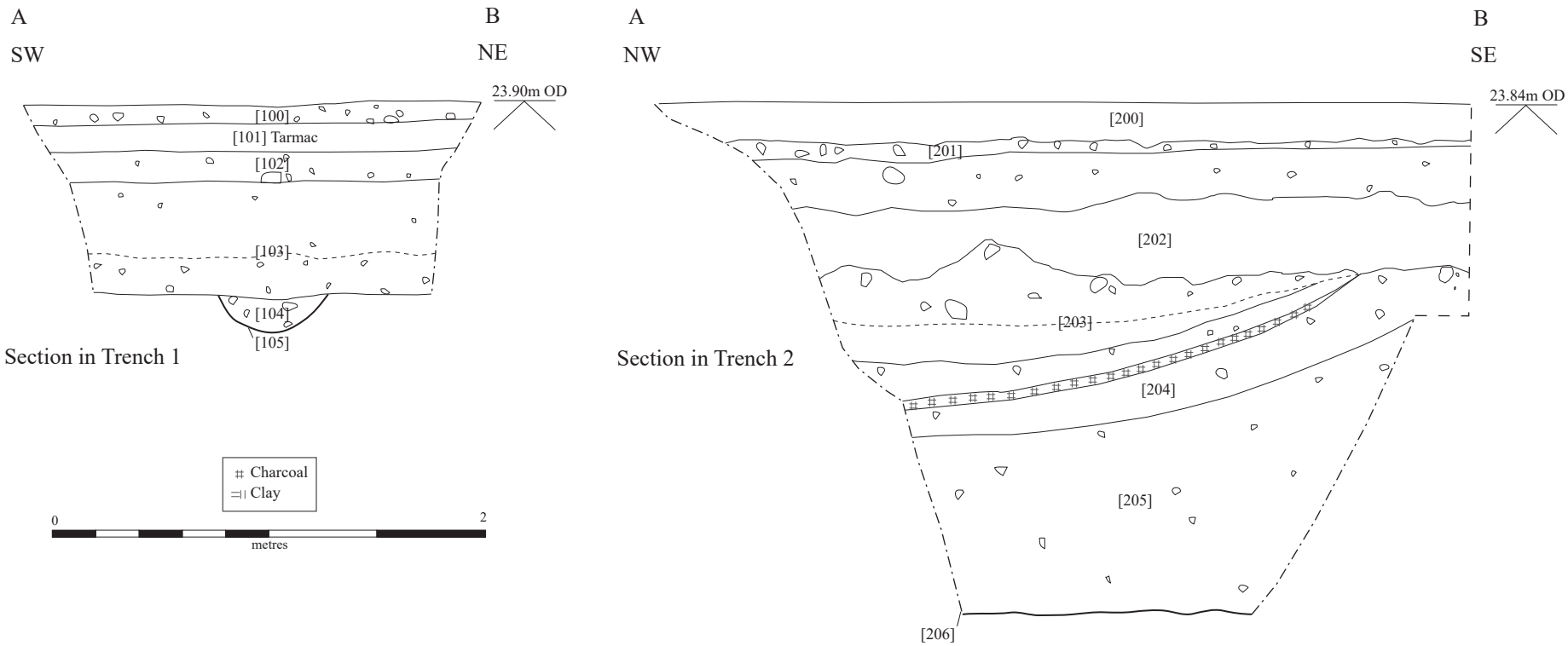

Figure 6. Trenches 1 and 2, Photographs and sections

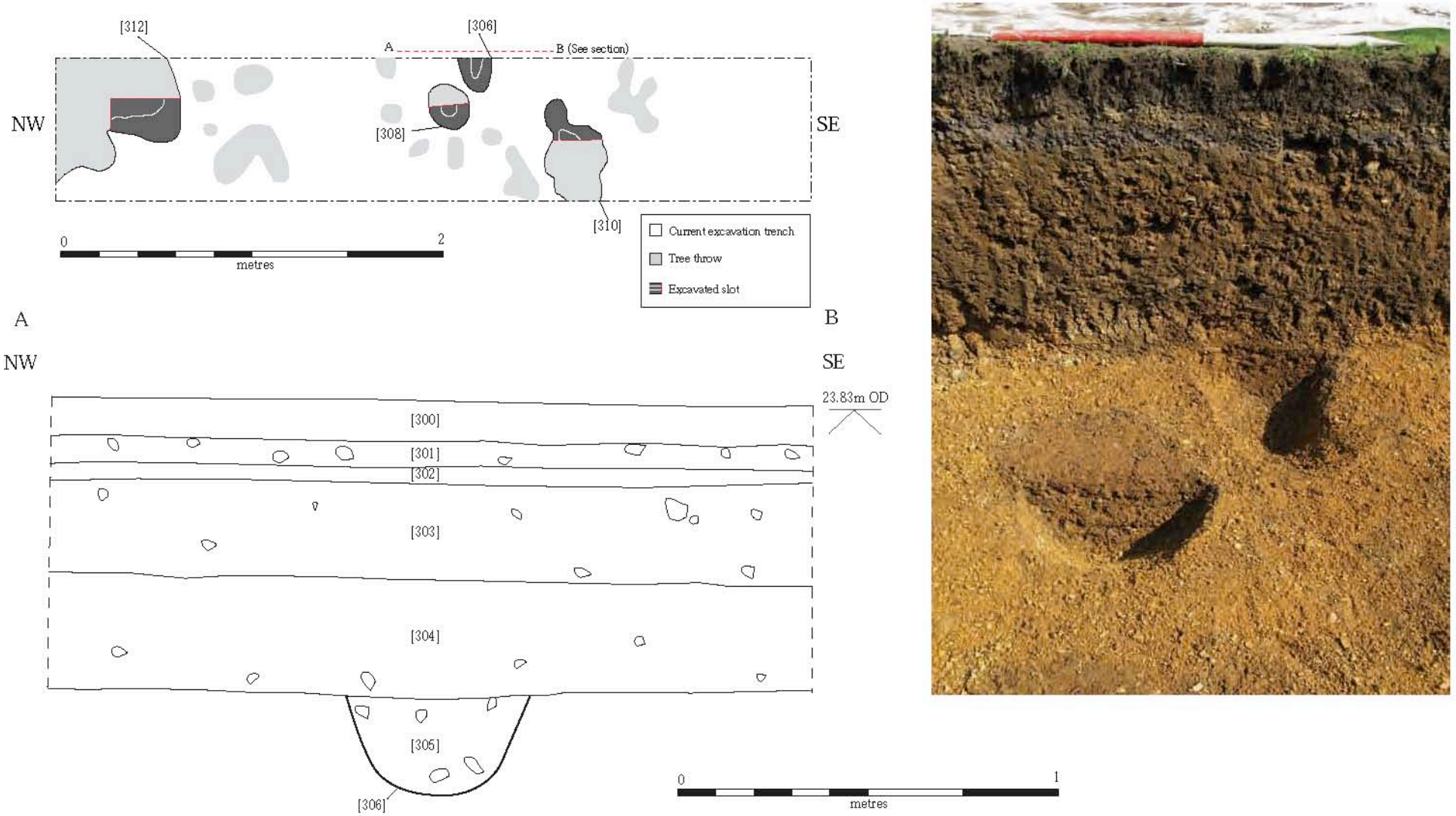

Figure 7. Plan, section and photograph of Trench 3

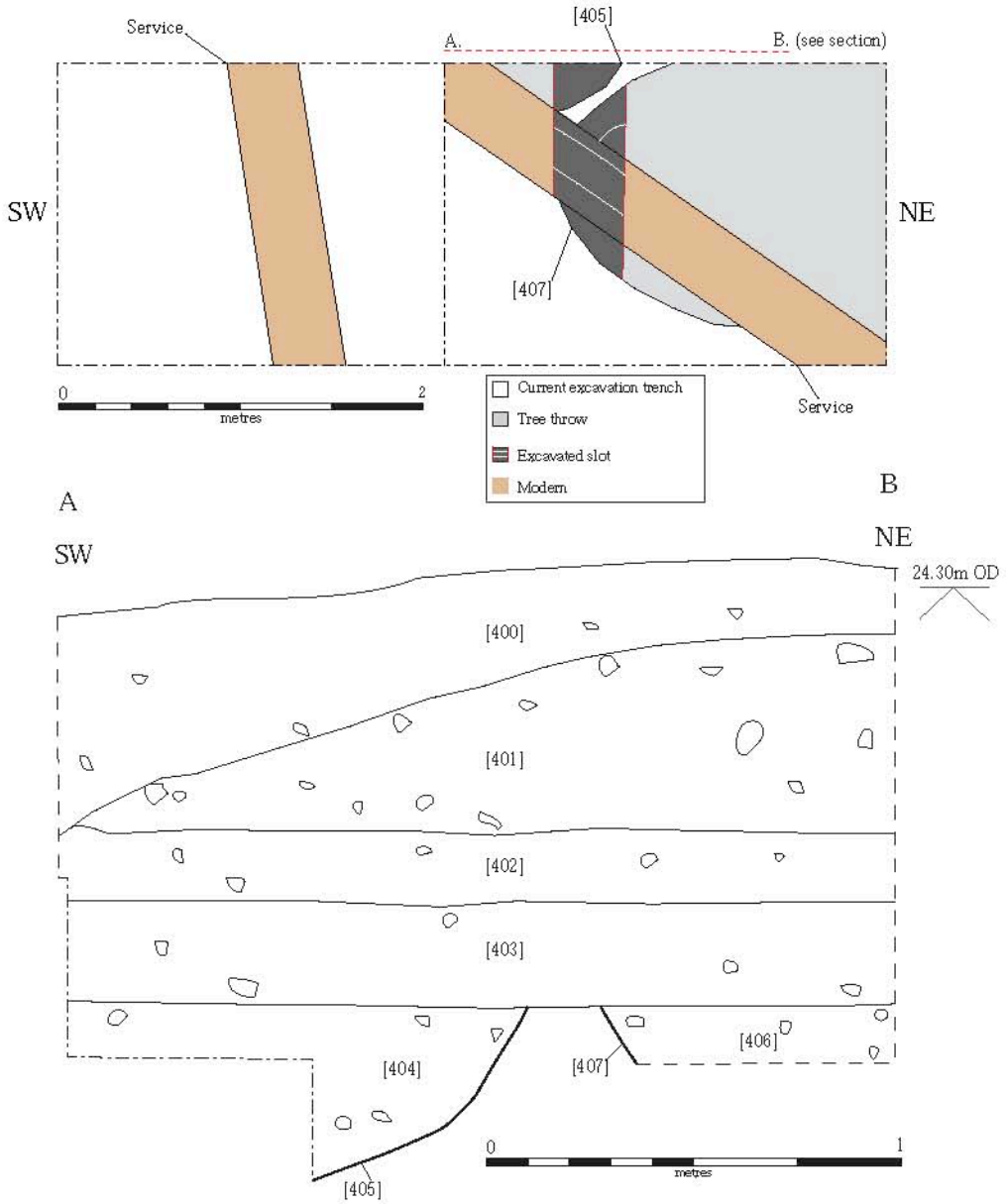

Figure 8. Plan, section and photograph of Trench 4

Trench 2

This trench was located on the lawn of Ash Court, towards the eastern end of the PDA. It measured 5.00m by 1.80m in extent, and was excavated to a depth of 2.40m. This trench was entirely situated within a late 19th century gravel quarry. Although the sides of this feature's cut, **[206]**, were not encountered, its relatively flat base was identified at 21.56m OD. This was situated only 0.1m above the upper horizon of the Gault clay (see Figure 6), thereby demonstrating that the quarry had specifically targeted the overlying gravels. Based upon the results of this evaluation – allied with those recovered during the monitoring of nearby Test Pit 1, which also encountered this feature – it is clear that the quarry measured in excess of 15.0m+ by 2.0m+ in extent and 1.75m+ deep. Its basal fill, **[205]**, consisted of mixed mid brown silty clay with occasional charcoal fleck and gravel inclusions measuring 1.30m thick. Above this lay banded deposit **[204]**, which consisted of: dark brown silt with frequent ash inclusions (measuring 0.17m thick); loose pale yellow sandy mortar, with frequent gravel inclusions (measuring 0.12m thick); dark grey to black ash (measuring 0.06m thick); and, finally, a second, basal band of loose pale yellow sandy mortar with frequent gravel inclusions (measuring 0.31m thick). These deposits represent a series of dumps that were inserted into the partially backfilled quarry. They appear to have been predominately construction-related in nature, and may well have been deposited during the construction of the nearby Old Wing of the college in 1870-71. Subsequently, a loose deposit of mixed orange sandy gravels (**[203]**), measuring 0.38m thick, was deposited. This was then overlain by **[202]**, a banded make-up layer. The latter consisted of an initial band of redeposited pale bluish grey Gault clay, measuring 0.40m thick, which was overlain by a second band of mid brown clay silt with occasional to frequent gravel and CBM inclusions measuring 0.27m thick. This material may have been inserted as a capping deposit to seal the pit, or may alternatively have acted as make-up inserted sometime later to counteract any initial slumpage. Above this deposit lay **[201]**, a loose mid yellowish brown rubble and silt spread, containing frequent mortar and CBM fragment inclusions, which measured 0.08m thick. This was also present, as **[301]**, in Trench 3. Finally, a thin deposit of humic topsoil (**[200]**), measuring 0.19m thick, was also present.

Trench 3

This trench was located towards the centre of the PDA. It measured 9.67m by 1.80m in extent, and was excavated to a depth of 0.81m. Natural gravels were encountered at 23.10m OD. Here, the earliest features to be encountered consisted of a series of irregular tree-boles/tree-throws (see Figure 7). Four of these features were investigated, although none of them contained datable material and no evidence of anthropogenic involvement in their creation was encountered. Their cuts – **[312]**, **[310]**, **[308]** and **[306]** – varied between 0.44m and 1.78m+ by 0.40m and 1.62m+ in extent, and between 0.23m and 0.38m in depth. Each had an irregular, moderately sloping concave profile. Their fills – **[311]**, **[309]**, **[307]** and **[305]**, respectively – consisted of uniform deposits mid reddish brown sandy silt with frequent gravel inclusions. These features were overlain by **[304]**, a layer of mid to dark brown humic clay silt, with occasional to rare gravel inclusions, which measured 0.30m thick. This deposit was in turn overlain by **[303]**, a layer of mid brown sandy clay silt with occasional to frequent gravel inclusions, which measured 0.25m thick. Both of these latter deposits appear to represent horticultural soils (the latter of which was markedly more humic) that had been repeatedly turned and homogenised. Overlying **[303]** was compacted spread of dark grey to black ash and charcoal **[302]**. This measured 0.05m thick, and represents repeated dumps of hearth rake-out debris that were deposited during the early years of Girton College. This material was overlain by **[301]**, a loosely compacted layer of mid yellowish brown rubble and silt that contained frequent mortar and CBM fragment inclusions, 0.06m thick. The latter deposit, which was also encountered (as **[201]**) in Trench 2, most probably represents make-up/levelling material. The sequence was topped by dark brown humic topsoil **[300]**, which measured 0.10m thick.

Trench 4

This trench was located towards the southeastern corner of the PDA. It measured 4.87m by 1.80m in extent, and was excavated to a depth of 1.24m. Natural gravels were encountered at 23.17m OD. The earliest features to be encountered in this trench consisted of two tree-boles/tree-throws, which were almost identical to those previously discussed in relation to Trench 3. The first of these was irregularly sub-oval in form, and its cut – **[407]** – had moderately sloping concave sides. It measured 1.90m+ by 1.48m+ in extent and 0.16m+ deep (its base was not reached). The second, **[405]**, was also irregularly sub-oval in form and had a very similar profile to its companion. It measured 0.78m+ by 0.27m+ in extent and 0.43m+ deep, although again its base was not reached. The fills of both tree-throws – **[406]** and **[404]** respectively – consisted of mid to pale reddish brown sandy silt with frequent gravel inclusions. Overlying these features was **[403]**, a deposit mid brown clay silt that measured 0.26m thick. This appears to represent the same horticultural soil that was previously identified in Trenches 1 and 3. It was overlain by a band of dark brown humic topsoil, **[402]**, which measured 0.18m thick. This was in turn sealed beneath a bank of upcast mid yellowish brown silty gravel (see Figure 8). The latter deposit – **[401]**, which measured 0.49m thick – was situated adjacent to Orchard Drive, a modern tarmac road, and was in turn overlain by a second band of topsoil (**[400]**) that measured 0.44m thick. These last two deposits therefore represent modern alterations to the landscape of the area. Two services were also present within this trench. The first, which was aligned northwest-southeast, consisted of a clay field drain situated 0.70m below the present ground surface (at 23.60m OD). The second, which was aligned east-west, comprised a brown salt-glazed sewage pipe. This was situated somewhat deeper, at 1.46m below the present ground surface (22.84m OD).

Discussion

As the above section reveals, no remains of archaeological significance were identified within the proposed development area. This result is perhaps somewhat surprising, given the wealth of archaeological discoveries that have previously been made in the vicinity (see the historical and archaeological background section, above). Nevertheless, very similar results were also obtained during two previous evaluations that were conducted in this area, one situated close by the College Chapel (Whittaker 2002) and one at the New Pavilion site (Fletcher 2008). In both locations only a single, undated feature was identified. Furthermore, a larger evaluation conducted a little way to the north, on land off Wellbrooke Way (Alexander 2000), also revealed a similarly blank landscape (although it should be noted that this latter area was situated upon the less hospitable Gault Clay plain, as opposed to the free-draining Observatory Gravel ridge). Taken together, therefore, these results indicate that archaeological activity in this area, although intensive, was not continuous. Instead, a more 'nodal' pattern is implied, in which discrete areas of settlement and activity were dispersed amidst an open – and, from later Prehistoric times onwards, most probably agricultural – landscape. Whilst the nodal points themselves are likely to have shifted both location and focus over time, the area as a whole appears to have only been selectively used during any one period. Just such a pattern of landscape dispersal was identified during the recent North West Cambridge evaluation, conducted a little way to the south of the PDA (Evans & Newman 2010, 142-51; see also Figure 2). In addition, a very similar pattern, in which discrete sites also appear to have been situated around 300m to 500m apart, has recently been identified to the south of Cambridge in the Addenbrooke's Environs (see Evans *et al.* 2008). Based upon this model, therefore, the present area of investigation appears to have been situated within an agrarian 'green belt' that lay between areas of more intensive activity. Indeed, it appears likely that the site was so used from at least Roman times until the foundation of Girton College itself in the late 19th century.

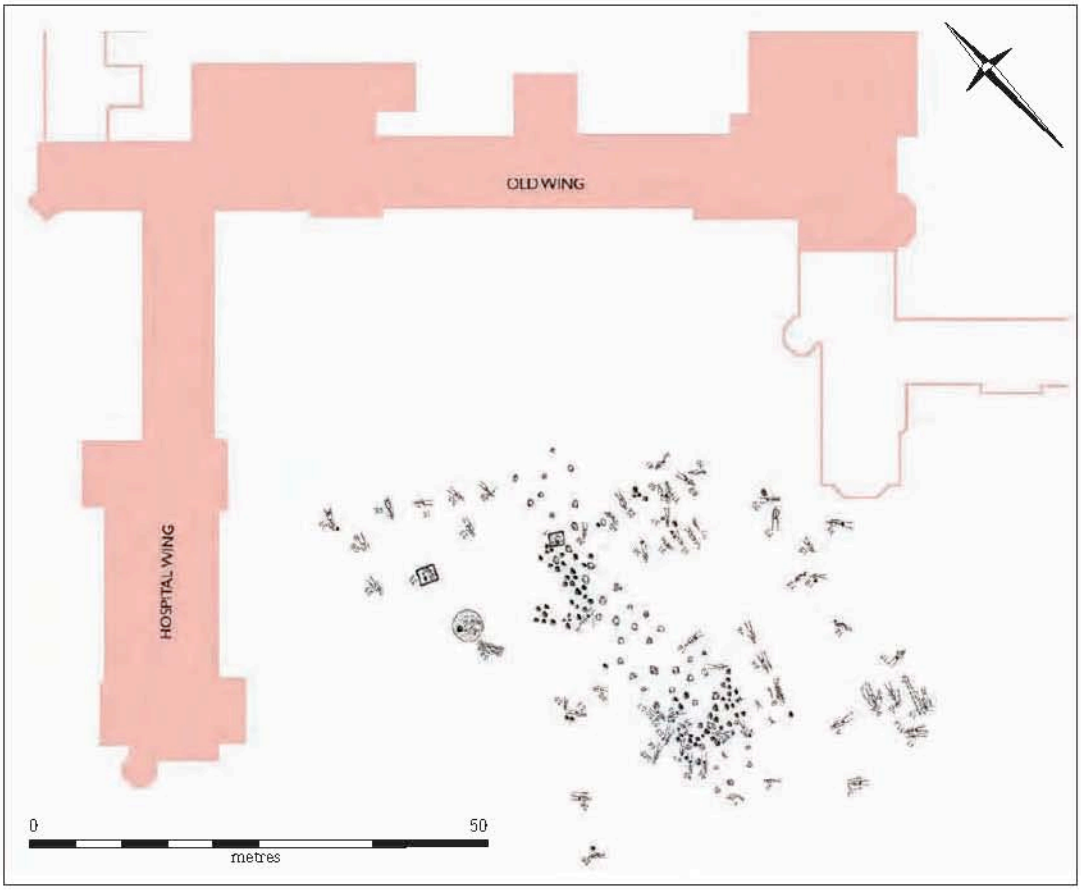

Figure 9. Approximate location of Roman and Anglo-Saxon cemetery (with, below, fragment of Roman statuary recovered from the site) Plan courtesy of Peter Sparks.

Perhaps the single most important implication to be derived from the absence of archaeological remains in the area of Ash Court concerns the location of the College's Roman and Anglo-Saxon cemetery. This is because numerous inhumations and cremations are known to have been encountered on several occasions immediately to the south of the PDA, in the area of what is now Emily Davies Court, during construction works conducted in the late 19th century (von Hügel 1886; Hollingworth & O'Reilly 1925; Rogerson 2007). Due to the limited nature of the records that were kept during this period, however, the precise location and extent of the cemetery remains unclear. One possibility was that burials continued beneath, and potentially to the north of, the College's Old Wing. But, as a result of the present investigations, the latter part of this theory at least can be discounted. Indeed, although a number of cinerary urns were reportedly encountered "during the construction of Old Wing" in 1872 (Hollingworth & O'Reilly 1925, 2), it is by no means certain that these were located within the footprint of the building itself. As the recent evaluation has demonstrated, a number of large gravel quarry pits were dug as part of the construction process, and numerous other ancillary works are also likely to have taken place. These artefacts might therefore have been encountered at some distance from the location of the actual structure. Furthermore, the discovery of additional Early Saxon urns "in Huntingdon Road" in 1874 (CHER ref: MCB12040) suggests that the cemetery may have been situated further to the south, closer to the southern boundary of the College grounds (although, once again, the precise location of these discoveries is unclear).

The main phase of archaeological excavation at the site took place in 1881. At this time, human remains were encountered during the construction of a series of tennis courts located immediately to the east of the College's Hospital Wing. As a result of these discoveries, Francis Jenkinson – Lecturer in Classics at the University of Cambridge – conducted an excavation of the area. His work revealed part of a large Anglo-Saxon cemetery of late 4th to early 6th century date, which contained of a minimum of *c.* 150 cremations and some 75 to 80 inhumations. A small number of Roman burials, including two richly accompanied 2nd century cremations, were also identified. Although no formal report of the excavation was published, Jenkinson maintained a meticulous notebook and a monograph based upon his notes was subsequently produced (Hollingworth & O'Reilly 1925). The plan shown in Figure 9 reveals the extent of Jenkinson's discoveries. Unfortunately, however, although the layout of the cemetery itself in this depiction is internally consistent, its precise location with regard to the surrounding buildings was not recorded; the plan therefore represents a 'best guess' approximation. Five years after Jenkinson's work, during the construction of the Tower Wing of the College in 1886, a further excavation was undertaken by Baron von Hügel (who was then curator of the University Museum of Archaeology and Ethnology). Although this second phase of work was conducted in great haste – in advance of the ongoing construction – around 30 inhumations and a large number of cinerary urns were recovered (von Hügel 1886, lxxiv; Rogerson 2007, 28). Very few details of their discovery were recorded, however, and it is again unclear whether the burials were situated within the footprint of the building itself. Significantly, the limits of the cemetery were not identified during either phase of investigation, implying that additional burials may still await discovery.

It has previously been suggested that much of the Roman material that was encountered during the excavation of the Girton College cemetery, which included both statuary (Figure 9) and numerous fragments of worked and moulded stone that were utilised as packing in many of the Anglo-Saxon graves, was derived from an elaborate roadside tomb (Hollingworth & O'Reilly 1925, 36; Liversidge 1977, 15-16). Given the sheer quantity of building material represented, however – allied with evidence of possible foundation trenches, along with the widespread presence of contemporary domestic refuse – it has also been suggested that the remains are more likely to represent the traces of a nearby settlement or villa complex. (Scott 1993, 37; Taylor 1997, 53). In either case, it appears to have been the presence of this preceding phase of Roman activity that attracted the addition of a large number of Anglo-Saxon burials to the site. The Roman remains themselves are most likely to have been situated in relatively close proximity to the contemporary Cambridge to Godmanchester road, which lay a short distance to the south of present-day Huntingdon Road (see Figure 2). This is especially true if the fragments were indeed derived from elaborate funerary monuments. Even were the Anglo-Saxon cemetery to have been established to the rear of the principal area of Roman activity, therefore, it is still perhaps most likely to have been focused within the southern portion of the College grounds. Thus, in conclusion, the present evaluation has confirmed that the cemetery does not extend to the north of Old Wing, and is in fact most likely to have lain some distance to the south. Furthermore, the dearth of archaeological features within the PDA – allied with the complete absence of pre-19th century material culture, even in residual contexts – indicates that this area comprised part of a relatively marginal agricultural hinterland up until the construction of Girton College in the early 1870s.

Acknowledgments

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Bibliography

Alexander, M. 2000. *Archaeological Assessment for Land off Wellbrooke Way, Girton, Cambridge*. Cambridge Archaeological Unit Report No. 368.

Babington, C. C. 1864. 'On Roman interments by the side of the so-called Via Devana, near Cambridge', *Comm. Cambridge Antiq. Soc.* 2, 289-294.

Babington, C. C. 1883. *Ancient Cambridgeshire*. London: Deighton Bell & Co.

British Geological Survey. 1976. *Cambridge*: *Sheet 188*. Southampton: Ordnance Survey.

Browne, D. M. 1974. 'An archaeological gazetteer of the city of Cambridge, 1973', *Proc. Camb. Antiq. Soc.* 65, 1-38.

Browne, D. M. 1978. 'Roman Cambridgeshire', in Wilkes, J. J. & Elrington, C. R. (ed's) *A History of the County of Cambridge and the Isle of Ely: Volume VII*. Oxford: Oxford University Press, 1-92.

Bryan, P. 1999. *Cambridge: the shaping of the city*. Cambridge: privately published.

Cessford, C. with Dickens, A. 2005. 'Cambridge Castle Hill: excavations of Saxon, Medieval and Post-Medieval deposits, Saxon execution site and a Medieval coinhoard', *Proc. Cambridge Antiq. Soc. 94*, 73-101.

Clark, J. G. D. 1938. 'Early Man', in Salzman, L. F. (ed.) *A History of the County of Cambridge and the Isle of Ely: Volume I*. Oxford: Oxford University Press, 247-304.

Dickens, A. 1999. *Gravel Hill Farm, Cambridge: an archaeological desktop assessment*. Cambridge Archaeological Unit Report No. 319.

Dickens, A. 2011. *A Specification for Archaeological Evaluation at Ash Court, Girton College, Cambridge*. Unpublished Cambridge Archaeological Unit document.

Evans, C. 1996. *New Hall College: Prehistoric landuse and Roman hinterland*. Cambridge Archaeological Unit Report No. 190.

Evans, C. with Mackay, D. & Webley, L. 2008. *Borderlands: the archaeology of the Addenbrooke's environs, South Cambridge.* CAU Landscape Archives: New Archaeologies of the Cambridge Region (1).

Evans, C. & Newman, R. 2010. *North West Cambridge, University of Cambridge: Archaeological Evaluation Fieldwork*. Cambridge Archaeological Unit Report No. 921.

Field Archaeological Rescue Group (F.A.R.G.) & Croft, P. W. 1977. 'An Iron Age and Roman crop-mark site at Girton', *Proc. Cambridge Antiq. Soc.* 67, 3-9.

Fox, C. 1923. *The archaeology of the Cambridge region*. Cambridge: Cambridge University Press.

Fletcher, T. 2008. *The New Pavilion Site, Girton College, Girton, Cambridgeshire*. Oxford Archaeology East Report No. 1060.

Griffith, A. F. 1879. 'On a flint implement found at Barnwell', *Proc. Cambridge Antiq. Soc.* 4, 177-80.

Grove, R. 1976. *The Cambridgeshire coprolite mining rush.* Cambridge: Oleander Press.

Guillebaud, P. 2005. 'The enclosure of Cambridge St. Giles: Cambridge University and the Parliamentary Act of 1802', *Proc. Cambridge Antiq. Soc.* 94, 185-98.

Hollingworth, E. J. & O'Reilly, M. M. 1925. *The Anglo-Saxon Cemetery at Girton College, Cambridge*. Cambridge: Cambridge University Press.

Hutton, J. 2009. *Orchard Court, Murray Edwards College, Cambridge: an archaeological investigation*. Cambridge Archaeological Unit Report No. 901.

Liversidge, J. 1977. 'Roman burials in the Cambridge area', *Proc. Cambridge Antiq. Soc.* 67, 11-38.

Lucas, G. & Whittaker, P. 2001. *Vicar's Farm, Cambridge: post-excavation assessment report*. Cambridge Archaeological Unit Report No. 425.

Lysons, D. & Lysons, S. 1808 (republished 1978). *Magna Brittania, Volume II, Part 1: Cambridgeshire*. Republished by E. P. Publishing: Wakefield.

Mackay, D., Mortimer, R. & Evans, C. 2002. *Gravel Hill Farm, North West Cambridge: an archaeological evaluation*. Cambridge Archaeological Unit Report No. 513.

Margary, I. D. 1973. *Roman roads in Britain (3rd Edition)*. London: John Baker.

Marr, J. E. 1920. 'The Pleistocene deposits around Cambridge', *Quart. J. Geol. Soc.* 75, 204-44.

Marr, J. E. & Burkitt, M. C. 1923. 'A Neolithic site northwest of Cambridge', *Proc. Cambridge Antiq. Soc.* 25, 11-15.

Masser, P. 2000. *Archaeological investigations at the Hoyle Building site, Madingley Rise, Cambridge*. Cambridge Archaeological Unit Report No. 391.

Mortimer, R. & Evans, C. 1997. *The Marion Close enclosure: archaeological ex.cavations at 138 Huntingdon Road, Cambridge*. Cambridge Archaeological Report No. 203.

Newman, R. 2008. *The Kavli Institute for Cosmology, Cambridge: an archaeological excavation.* Cambridge Archaeological Unit Report No. 820.

O'Connor, B. 1998. *The dinosaurs on Coldham's Common: the story of Cambridge's coprolite industry.* Sandy: self-published.

Oosthuizen, S. 2005. 'New light on the origins of open-field farming', *Medieval Archaeology* 49, 165-94.

Redfern, N. 2001 (updated 2008). *North West Cambridge: an archaeological desk based assessment.* Cambridge Archaeological Unit Report No. 455.

Rogerson, A. 2007. 'Digging in the Nineteenth Century: the College Anglo-Saxon Graves', *Girton College Annual Review 2007*, 26-29.

Scott, E. 1993. *A gazetteer of Roman Villas in Britain*. Leicester: University of Leicester.

Slater, A. 2008. *Fitzwilliam College library: an archaeological excavation*. Cambridge Archaeological Unit Report No. 817.

Spence, C. 1994. *Archaeological Site Manual* (3rd edition). London: MoLAS.

Taylor, A. 1999. *Cambridge: the hidden history*. Stroud: Tempus.

von Hügel, A. 1886. 'Note', *Proc. Cambridge Antiq. Soc.* 6, lxxiv.

Walker, F. G. 1910. 'Roman roads into Cambridge', *Proc. Cambridge Antiq. Soc.* 14, 141-76.

Whittaker, P. 2002. *An Archaeological Evaluation at Girton College, Cambridge, Cambridgeshire*. Cambridge Archaeological Unit Report No. 501.

Wright, A. P. M. & Lewis, C. P. 1989 'Girton parish', in Wright, A. P. M. & Lewis, C. P. (eds.). *A History of the County of Cambridge and the Isle of Ely: Volume 9*. Oxford: Oxford University Press, 115-24.

Appendix 1

Gas Pipeline Trenches
Adam Slater

On 27th June 2011 trenches were cut on and alongside the line of a proposed new gas supply into Girton College. By agreement with Kasia Gdaniec these were added into the existing specification for the Ash Court works.

Results

Trench 1.
Trench 1 was to be located close to Huntington Road. Excavation of the trench was not undertaken due to heavy tree coverage and the presence of new signage within its proposed location.

Trench 2.
Trench 2 was orientated northwest-southeast. It was 10m in length and a maximum of 1.09m in depth. Geology of gravelly sandy clay was present within the trench. No archaeology was encountered. A modern northeast to southwest aligned service trench was located within its south eastern end, with a fill of compacted clay with high quantities of modern brick and tile. The soil profile of Trench 2 was identical to that of Trenches 3 and 4, with the addition of a thin deposit of compacted sandy chalk [002] between subsoil [003] and topsoil [001], likely to represent residue related to the construction of adjacent college building in the 1960's and seemingly contemporary with the insertion of the service trench.

Trench 3.
Trench 3 was orientated northeast to southwest. It was 10m in length and a maximum of 0.92m in depth. Geology of sandy, gravelly clay was present within the trench and no archaeology was encountered.

Trench 4.
Trench 4 was orientated northeast to southwest, was 10m in length and a maximum of 1.07 m in depth. Geology of sandy, gravelly clay was present within the trench and no archaeology was encountered.

Trench No.	Deposit/ Context	Thickness	Description
2	001	0.25	Topsoil
	002	0.37	Modern building detritus
	003	0.93	Subsoil
3	001	0.24	Topsoil
	003	0.68	Subsoil
4	001	0.26	Topsoil
	003	0.81	Subsoil

Discussion

No archaeology was encountered in any of the trenches; the results would suggest that the Saxon cemetery does not extend this far to the west.

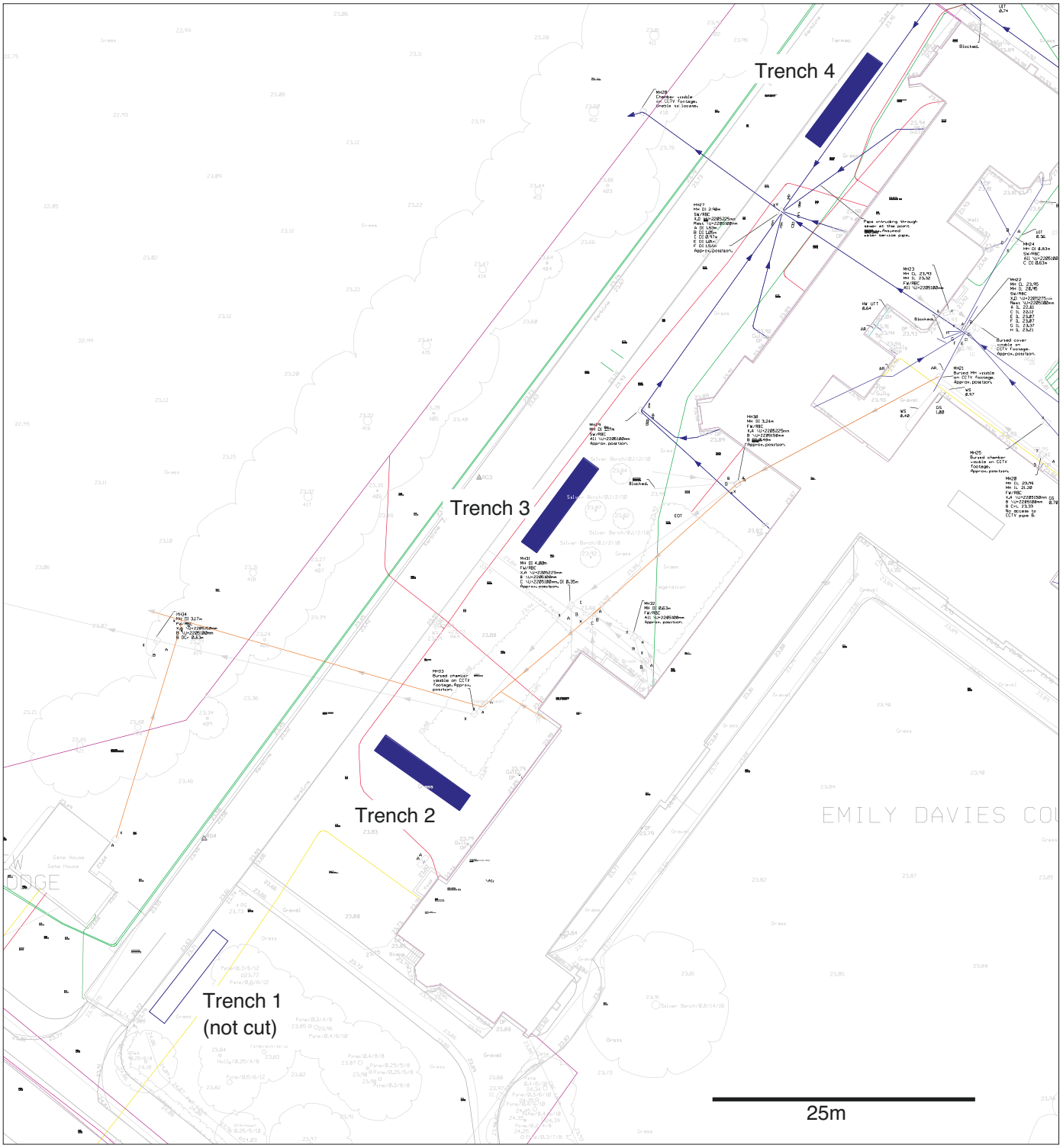

Figure 10 Gas Pipe Trench Locations

Oasis Form

OASIS ID: cambridg3-100390	
Project Details	
Project name	Ash Court, Girton College, Cambridge
Short description of the project	Three phases of archaeological investigation were undertaken at Ash Court, Girton College, Cambridge, between the 21st of February and the 11th of March 2011. In the first instance, a geophysical survey of the area was undertaken. Subsequently, the excavation of a series of five geotechnical test pits was monitored before, thirdly, four evaluation trenches were inserted at the site. The earliest features to be encountered during these works consisted of a series of tree-boles/tree-throws that showed no signs of anthropogenic involvement in their creation. These had been overlain by a horizon of well-worked horticultural soil. As this latter deposit showed no evidence of bioturbation, it appears likely that the area was cleared prior to the commencement of agricultural activity. Overlying the horticultural soil was a compacted spread of ash and charcoal that was deposited in the late 19th century, during the early years of Girton College. Also dating to this period was a large gravel quarry pit, which appears to have been associated with the initial construction of Old Wing in the early 1870s. Finally, evidence of 20th century landscaping activity - in the form of a rubble spread, and an upcast gravel bank flanking Orchard Drive - was also encountered. These results clearly demonstrate that the large Anglo-Saxon cemetery that was previously identified a little way to the south during the late 19th century does not extend into the proposed development area.
Project dates	Start: 21-02-2011 End: 11-04-2011
Previous/future work	No / Not known
Any associated project reference codes	ECB 3580 - HER event no.
Any associated project reference codes	ACG 11 - Sitecode
Type of project	Field evaluation
Site status	None
Current Land use	Other 5 - Garden
Monument type	TREE THROW Uncertain
Significant Finds	N/A None
Methods & techniques	'Geophysical Survey','Sample Trenches'
Development type	Large/ medium scale extensions to existing structures (e.g. church, school, hospitals, law courts, etc.)
Prompt	Direction from Local Planning Authority - PPG16
Position in the planning process	After full determination (eg. As a condition)
Solid geology (other)	Gault Clay
Drift geology	RIVER TERRACE DEPOSITS
Techniques	Magnetometry

Project Location	
Country	England
Site location	CAMBRIDGESHIRE SOUTH CAMBRIDGESHIRE GIRTON Ash Court, Girton College
Postcode	CB3 0JG
Study area	1282.00 Square metres
Site coordinates	TL 4236 6105 52.2288009937 0.08465056147920 52 13 43 N 000 05 04 E Point
Height OD / Depth	Min: 23.05m Max: 23.17m
Project Creators	
Name of Organisation	Cambridge Archaeological Unit
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body
Project design originator	Alison Dickens
Project director/manager	Alison Dickens
Project supervisor	Rose Ferraby
Project supervisor	Richard Newman
Project supervisor	Jacqui Hutton
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Girton College
Project Archives	
Physical Archive Exists?	No
Digital Archive recipient	Cambridge Archaeological Unit
Digital Archive ID	ACG 11
Digital Contents	'other'
Digital Media available	'Geophysics','Images raster / digital photography','Survey'
Paper Archive recipient	Cambridge Archaeological Unit
Paper Archive ID	ACG 11
Paper Contents	'Stratigraphic','Survey','other'
Paper Media available	'Context sheet','Plan','Section','Survey '
Project Bibliography	
Publication type	Grey literature (unpublished document/manuscript)

Title	Ash Court, Girton College, Cambridge: an Archaeological Evaluation
Author(s)/Editor(s)	NEwman, R., Ferraby, R. and Hutton, J.
Other bibliographic details	CAU Report Number 1006
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