Babraham Research Campus: The Car Park Extension

An Open Area Excavation and Monitoring, Excavation and Recording Exercise Interim Assessment



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CAMBRIDGE ARCHAEOLOGICAL UNIT UNIVERSITY OF CAMBRIDGE



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Contents

Non Technical Summary	3
Car Park Extension: Open Area Excavation	
Introduction	4
Methodology	4
Results	4
Discussion	5
Acknowledgements	5
Car Park Extension: Watching Brief	
Introduction	6
Methodology	6
Results	6
Discussion	7
Acknowledgements	8
References	9
List of Figures	
Figure 1 – Location map	
Figure 2 – Location of site showing previous excavation	
Figure 3 – Plan showing Watching Brief machining levels	
Figure 4 – Plan showing all features from the Excavation and Watching Brief	
Figure 5 – Photograph of F.201	
Figure 6 – Photograph of F.203	
Figure 7 – Photograph and plan of horse burial F.134	
Figure 8 – Photograph and plan of truncated grave F.114	
Figure 9 – Section of medieval well F.119	

Non Technical Summary

Cambridge Archaeological Unit undertook an open-area excavation and watching brief at Babraham Research Institute prior to the extension of a car-park. Despite a high level of modern disturbance and truncation, these phases of excavation uncovered significant archaeological remains in the form of a possible late Anglo-Saxon building, together with $12^{th} - 13^{th}$ c. AD ditches, rubbish pits, wells and livestock burials. Also present was a truncated Romano-British grave and a segment of post-medieval road with corresponding road-side ditch.

Babraham Research Institute – Car Park Extension: Open Area

Matthew Collins

Introduction

Following on from the trenched evaluation, a small open area totalling 900m² and centred on TL 5103 5070 was excavated within the eastern half of the Car Park Extension (see Figures 2 and 4) in order to further investigate the medieval archaeology identified within that phase of work. The work was carried out between 20th June and 4th July 2011 and a significant phase of medieval and post-medieval archaeology was identified, excavated and recorded.

Methodology

Located on the site of the former Calcutta Research building and other laboratories, the development area was machined under archaeological supervision with a 20-ton tracked 360° machine using a toothless 2.0m wide ditching bucket. Deposits overlying the archaeological level consisted primarily of building rubble with partially preserved subsoil only present across some of the area. Concrete and brick foundations and disused services also truncated large areas of the site (see Figure 4).

Excavation of archaeological features was carried out using hand-tools, with one metre slots excavated at varying intervals in ditches, pits and post-holes half-sectioned whilst other features including graves and animal burials were fully excavated. The recording followed a CAU modified MoLAS system whereby feature numbers, F. were assigned to stratigraphic events and numbers [fill] and [cut] to individual contexts. The area was planned digitally using a Total Station and individual sections were drawn at scale 1:10.

All work was carried out in strict accordance with statutory Health and Safety legislation and with the recommendations of FAME (Allen & Holt 2010) and in accordance with a site specific risk assessment and the CAU Health and Safety policy. The CAU assigned site code is RCB 11 (2) and event number is ECB 3630.

Results

Despite the impact of modern intrusions and disturbance a significant quantity of archaeology was identified across this site (see Figure 4). Ditch **F.112** (a recut of ditch **F.113**) bisected the site on a northwest-southeast orientation and was a substantial medieval $(12^{th} - 13^{th} c. AD)$ boundary ditch. To the south of this ditch was an area of medieval pits, some of which, **F.106** for example, contained significant quantities of finds. Also present here were two substantial medieval wells including **F.119**, (see Figure 9) which was augered to a depth of 3.20m and horse burial, F.134, (see Figure 7). All these features could be dated between the $12^{th} - 13^{th} c. AD$.

To the north of ditch **F.112** was a marked increase in the level modern truncation. However, towards the northern edge of the excavation a possible, truncated, late Anglo-Saxon, Sunken Floored Building (SFB) was present together with several small pits. These features contained a moderate number of Thetford and St. Neots

ware pot sherds suggesting a $10^{th}-12^{th}$ date, together with animal bone, a loom-weight fragment, a knife blade and burnt stone. West of these features and adjacent to the edge of the excavation area were a series of at least three cow and two horse burials, one of which retained horse-shoes attached to the hooves. The date of these features is currently ambiguous as an occasional sherd of abraded medieval and late medieval pot was found within them; however these types of burials are unusual for the medieval period and could potentially be later in date.

Unlike previous phases of work at the Babraham Research Institute, limited evidence for Romano-British activity was identified. This included grave, **F.114**, (see Figure 8) which was truncated by ditch **F.112** and modern activity. Only the legs and feet survived, although hobnails were recovered from around one of the feet together with a (crushed) whole pot dating to the mid-late Roman period. The only other feature positively dated to this period was large, shallow rectangular pit **F.111** which is probably a quarry reused as a rubbish dump.

Discussion

The single truncated grave identified here is some distance from the known Romano-British cemetery within the current car park area (Timberlake, Armour, Dodwell & Anderson *forthcoming*) so it is unclear at this stage whether this burial is part of that or separate, although it is of a similar date.

The possible late Anglo-Saxon SFB was an unexpected find and suggests activity during this period was more wide-spread than previously assumed. Whereas the density of $12^{th} - 13^{th}$ c. medieval features and the number of finds recovered from them is indicative of nearby settlement activity, with the substantial boundary ditch **F.112** probably marking its northern extent, although no evidence for actual structures dating to this period were identified within the excavation area.

Acknowledgements

The archaeological excavation was commissioned by Chris Chapman on behalf of Babraham Bioscience Technologies (BBT). Machining was undertaken by Lattenbury Services. Emma Beadsmoore was CAU Project Manager. Donald Horne (CAU) undertook the digital planning and surveying whilst Vicki Herring produced the graphics. Site staff were Lizzie Middleton, Leanne Zecki and Matt Jones. Thanks also to David Hall who spot-dated the medieval finds.

Babraham Research Campus – Car Par Extension: Monitoring, Excavation and Recording Exercise

Simon Timberlake

Introduction

A Monitoring, Excavation, and Recording exercise was conducted in an area of approx. 1700m², which lay to the west of the car park limits and the open area excavation. The monitoring began on the 10th August and was completed on the 17th August 2011.

Methodology

Stripping of the topsoil and a partial strip of the subsoil and removal of concrete foundations was carried out by 13 ton 360° machines using either 1.2m wide toothed buckets or 2m wide ditching buckets. The nature of the levelling for the future car park and building foundations was such that a complete strip down to the top of the subsoil was only achieved within certain areas; such as along the western, northern and south-eastern edges of the former excavation, and along the furthest western edge of the development area (Figure 3). Those areas where archaeology was identified were cleaned by hand, whilst features were planned, excavated and recorded. All archaeological features were dug by hand. Typically 1m wide slots were dug across ditches and quadrants cut out of pits. Planning was undertaken relationally by measuring off from the edges of the former archaeological excavation area, though other features were planned and levelled using GPS. The work was carried out in strict accordance with statutory Health and Safety legislation and with the recommendations of FAME (Allen & Holt 2010). The CAU site code was RCB 11(2) WB.

Results

Particular attention was paid to the removal of soils along the remaining strip of land between the eastern edge of the excavation area and the car park fence in respect of the possibility of further burials associated with the Roman Cemetery to the west. Nothing of this nature was found, though this may in part be due to the extent of the previously disturbed and made-up ground within this area. Indeed, much of the rest of the monitoring area was not stripped down to natural. However, archaeology was identified and sampled within three distinct areas aligned in a NW-SE strip across the area. Rather than indicating the real distribution of archaeology, it seems more likely that we are simply looking at a topographic high within the underlying natural, the surface of which has been cleaned off.

Just east of the excavation area the continuation of ditch **F.112** was examined, and south of this a 3.25m wide, shallow and irregular-shaped flat-bottomed pit (**F.202**). This was half-excavated but produced only Post-medieval pot. From the main fill (2013) of this came16th-17th-century sherds including some 16th-century coarseware.

Immediately to the west of the excavation (RCB11(2)) the continuation of ditch **F.112** appears to cease. At this point the ditch terminal appears to cut a group of intercutting

pits. Two of these pits were examined. One of these was a small 2m wide irregular to oval-shaped pit with a deep, weathered hollowed-out base consisting of interconnecting hollows in the chalk (**F.200**). From the main fill (2000) of this was recovered animal bone and some Early Medieval pot including sherds of 13th-15th-century and 10th-12th-century (St.Neots) ware. This feature cut the edge of a much shallower 4.5m long and 0.45m deep sub-rectangular pit (**F.201**) with a near-vertical (western) sides. From the basal sandy gravel fill (2008) of this pit came three 2nd-3rd century AD greywares century AD indicating a clear Roman origin to this feature. Nevertheless, both features appear represent former quarry pits of different periods; in one case at least (**F.200**) this seems to have been used later for rubbish disposal.

Some 13m to the NW of these features was located a 3m wide section of truncated flint-metalled road (F.210) which appeared to be associated with a 1.4m wide ditch (F.209) on its eastern side. No pottery was recovered from this ditch, though the presence of small fragments of 17th-century brick might provide some indication of date. To the west of this point two c.2m wide round shallow features (F.207 and F.208) to the west of this produced no finds; only one of these was a proper pit, and both of them may have been modern. Beyond these was identified a 14.5m+ long NE-SW oriented ditch (F.203) with a 1.5m wide shallow V-shaped sloping sides and a narrow flat-bottomed profile some c. 0.4m deep, which was sectioned in two places. The base of this ditch which had been cut into the chalk had a similar weathered appearance, whilst tree throws had cut the surface outline of this in at least three different places. No pottery was recovered from the ditch although some 16th-17thcentury glass (C. Cessford pers.com.) was found within the silty-chalky-gravel fill (2031) of ditch sample in Slot 2. It seems probable that the ditch is Post-medieval on this basis, though a Medieval or still earlier date is still possible given the amount of tree disturbance this has experienced. The ditch appears to terminate to the NE of this point, though just as likely this feature is truncated here – as was suggested by the survival of a small island segment of ditch just a little way beyond. The outline of the southern end was even more unclear at the point where this was intersected by an electricity cable. However, it would appear from the eastern edge of this that the ditch then turned due south. Northwards of this point against the western edge of the machine-stripped area a 2m wide sub-rectangular feature (F.206) was half-sectioned and examined. This proved not to be a true cut hollow, and was undateable, possibly modern. The final feature which was partially cut by a gas main at the northern end of this area consisted of a circular 3m wide flat-bottomed pit (F.205) devoid of finds, but possibly Post-medieval in date. This had been cut by a small modern chalk-filled feature (F.204).

Discussion

Although a number of archaeological features were found, none of these significantly changed the picture revealed by the open area excavation of RCB11(2). The three Post-medieval, Medieval and Roman features examined were all located fairly close to the western and eastern edges of the RCB11(2) excavation – in other words, most of these relate to the similar sorts of features previously examined within the excavated area. Any other Roman or Medieval features which may have been present (within the monitoring area) would not and could not have been examined on account of the ground levels of the development. Thus any archaeology revealed will be

preserved in situ. The much more intensive examination of the westernmost area of the PDA seems to have shown fairly conclusively that there is little evidence for the continuation of Roman or Medieval archaeology in this particular direction. The position and orientation of the Post-medieval road is interesting, in that it conforms almost exactly to the hypothetical branch suggested for the main Roman-Postmedieval road excavated in 2006 beneath the ARES Building Car Park (Timberlake et al. forthcoming). This it was thought linked up with the roadside ditches identified within Trench 6 of the Riverside site (Timberlake & Armour 2006), a fact confirmed by the recent excavations of a Post-medieval and an adjacent Roman Road aligned in this direction at RCB11(3). Thus in RCB11(2) we have a confirmed continuation of the Post-medieval road (the date of which seems to be supported by finds of 17thcentury brick in the ditch), which leaves the possibility that the earlier Roman Road is to be found a few metres to the east beneath unexcavated ground, or else it lies buried underneath the Postmedieval road, or has been truncated by the levelling carried out prior to the construction of the modern buildings. The width (c.3m) of this road in RCB11(2)WB clearly matches that revealed in RCB11(3), though the position of the ditch on the eastern side matches that of the Roman road. However, there is little resemblance between the profile of and fill of this and that of the Roman ditch. What we can see, therefore, is just one branch of the 17th-century wagon-way heading southwards to cross the ford and reach the fields beyond.

Close to the western edge of the excavation it has been useful to show the existence of another large and slightly irregular shallow Roman pit similar to **F.111**, found a short distance to the NE within the area of the excavation. In much the same way the medieval pit which cuts this is merely a continuation of the fairly abundant pitting encountered within the excavation and representing, most probably, the same 'backyard plot' quarry pits, middens and wells of the Medieval settlement previously identified along the line of the modern road and the incidentally corresponding to the line of the easternmost edge of the former Babraham Roman settlement (Timberlake et al. *ibid.*).

Roman Pottery – Katie Anderson

Three Romano-British greywares were collected from [2008], dating 2^{nd} - 3^{rd} century AD. This included a straight-sided dish and a lid-seated jar.

Acknowledgements

The archaeological watching brief here was undertaken for the client Babraham Bioscience Technologies (BBT) and commissioned by Chris Chapman (BBT). Emma Beadsmoore was CAU Project Manager. Donald Horne (CAU) undertook the surveying whilst Vicki Herring produced the graphics for this report.

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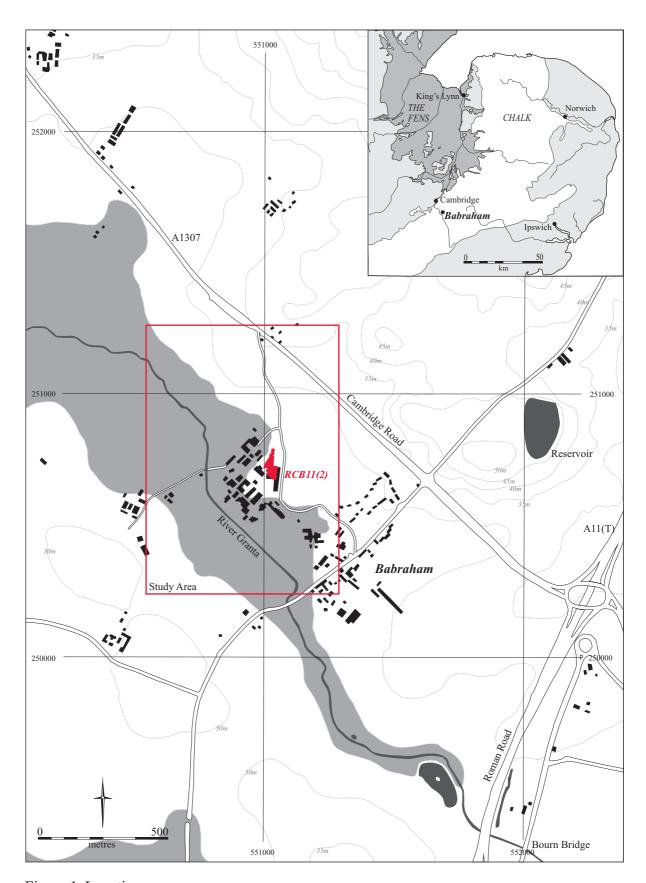


Figure 1. Location map

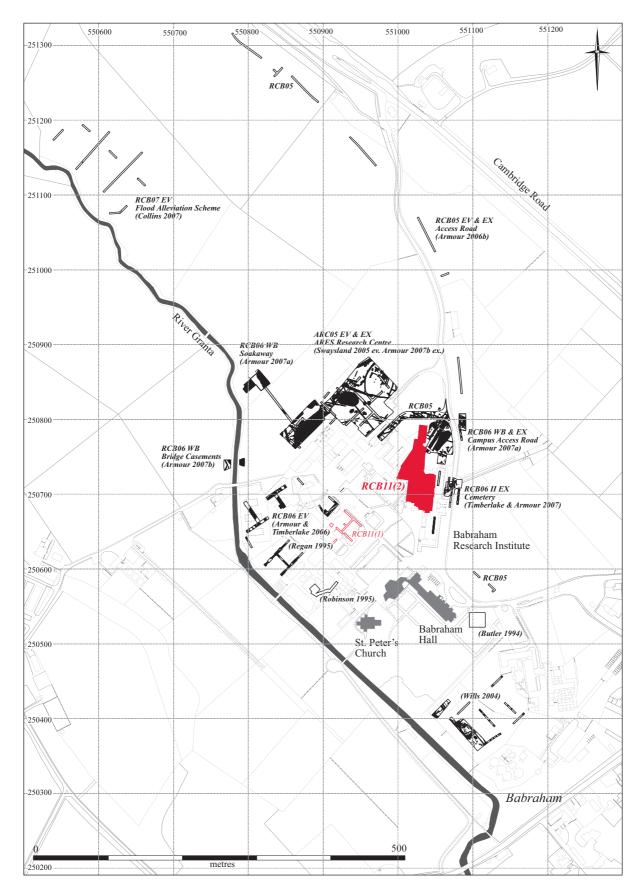


Figure 2. Location of site showing previous excavations in the area

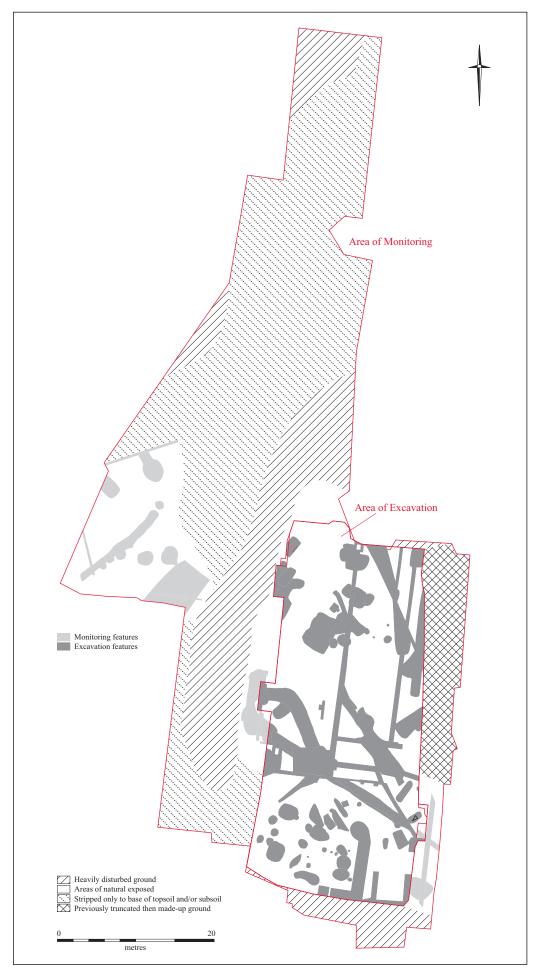


Figure 3. PDA showing area(s) of monitoring, levels of stripping and truncation and archaeological features

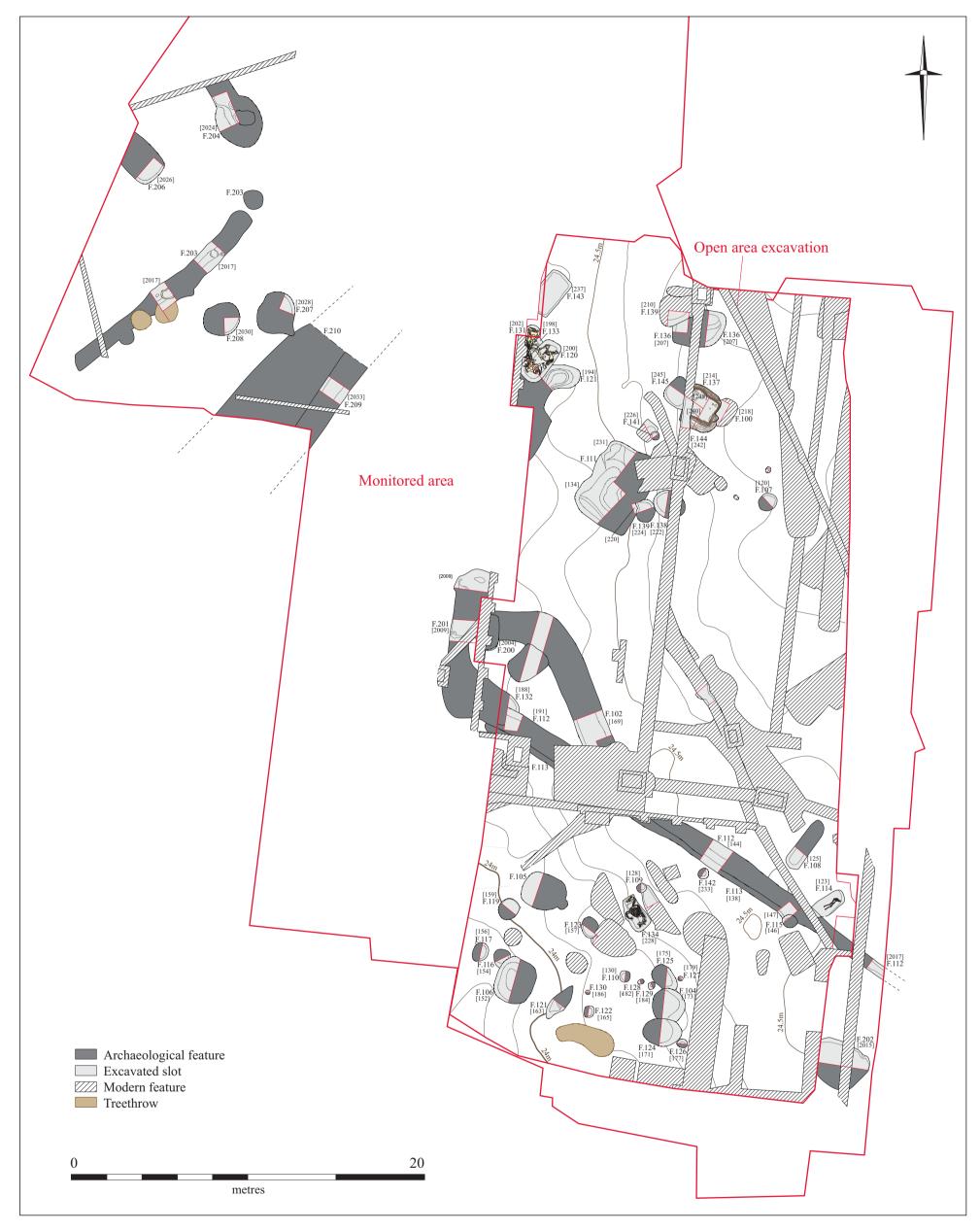


Figure 4. Plan of all Monitoring and Excavation features





Figure 5. F.201 excavated

Figure 6. Terminal of ditch F.203



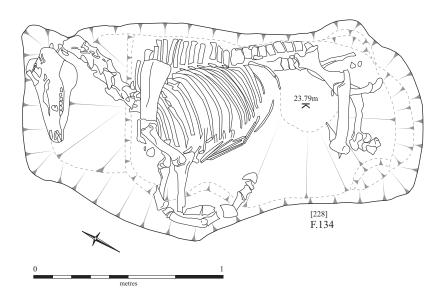


Figure 7. Photograph and plan of horse burial F.134

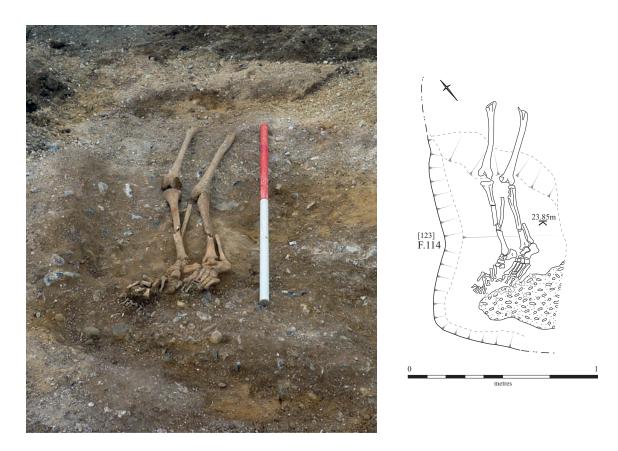


Figure 8. Photograph and plan of F.114 truncated Roman grave

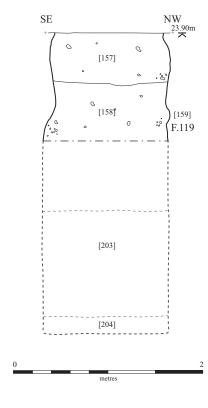


Figure 9. Section through well F.119, showing projected continuation based on auger results

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Project details

Project name Babraham Research Institute: The Car Park Extension An Open Area Excavation and

Watching Brief Interim Assessment

Short description of the project

Cambridge Archaeological Unit undertook an open-area excavation and watching brief at Babraham Research Institute prior to the extension of a car-park. Despite a high level of modern disturbance and truncation, these phases of excavation uncovered significant archaeological remains in the form of a possible late Anglo-Saxon building, together with 12th - 13th c. AD ditches, rubbish pits, wells and livestock burials. Also present was a truncated Romano-British grave and a segment of post-medieval road

with corresponding road-side ditch.

Project dates Start: 20-06-2011 End: 17-08-2011

Previous/future

work

Yes / No

Type of project Recording project

Site status Local Authority Designated Archaeological Area

Current Land

use

Vacant Land 1 - Vacant land previously developed

Monument type SFB Early Medieval Monument type DITCHES Medieval

Monument type WELLS Medieval

Monument type PITS Medieval

Monument type ANIMAL BURIALS Medieval

Monument type GRAVE Roman

Significant Finds HUMAN BONE Roman Significant Finds ANIMAL BONE Medieval

Significant Finds POT Medieval

OASIS FORM - Print view

Investigation

'Open-area excavation', 'Watching Brief'

type

Prompt Direction from Local Planning Authority - PPS

Project location

Country England

Site location CAMBRIDGESHIRE SOUTH CAMBRIDGESHIRE BABRAHAM Babraham Research

Institute: The Car Park Extension

Postcode CB22 3AT

Study area 0.26 Hectares

Site coordinates TL 5103 5070 52.1334931031 0.206900512937 52 08 00 N 000 12 24 E Point

Height OD /

Depth

Min: 23.00m Max: 24.00m

Project creators

Name of Cambridge Archaeological Unit

Organisation

Project brief Local Authority Archaeologist and/or Planning Authority/advisory body

originator

Project design originator

Emma Beadsmoore

Project director/

Emma Beadsmoore

manager

Project Matthew Collins

supervisor

Project Simon Timberlake

supervisor

Type of sponsor/ Landowner

funding body

Name of Babraham Bioscience Technologies

sponsor/funding

body

Project archives

Physical Archive Cambridge Archaeological Unit

recipient

Physical Archive RCB 11 (2)

ID

Physical 'Animal Bones', 'Ceramics', 'Environmental', 'Human Bones', 'Metal', 'Worked stone/lithics'

Contents

OASIS FORM - Print view

Digital Archive

Cambridge Archaeological Unit

recipient

Digital Archive

RCB 11 (2)

ID

Digital Contents 'Survey'

Digital Media

available

'Database', 'GIS', 'Images raster / digital photography', 'Spreadsheets', 'Survey', 'Text'

Paper Archive

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recipient

Paper Archive ID RCB 11 (4)

Paper Contents

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'Context

Paper Media available

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','Unpublished Text'

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Grey literature (unpublished document/manuscript)

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