An Archaeological Evaluation of Proposed River Ford, Rowley Lane, Babraham

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Contents

INTRODUCTION

The Cambridge Archaeological unit (CAU) undertook a programme of test-pitting between the 25th and 27th August 2009. The evaluation was carried out in advance of a proposed ramped ford and new roadway section designed to take heavier vehicles than the current bridge on behalf of Babraham Bioscience Technologies. The work was done following a project design (Standring 2010) and approved and monitored by Kasia Gdaniec of Cambridgeshire Archaeology Planning Countryside Advice (CAPCA).

Location, Geology and topography (Fig 1)

The crossing of the River Granta at Rowley Lane [TL 495514], lies at c.21m /OD, immediately to the south of the Rowley Lane bridge crossing and approx. 1 km north-west of the Babraham Research Campus (Fig 1). The land to the south of the river at this location lies within the slightly wider floodplain of the river, and is thus more flat, but rising more steeply to the north; the much clearly defined northern edge of the flood plain forms a ridge which defines the southern edge of a large arable field and which also coincides with a public footpath crossing the parish boundary between Babraham and Stapleford.

The underlying geology within the vicinity of this river crossing is shown on the Saffron Walden map sheet (BGS 2002) as the top of the Lower Chalk (Grey Chalk or Zig-Zag Chalk Formation); a horizon which lies a short vertical distance beneath the Melbourne Rock bed (basal Middle Chalk). Up-river this same bed forms the spring-line outcrop which underlies the settlement of Roman Babraham (Timberlake *et. al. forthcoming*). At the end of Rowley Lane, corresponding with the actual location of this river crossing there is a somewhat reduced width of gravel terrace, yet both the 1st and 2nd Terrace gravels here are exposed on both sides of the river either side of the spread of (Holocene) alluvium. However the alluvial overspill within this area of the floodplain is clearly more extensive than up-river to the east; the main area of alluviation being on the flat low-lying gravel-floored floodplain. A number of c.10m wide shallow hollows were also noted within the short strip of sloping meadow which lies between the river and the footpath to Stapleford approx 30-50m west of the crossing. These features appear to be natural and may be periglacial in origin – perhaps part of the same network of possible ice polygons noted by Roger Palmer in his 2007 air photo assessment of the Babraham landscape (see Timberlake *et. al. forthcoming*).

The field to the south of the Rowley Lane bridge is damp, and has been left fallow as meadowland, the same also applies to the land to the east of Rowley Lane. North of the Stapleford footpath on the higher land of the chalk wheat and oilseed rape have been cultivated. The latter field (also the location of the 'Roman building' *see below*) is notably dryer and shows signs of having been extensively deep ploughed.

Methodology

Seven test pits (TP 1-5a, 5b and 6) were excavated along the route of the proposed river crossing on both sides of the river to a depth consistent with the engineering design: those closest to the river banks being the deepest (up to 1.8m). Vegetation along the river banks was not disturbed for ecological reasons. The test pits were excavated under constant archaeological supervision using a 7 ton 360° machine with a 1m wide ditching bucket. Each contextual change was recorded in plan and a programme of 'bucket sampling' 80 litres of each deposit to identify the presence and quantity of material culture as well as a metal detector survey of each excavated context was undertaken, in concordance with the requirements of the design specifications (Standring 2010).

The excavation of all archaeological features was carried out by hand. Sections at a scale of 1:10 were recorded for each test pit which collectively formed a running section showing the riverine alluvium, colluvium and subsoil; thus the sequence of sedimentation and any anthropogenic influences upon this was exposed across as much of the river flood plain as was possible. The recording followed a CAU modified MoLAS system (Spence 1990) whereby numbers (fill) and [cut] were assigned to individual contexts and feature numbers, F., to stratigraphic events. All work was carried out in strict accordance with statutory health and safety legislation and with recommendations of SCAUM (Allen & Holt 2002). The site code is RCB 10 (2).

Archaeological background (Fig 1)

The broader archaeological background to Babraham and the surrounding area is discussed in some detail within the forthcoming monograph *A Romano-British Cemetery and its associated settlement at Babraham Research Campus, Cambridgeshire*. This same background has also been covered by a desktop assessment (Hall 2003) and various grey reports produced for the evaluations and excavations undertaken on the campus by the CAU since 1995 (e.g. Armour & Timberlake 2006, Armour 2007a & 2007b). For this reason only detail specific to this part of the site shall be replicated here.

In October 2007 an assessment carried out by Air Photo Services Cambridge of the area to the north-west of the Babraham Research Campus as far as the bridge across the River Granta and the end of Rowley Lane provided evidence for the presence of a much more extensive Roman field system and settlement than hitherto conceived (Palmer 2007). This study revealed potential archaeological features such as linear banks or scarps plus definite or possible ditches forming the basis of a rectilinear field system laid out on a broad NW-SE alignment. The field system, which includes possible outfields, small enclosures and tracks, covers an area of up to one square kilometre, the majority of it lying to the south of the River Granta and above the edge of the flood plain, well to the west of the presumed area of medieval settlement between St. Peter's Church, (Babraham) and the sewage works. Most of these features, alongside a number of small ponds and hollows, were revealed through the study of aerial photographs taken between summer 1940 and the present day. This

was a period before the land was given over to a more intensive agricultural regime when many of the remaining topographical features were either levelled or filled in.

At the extreme western end of the area examined, within the area traditionally known as Babraham Common, (to the immediate north-west of the current area of test pitting), the air photos show yet another concentration of potential archaeological features (most probably ditches), all of which lie just to the east of what is referred to as the 'Roman Building' located immediately north of the current investigation.

This feature may have been a small villa or a bath house, and significantly, this is also shown on the 1:50000 OS map (TL 494515). The traces of this building, assumed then to be a villa, were found in 1952; the associated earthworks of this almost straddle the parish boundary (see Butcher 1954 *unpubl.*). According to the catalogue entries for the Cambridge University Museum of Archaeology and Anthropology, the site lies close to the intersection of two Roman roads (TL 495515).

Meanwhile the cropmark features in this area all share the same predominantly west, north-west by east, south-eastern and north-east by south-western Roman alignments. Collectively these would seem to represent a small area of paddock and an enclosed settlement. Beyond is a road or trackway which appears to head off south-eastwards towards the main settlement of Roman Babraham, or perhaps due east to meet the *Via Devana* or the westernmost branch of the Icknield Way. This then might join the latter route as it descends off the Gog Magog Hills heading towards the Babraham crossing of the Granta.

Several surveys and interest by dedicated local residents has produced, over the last decade, a small collection of identifiable artefacts from the 'Roman Building' site (at least sixteen groups of items) which been deposited within the University Of Cambridge Museum Of Archaeology and Anthropology. These largely consisted of coarseware pottery and tile (*imbrex* and *tegula* and hypocaust box flue tile), some locally made (Horningsea) and imported sherds of fineware, plus *opus signinum*, brick, Roman glass, and animal bone. The identification of sherds of Nene Valley Colour Coat beakers (3rd to 4th century AD), as well as imported ceramics such as Globular Spanish amphorae (Drag. 20) (1st to 3rd century AD) suggests a span of occupation dating from the middle to late Roman period.

The inclusion in this assemblage of hypocaust and floor tile, as well as some fineware pottery, would appear to confirm that the building was probably villa-related, yet its proximity to the river and relatively small size leaves open the option of this being a bath house. To some extent the latter interpretation is supported by local memories (none of which have been written down) of there having being 'Roman' ponds or cisterns nearby. Amongst these 'Roman ponds' were some reputedly found to be 'stone-lined' when it came to their being infilled during a phase of agricultural reclamation of this land in the 1950s. The location of some in filled pond features has been plotted from Luftwaffe photographs taken in the summer of 1940 (fig 1).

A short distance to the west of site of the Roman building were found four forged iron shackles; two with a hinged barrel-lock to close them, and two with chains attached (CUMAA catalogue no. 1965.92; Plate III). The significance of this find is uncertain; the shackles would appear to relate to convict or slave use, and though similar

examples are known, there is no way of being certain that these are contemporary with Romano-British occupation. The shackles were probably recovered during ploughing operations in the late 1950's; the grid reference supplied for this (TL 495 514) suggested that it came from the same field as the building, but up to 100m to the west of it. Other finds from this same area (TL 495 515) include a number of Roman brooch fragments [CHER 04326] found more recently, from close to the site of the building.

To the east and north-east of the current area of investigation, the presence of yet more Roman structures or features is suggested by a small finds distribution within the field that lies immediately to the north of the river opposite Ash Grove Wood and the western end of Rowley Lane. Here stone and clunch foundations were revealed within an area 10m by 6m following ploughing (TL 4960 5148); surrounding this was a scatter of Roman pottery, some dog bones, two bronze finger rings, and an unidentified lead object [CHER 04328]. The location of this find closely matches the location of a series of possible archaeological enclosure ditches seen on the air photo plot. It seems likely therefore that another small settlement enclosure surrounding one or more stone structures lies little more than a hundred metres or so due east. The probability therefore is that both this and the probable 'bath house' are linked; perhaps together they form part of the neighbouring villa settlement to Babraham. Interestingly, the course of a former stream was detected on the air photo plots just to the south of the above-mentioned clunch and stone structure. This may have been a water supply. Just north of this lay the ditched east–west aligned trackway or road this led eastwards towards the settlement of Roman Babraham (Palmer 2007).

RESULTS

A total of seven test pits (TP 1, 2, 3, 4, 5a, 5b and 6) were excavated during the evaluation; three on the north side of the current channel of the river Granta (TP1-3) and four on the south side. The excavated depth of each test pit was determined by the design depth of the proposed development; with the exception of TP1 (see below).

The only 'cut features' and feature seemingly related to deliberate human activity were identified within TP1, with the remaining sequence appearing to consist of alluvial and colluvial events. The sedimentary and archaeological deposits of each Test Pit were recorded and, when possible, the numbering of the deposits was continued throughout all the test pits. Full section drawings of all the pits were made, allowing for a continuous elevation of the exposed deposits and relationship to the Granta to be developed (Fig 3).

The developmental sequence of the deposits exposed within the test pits were primarily the result of alluvial and colluvial processes, containing traces of anthropogenic material. They were therefore recorded as archaeological deposits but also as a sequence of geological horizons. The full geological appraisal can be seen in Appendix 2 (Timberlake *below*).

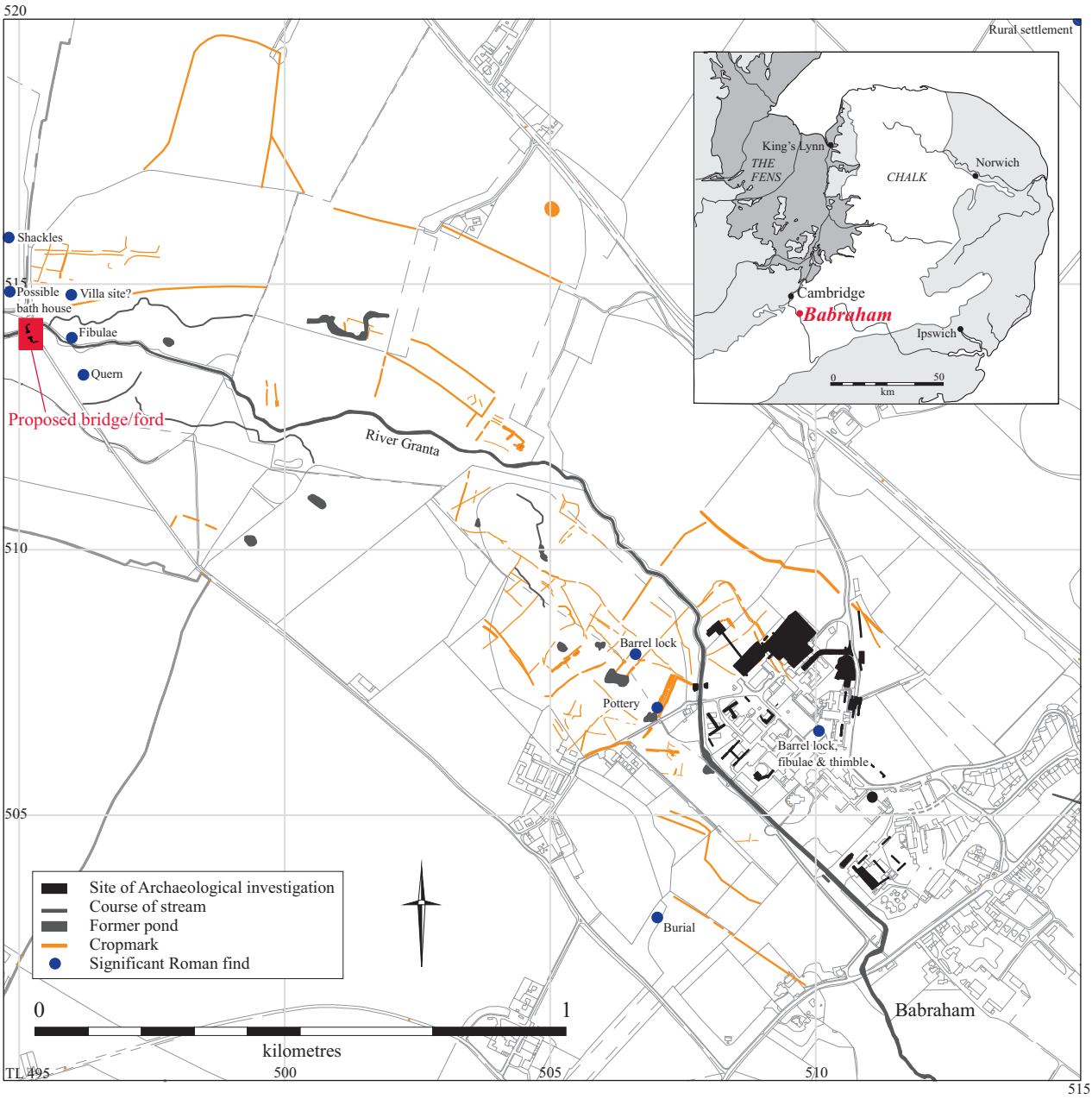


Figure 1. Location map showing crop marks and previously investigated archaeology

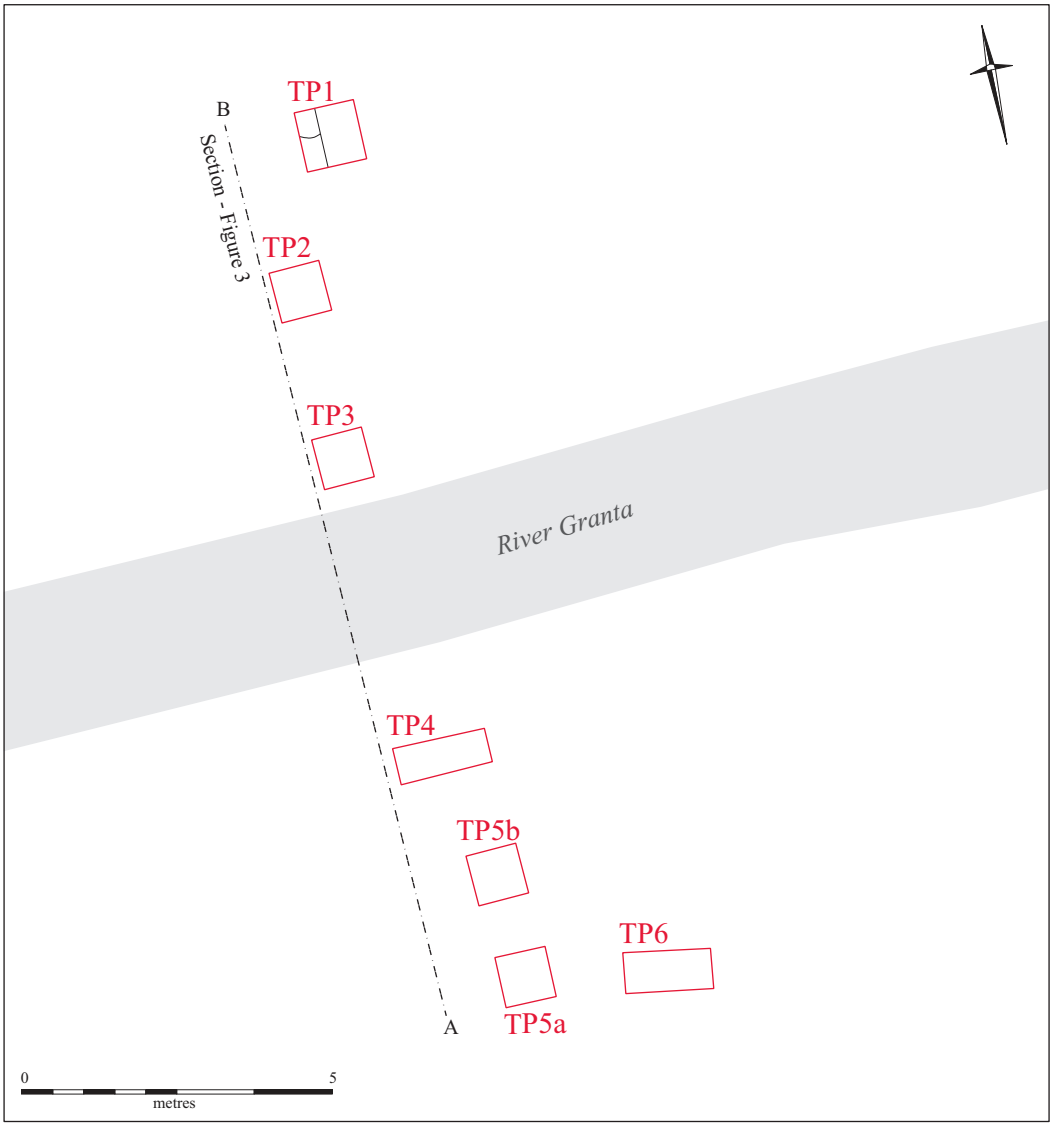


Figure 2. Trench Locations

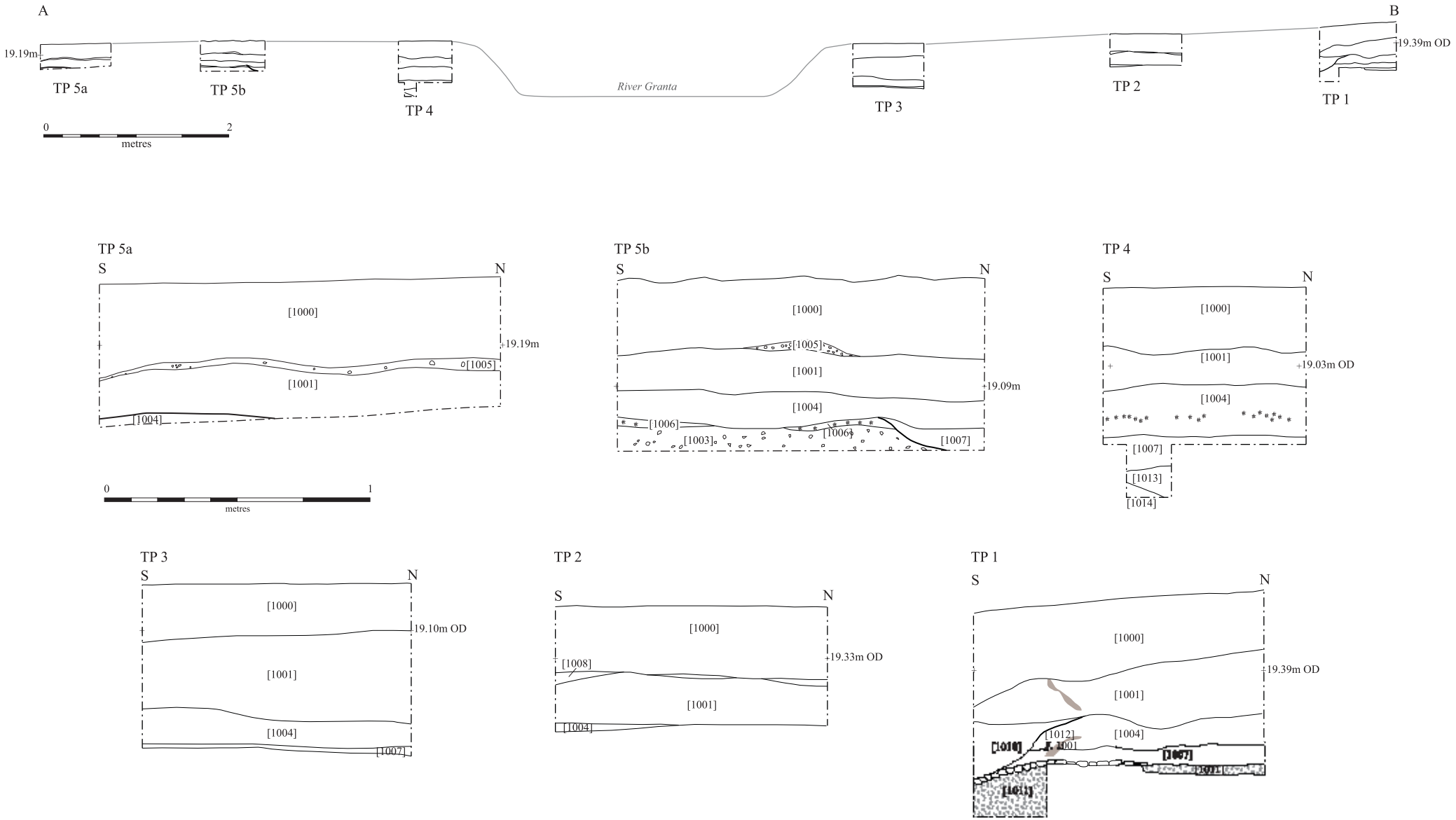


Figure 3. Sections

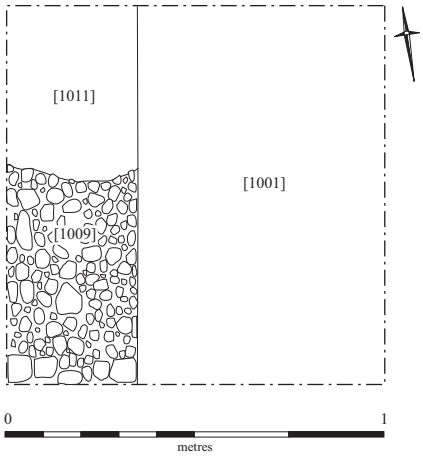


Figure 4. Plan and photograph of Test Pit 1

Test Pit 1. (Fig 2, 3, 4)
Test pit 1 was 2m by 2m square and was the shallowest of the test pits; originally excavated to a depth of 0.8m below the current ground surface. At the request of the County Archaeologist, a sondage, 0.7m in width and 2m in length was excavated within the western side of the trench to a further 0.5m in depth, and a further 0.5m deep sondage, 0.5m in length was excavated within the south-western corner. The lowest part of TP1 was 1.8m in depth (18.03m /OD).

The earliest deposit encountered, [1011], comprised of a compacted sandy clay, which although generally horizontally stratified showed a marked downward slope to the south. Overlying this was F. 1000, a compacted layer of rounded and sub-angular stones, a maximum of 70mm in diameter and likely originating from the river bed [1009]. Infrequent angular flint nodules and compacted mortar were within [1009] thought to represent re-used building material. Several fragments of Romano-British tile, of a 2-4th century date were recovered from the upper horizon of [1009] (Anderson *below*). The full extent of F. 1000 was not exposed to the south of TP1. A notable sloping to the south, mirroring [1011] was noted.

The relatively dry whilst pale, washed-out and compacted nature of [1011], whilst still likely to originally be colluvial in origin, appeared to represent a possible riverbank of a wider Granta. F. 1000 would appear to be a localised deposit of stones, restricted to the edge of the bank, potentially as a Romano-British consolidation or stabilisation at the rivers edge. An alternative purpose that of a metalled fording point is unlikely to be pertinent, as no similar deposits were identified within the deepest Test pits of the south side of the river (eg. TP 4).

Overlying [1009] was [1007] a pale compacted silty alluvial deposit, also identified within test pits 3, 4 and 5B, with frequent mollusca shells, potentially representing the first series of flood events to inundate the area following consolidation by F. 1000. The alluvial processes appeared to continue with [1004], also of fine grained sandy clay overlying [1007], with infrequent charcoal mottling.

Alluvial deposits [1007] and [1004] within TP1 were truncated within the south-west corner of the excavation by irregular linear F. 1001, [1012], which is likely to represent the edge of a wider river channel. The fill of F. 1001, [1010] was a compacted silty sandy clay, which although it shared many similarities with later colluvial deposits is likely to represent a slow alluvial deposition of the channel.

F. 1001 was sealed by thick colluvial deposit [1001]; identified throughout all the trenches as the final colluvial event within the evaluated area. This was itself overlain by humic plowsoil [1000].

Context Number	Feature	Description	Max M/OD	Min M/OD	Interpretation
1000		Mid to dark grey-brown loosely compacted silty clay. High levels of rooting and modern disturbance.	19.8	19.11	Ploughsoil
1001		Mid orangey-brown, moderate to firmly compacted sandy clay.	19.36	18.75	Final Colluvium
1010	1001	Dark orangey brown, mid to firmly compacted silty, sandy clay. Fill of cot [1012] Similar to	18.99	18.55	Alluvium within 'cut' [1012].

		colluvium (1004).			
1012	1001	Cut: Not visible in plan. Steep to moderately sloping sides. No base exposed. Filled by (1010)	18.945	18.55	Late Palaeochannel
1004		Mid grey to orangey-brown moderate to firmly compacted silty clay. Very infrequent mollusca shells.	18.88	18.73	Alluvium
1007		Mid grey, firmly compacted silty, sandy clay. Frequent mollusca shells.	18.695	18.59	Alluvium
1009	1000	Single layer of rounded and sub-angular stones (max 70mm). Occasional angular stones with decomposed mortar, likely re-used building material. No deliberate bonding material. Set into upper horizon of (1011)	18.63	18.54	Cobbled surface
1011		Light to mid orangey-grey, very compacted sandy clay. Infrequent small angular and sub-angular gravels.	18.61	18.29	Colluvium/ riverbank

Table 1 Context/ Feature descriptions of TP 1.

Test Pits 2 and 3 (Fig 2, 3)

Test Pits 2 and 3 were both 2m by 2m square and were excavated to a depth of 0.9m (18.78m/ OD) and 1.23m (18.4m/ OD) respectively; and demonstrated the continuation of the Romano British alluvial deposit [1007] (in TP 3) as well as later alluvial build up [1004]. The upper boundary of this deposit within TP2 contained one undiagnostic flake potentially relating to flint working nearby, (Beadsmoore *below*). The same thick, final episode of colluvium [1001] was visible in both test pits which was overlain within TP 2 by a thin deposit of silty clay, [1008] with high Mollusca content, which appeared, stratigraphically to be contemporary with [1005] within TP 4, 5a and 5b. The uppermost deposit within TP2 and 3 was the ploughed topsoil [1000].

Context Number	Feature	Description	Max M/OD	Min M/OD	Interpretation
1000		Mid to dark grey-brown loosely compacted silty clay. High levels of rooting and modern disturbance.	19.71	19.17	Ploughsoil
1001		Mid orangey-brown, moderate to firmly compacted sandy clay.	19.23	18.83	Final Colluvium
1004		Mid grey to orangey-brown moderate to firmly compacted silty clay. Very infrequent mollusca shells.	18.84	18.78	Alluvium
1008		Thin lense of mid grey-brown, moderate compacted silty clay. Frequent Mollusca shells.	19.23	19.10	Alluvial lense

Table 2; Context descriptions of TP2

Context Number	Feature	Description	Max M/OD	Min M/OD	Interpretation
1000		Mid to dark grey-brown loosely compacted silty clay. High levels of rooting and modern disturbance.	19.53	19.21	Ploughsoil
1001		Mid orangey-brown, moderate to firmly compacted sandy clay.	19.3	18.6	Final Colluvium
1004		Mid grey to orangey-brown moderate to firmly compacted silty clay. Very infrequent mollusca shells.	18.7	18.3	Alluvium
1007		Mid grey, firmly compacted silty, sandy clay. Frequent mollusca shells.	18.73	18.25	Alluvium

Table 3; Context descriptions of TP3

The present channel of the River Granta was located between test pit 3 and test pit 4. No suggestion of deliberate management or canalisation of the course was evident apart from the straightness of the channel itself.

Test Pit 4 (Fig 2, 3)

Test pit 4 was 1.5m north-south by 3.5m east-west and was a maximum of 1.2m in depth (18.43m /OD). A hand dug sondage, 0.3m wide and 0.4m in depth was excavated within the south-west corner of the test pit to a base of 18.03m /OD.

The lowest and earliest deposits within the sondage were [1015], a deposit of wet, compacted sandy gravels, overlain by [1014], a silty gravel, both likely to reflect the base of an earlier, wider channel of the Granta. A thicker deposit of sterile fine to coarsely grained sand [1013] overlaid this and appeared to also represent the fill of an active stream or river bed.

[1013] was sealed by [1007] a light silty clay primary alluvial deposit that although unlikely to have any physical connection with the identical deposit identified to the north of the present river course; is both morphologically and stratigraphically similar and is likely to represent the same actions. In this instance, considering the underlying channel deposits, [1007] appeared to manifest itself as the first deposit within a channel which although wet enough to encourage an amplitude of land based mollusca, was no longer part of a flowing river course.

Overlying [1007] and following the same sequence as all the test pits, was the thick, alluvial deposit [1004]. A notable banding of small charcoal flecking and rare inclusions of animal bone was present within [1004] within TP4 which appears to reflect an event *ex-situ* during one of the many episodes of flooding represented by the deposit.

Final colluvial deposit [1001] was present, with a notable dark grey, silty clay lense [1005], containing fragments of burned clay and charcoal mottling. Located sporadically between this and the thick humic ploughsoil [1000].

Context Number	Feature	Description	Max M/OD	Min M/OD	Interpretation
1000		Mid to dark grey-brown loosely compacted silty clay. High levels of rooting and modern disturbance.	19.68	19.23	Ploughsoil
1005		Mid to dark grey-brown, moderate to loosely compacted silty clay. Frequent charcoal and occasional ceramic and CBM fragments.	19.40	19.23	Alluvium with high material culture
1001		Mid orangey-brown, moderate to firmly compacted sandy clay.	19.33	18.83	Final Colluvium
1003		Light grey, firmly compacted silty clay. High quantities of mollusca with very infrequent charcoal flecks. Only visible within north facing elevation.	18.73	18.48	Alluvium
1004		Mid grey to orangey-brown moderate to firmly compacted silty clay. Very infrequent mollusca shells.	19.03	18.48	Alluvium
1007		Mid grey, firmly compacted silty, sandy clay.	18.68	18.23	Alluvium

		Frequent mollusca shells.			
1013		Light orangey brown, moderately compacted sand. Sterile.	18.28	18.03	Sand, Primary alluviation
1014		Mid grey-brown, moderately compacted silty clay with frequent sandy gravel inclusions. High concentration of Mollusc shells	18.13	18.03	River sands/ gravel
1015		Light grey, moderately compacted sandy gravels. Rounded and sub rounded. Size 5mm to 60mm.	18.10	Below 18.03	River Gravels

Table 4; Context descriptions of TP4

TP5b and 5a (Fig 2, 3)

Test pit 5b was 2m square with maximum depth of 1m (18.69m/ OD). Test pit 5a was larger, being 2.3m north-south by 2.5m east west, to a maximum depth of 0.8m (18.73m /OD).

Both test pits demonstrated a continuation of the multiple early flooding alluvium episodes seen in TP 4 and in those across the Granta. Stratigraphically, the earliest deposit was [1003] a light grey silty clay alluvium with very high quantities of mollusca shells. Undulations within the upper horizon of [1003] were filled by a thin lense of dark grey silty clay containing high quantities of charcoal and occasional animal bone fragments [1006]. Like similar lenses [1005] and [1008], it would appear that this was the result of ex-situ activity. The presence of the overlying silty colluvium [1007], however locates [1006] as stratigraphically contemporary with the Romano-British riverbank consolidation surface F. 1000 within TP1.

Alluvial deposit [1007], only recorded within the northernmost end of the test pit appeared to be within a shallow depression within [1003] and seemingly truncating lense [1006]. This could be representative of the edge of a channel associated with the Romano-British riverbank revetment in TP1.

Sealing [1003], [1006] and [1007] was the continuation of alluvial deposit [1004], itself underlying final colluvial deposit [1001]. At the upper horizon of this deposit, in both TP5a and TP5b was a continuation of the dark, charcoal rich lense [1005] also identified within TP4. Within TP5a [1005] contained a notable quantity of what appeared to be heavily eroded ceramic building material (burned clay and possibly brick). This was too dispersed to be a deliberate surface and is likely to be associated with a flood event bringing the material culture from elsewhere but was, however too heavily abraded to be diagnostic.

Context Number	Feature	Description	Max M/OD	Min M/OD	Interpretation
1000		Mid to dark grey-brown loosely compacted silty clay. High levels of rooting and modern disturbance.	19.54	19.0	Ploughsoil
1001		Mid orangey-brown, moderate to firmly compacted sandy clay.	19.08	18.76	Final Colluvium
1003		Light grey, firmly compacted silty clay. High quantities of mollusca with very infrequent charcoal flecks. Only present in southern section.	19.05	18.85	Alluvium
1004		Mid grey to orangey-brown moderate to	19.03	18.73	Alluvium

		firmly compacted silty clay. Very infrequent mollusca shells.			
1005		Mid to dark grey-brown, moderate to loosely compacted silty clay. Frequent charcoal and occasional ceramic and CBM fragments.	19.13	19.04	Alluvium lense with high material culture

Table 5; Context descriptions of TP5a

Context Number	Feature	Description	Max M/OD	Min M/OD	Interpretation
1000		Mid to dark grey-brown loosely compacted silty clay. High levels of rooting and modern disturbance.	19.69	19.23	Ploughsoil
1001		Mid orangey-brown, moderate to firmly compacted sandy clay.	19.29	18.98	Final Colluvium
1003		Light grey, firmly compacted silty clay. High quantities of mollusca with very infrequent charcoal flecks	18.85	18.7	Alluvium
1004		Mid grey to orangey-brown moderate to firmly compacted silty clay. Very infrequent mollusca shells.	19.05	18.72	Alluvium
1005		Mid to dark grey-brown, moderate to loosely compacted silty clay. Frequent charcoal and occasional ceramic and CBM fragments.	19.34	19.24	Alluvium lense with high material culture
1006		Dark grey, moderately compacted silty clay. Frequent charcoal mottling.	18.91	18.83	Alluvium
1007		Mid grey, firmly compacted silty, sandy clay. Frequent mollusca shells.	18.89	18.69	Alluvium

Table 6; Context descriptions of TP5b

Test Pit 6 (Fig 2, 3)

Test pit 6 was 2m north-south by 3.1m east-west (extended to maximise the profile of deposits running parallel to the present river course) and a maximum of 0.93m in depth (18.81m /OD).

The exposed deposits within test pit 6 showed a continuation of the same alluvial/ colluvial sequence as the adjacent TP5b and 5a, with the earliest deposit being grey, compacted alluvium [1003] which contained very infrequent flecks of charcoal, was overlain by alluvial deposit [1004] located in the western end of the test pit, within what could be an alluvial channel. The upper horizon of [1003] was defined by a notably thick deposit of red iron-panning [1002] which likely results from intermittent flooding and water-logging of overlying deposits; further emphasising the character of the southern side of the current river channel as more prone to flood events than the north.

Sealing [1002], [1003] and [1004] was the final colluvial event [1001] and ploughsoil [1000].

Context Number	Feature	Description	Max M/OD	Min M/OD	Interpretation
1000		Mid to dark grey-brown loosely compacted silty clay. High levels of rooting and modern disturbance.	19.74	19.20	Ploughsoil
1001		Mid orangey-brown, moderate to firmly compacted sandy clay.	19.24	18.90	Final Colluvium
1002		Mid reddy-brown, firmly compacted sandy	19.10	19.04	Iron panning

		clay.			
1003		Light grey, firmly compacted silty clay. High quantities of mollusca with very infrequent charcoal flecks	19.00	18.80	Alluvium
1004		Mid grey to orangey-brown moderate to firmly compacted silty clay. Very infrequent mollusca shells.	18.88	18.81	Alluvium

Table 6; Context descriptions of TP6

Discussion

The deposits exposed with the test pitting at the proposed river crossing site allow a localised developmental sequence to be formed; with the presence of a Romano-British surface F. 1000 within TP1 allowing a certain degree of relative dating of the depositional sequence to be made.

The earliest deposits, identified within the sondage in TP4 are directly related to the presence of a river channel wider to the south than its current course. The heights of the exposed gravels [1015], corresponding with the gravelly bed of the current river channel, and the silty gravels [1014] and sterile sand [1013] corresponding to deposits laid down within a constantly flowing channel. Stratigraphically this wider, river course is likely to be contemporary with the riverbank material [1011] identified within TP1, demonstrating the northern edge of the palaeochannel.

The overlying deposit of [1003] sealing river deposits within TP4 and identified solely to the south of the current river channel appears to mark the primary alluvial episodes following a change in size and/ or course of the river, with the channel potentially being narrowed; although whether this was through natural or anthropogenic processes was not revealed. The small quantity of charcoal within this deposit suggests otherwise undated human activity nearby and the presence of the stone surface F. 1000 along the riverbank within TP1 certainly suggests that a degree of waterside management dating to the 2-4th centuries AD, either altering the river or as a response to these changing environmental conditions occurred. A slightly earlier Romano-British water management programme possibly relating directly with events that also deposited [1003] were identified at the Riverside site (Timberlake 2006); suggesting a constant battle was being fought against flooding from the 2nd century onwards. Indeed the possible erosion through [1003] visible within TP6 may relate to more periods of flooding relating to the southern side of the current Granta and the relative dryness of the northern side of the river; further supported by the absence of soft colluvial material under the Romano-British surface in TP1.

The stone surface, either in a capacity as riverside revetment or consolidation is likely to be associated with the identified location of a Romano-British building approximately 100m to the north (CUCAP 2007). Indeed ceramics of a contemporary date to the 2-4th century tile recovered from the cobbled surface have been collected during early surveys (Butcher 1954 *unpubl.*) as well as field-walking by enthusiastic local residents. The relatively large quantity of animal bone recovered from the edge of F. 1000 also suggests nearby domestic activity of a Romano-British date.

The presence of a datable horizon so early within the exposed stratigraphic development of the evaluated area allows a reliable *terminus ante-quem,* for the

deposits and identified alluvial and colluvial episodes that followed; that they must be either late Romano-British or later in date. The most relatively datable deposit distinct being the alluvium [1007] which was directly covering the cobbled surface, as well as being identified across the evaluated area. A late or early post Romano-British date for this accumulation would be tempting; the presence of high quantities of land based snail suggests long periods of water logging associated with a generally unmanaged and wider river. This is likely to be comparable with phases of Late Romano-British flooding identified within the nearby ARES site (Boreham in Amour 2007) which corresponds well with climatic and environmental changes identified regionally during the same period (eg French 2003). The dating of F. 1000 also suggests the wider river channel shown in TP4 to be of a prehistoric date.

What would appear to be a relatively long period of accumulative deposition of alluvium ([1006], [1004]) across the whole evaluated area, a notable channel, F. 1001, likely running in an east-west direction was identified within TP1. Although whether this was a result of a short lived inundation or a human intervention to redefine the northern riverbank was not determined: the fill of the cut [1010] being sterile.

The upper horizon of [1004] was marked by a thin lense of more silty, charcoal rich material likely to relate to an increase in activity on both sides of the river; ([1008] to the north and [1005] to the south). A notably higher quantity of material culture; burned clay and charcoal was present within [1005] and it would appear to represent the imported material associated with nearby settlement disturbed during the primary cultivation of land long left fallow. The frequency of flooding would suggest that the south side of the river was not easily cultivated, likely being water-meadow. Identification of a single sherd of local courseware dating to the 13-14th centuries from the present ploughsoil [1000] of test-pit 5b (Slater, *below*) could be indicative of a more deliberate programme of cultivation at this time.

CONCLUSION

No significant archaeological deposits or features were identified at, or above the proposed engineering depths for the access road and ford. The archaeological remains within the sondage within test pit 1 began at 18.63m /OD (1.2m below present ground surface) which is 0.4m below the proposed development depth (Appendix 3).

The exposed archaeology and deposits from the evaluation confirm the findings of previous excavations within the Babraham campus that demonstrate the prominence of environmental changes, resulting in sporadic flooding and generally higher water levels around the River Granta during the middle and later Romano-British occupation of the area.

ACKNOWLEDGEMENTS

The evaluation was undertaken on behalf of Babraham Bioscience Technologies with Stephen Woolverton, Head of Engineering. The site was monitored by Kasia Gdaniec from Cambridgeshire County Council. The site was surveyed by Bryan Crossan and the finds were processed by Jason Hawkes. Ian Forbes and Bryan Crossan prepared the Graphics. Robin Standring managed the project.

APPENDICES

Appendix 1; Material Culture

Worked Flint (*Emma Beadsmoore*)

A single none-diagnostic struck flake was recovered from the upper horizon of [1004] within test pit 2. All other flint recovered from the same context and the field surface was highly abraded, naturally occurring and un-worked.

Romano-British Tile (*Katie Anderson*)

Two fragments of tile weighing 72g and of a 2-4th century date were recovered from F. 1000, a cobbled floor surface, incorporating fragments of re-used building material.

Medieval Ceramic *(Adam Slater)*

A single body-sherd of wheel-thrown ceramic (30g) was recovered from the ploughsoil [1000] of test pit 5b. A course, oxidised dark grey outer and light brown inner fabric, with frequent inclusions suggest it to be a locally manufactured courseware, likely to be of a 13-14th century date.

Animal Bone (*Vida Rajkovaca*)

A small faunal assemblage recovered from four different contexts totalled 154 fragments of mostly highly abraded unidentifiable fragments. 21 assessable fragments with a weight of 1113g were recovered.

A total of 21 fragments were in a condition to be assessed, 10 of which were possible to assign to species level, the majority of which were identified as cow. In addition, two horse specimens and one sheep/ goat specimen were recorded. The remainder of the assemblage represent cattle-sized unidentifiable bone splinters. All of this small assemblage came from TP.1 ([1007]).

Three specimens were recorded with butchery marks, all of which imply splitting of bone for marrow extraction. Butchery marks observed appear to have been made by cleaver, which is considered to be a Roman introduction. The preference for beef consumption is believed to have come from the Continent with Roman legions populating Britain (King 1999). The prevalence of cattle and the indication of butchery marks of Roman character suggest Romano-British or later date for the assemblage.

Appendix 2; Geology, sedimentation and alluvial episodes *(Simon Timberlake)*

Introduction

The underlying bedrock geology within the vicinity of this river crossing of the Granta is shown on the Saffron Walden map sheet (BGS 2002) as being at the top of the Lower Chalk (Grey Chalk or Zig-Zag Chalk Formation) a short vertical distance below the Melbourne Rock whose spring-line outcrop was an aquifer source up-river on the settlement of Roman Babraham (Timberlake *forthcoming*). Perhaps due to the slightly increased angle of slope of the valley sides at the location of this crossing there is a slightly reduced width of gravel terrace within this part of the floodplain, with the 1st and 2nd Terrace gravels exposed on both sides of the river. Nevertheless the alluvial overspill within this area of the Granta floodplain is clearly more extensive than up-river; the main area of alluvial extension being on the flat low-lying gravel-filled landscape on the south side of the river.

Methodology

The test pit sediments were logged on the basis of their sediment typology and are detailed below. Bulk samples were taken, although a cursory examination of these would suggest that molluscan assemblages probably match quite closely the freshwater mollusc fauna described by Boreham from the Riverside evaluation on the Babraham campus (Timberlake & Armour 2006).

Results

Test pit 1

0 – 3 cm [horizon 1]
3 – 30 cm [horizon 2] topsoil
30 – 63 cm [horizon 3] brown clay-rich sub-soil (inclusion of flint nodule) = colluvium
63 cm [horizon 4] = colluvium/ alluvium?

Subsequent excavation of this test pit to reveal mortared metalled (including tile and flint) surface overlying a hard and compact ancient colluvium (the original river bank), shows that the alluvial horizon 5 (at about 85 cm depth) and upper floodplain alluvium horizon 6 (at 110 cm depth) overlies this Roman feature at a depth of around 120 cm.

Test pit 2

0 – 7 cm [horizon 1] turf and topsoil
7 – 32 cm [horizon 2] = modern soil
32 – 65 cm [horizon 3] = subsoil colluvium
no degraded tile/pot [3a] but some burnt flint
65 – 102 cm [horizon 4] light brown earth type = colluvium/ alluvium?
base of this contains small flint flake and animal bone
102 – 110 cm [horizon 5] light grey brown clay and silt with molluscs = alluvium

Test pit 3

0 – 8 cm [horizon 1] turf and topsoil
8 – 25 cm [horizon 2] = modern soil
25- 44 cm [horizon 3] = subsoil colluvium
[horizon 3a] 40-44 cm: horizon of degraded pot + tile in soil = colluvial
44 – 70 cm [horizon 4] brown clay with rare land snail = colluvium/alluvium?
70 – 80 cm [horizon 5] silty clay with thinly concentrated broken mollusc shell and tiny gastropods = upper alluvial episode
80 – 95 cm [horizon 6a] brown clay with worm activity and root penetration = mixed colluvium and flood alluvium
Fe. top of migrating **iron pan** (@ 85 cm)
95 – 110 cm [horizon 6b] pale grey clay = floodplain alluvium
Fe.base of **iron pan** (@ 1.0m)
110 – 115cm [horizon 7a] pale clayey silt with molluscs = alluvium
115 - 125 cm [horizon 7b] a pale grey alluvial clay with incl. of fresh black flint nodule = flood alluvium.

The present course of the River Granta lay between TP3 and TP4

Test pit 4

0 – 7 cm [horizon 1] turf and topsoil
7 – 35 cm [horizon 2] = modern soil
35 – 53 cm [horizon 3] = colluvium
[horizon 3a] 37 – 40 cm: degraded tile + pot layer in subsoil = colluvial
53 – 75 cm [horizon 4] brown earth type clay silt (with worm action + roots). =colluvium/alluvium?
75 - 85 cm [horizon 5] silty clay with broken molluscs = flood alluvial episode mixed with colluvium
85 – 110 cm [horizon 6] grey clay silt with occasional molluscs and rare charcoal incl. = floodplain alluvium
Fe.top of migrating **iron pan** (@98 cm)
110 – 120 cm [horizon 7a] pale grey silty clay with mollusc and moderate charcoal = alluvium
Fe.base of **iron pan** (@112 cm)
120 – 133 cm [horizon 7b] mid-dark grey clay silt with rare charcoal = flood alluvium
133 – 140 cm [horizon 7c.1] a mid grey sandy silt with occasional molluscs = proximal channel alluvium
140 – 147 cm [horizon 7c] fine pale grey-yellow sand (no molluscs) = channel fill
NB channel cut into underling gravel silt to a depth of c.155 cm
147 - 152 cm [horizon 7d] a dark grey fine gravely sand and silt = the earlier river bed which lies on top of underlying terrace gravels
152 – 165 cm top of 1st-2nd terrace gravels

Test pit 5a *W-facing section*

0 – 4 cm [horizon 1] turf and topsoil
4 – 26 cm [horizon 2] brown earth topsoil + roots = modern soil
26 – 45 cm [horizon 3] a lumpy broken-up topsoil with inclusions of clay-silt subsoil = colluvium (plough disturbed)

[horizon 3a] 26 – 34 cm: waterworn degraded nodules of burnt clay = washed in disintegrated tile and pot= colluvial process .
45 – 50 cm [horizon 4] solid clay-silty subsoil with occasional land snails = colluvium/alluvium?
50 – 55 cm [horizon 5] marly silty horizon with small broken molluscs (bivalves and snails] = alluvial episode

55 – 70 cm [horizon 6] grey-brown silty clay with some flint nodule = mixture of colluvium and flood plain alluvium
Fe.upper limit to **iron pan** horizon (@ 60 cms)
70 – 80 cm [horizon 7a] more clay-rich alluvium with sandy-silty lenses (contains broken snails and bivalves) = alternating flood and channel alluvium

E-facing section

0 – 3 cm [horizon 1]
3 – 23 cm [horizon 2] with large taproots
23 – 37 cm [horizon 3] lumpy clay-silt subsoil = colluvium
[horizon 3a] 28 – 32cm: degraded pot and tile horizon within colluvium – contains rare charcoal
37 – 46 cm [horizon 4a] clay-silty subsoil = colluvium/alluvium?
Fe upper limit of **iron pan** horizon (@ 46-48 cm)
46 – 65 cm [horizon 4b] grey-brown silty clay with land with occ land snails towards top = mixture of colluvium and alluvium (seasonally wet?)
65 – 70 cn [horizon 5] more clay rich silt with broken molluscs (snails and bivalves) = alluvial episode
70 – 75 cm [horizon 7a] proper clay-rich alluvium with some mollusc = floodplain alluvium

Testpit 5b

0 – 7 cm [horizon 1] turf and topsoil
7 – 30 cm [horizon 2] humic brown loam silt with tap roots = modern soil
30 – 50 cm [horizon 3] loose light brown loamy subsoil = colluvium
[horizon 3a] 30 – 33 cm: degraded pot + tile horizon = colluvium
50 – 62 cm [horizon 4] brown earth type with occasional chalky inclusions = colluvium/alluvium?
62 – 72 cm [horizon 5] pale buff-grey silty-clay with chalky inclusions and broken mollusc = flood alluvial episode mixed with colluvium
72 – 85 cm [horizon 6] darker grey clay-silt: has inclusions of animal bone (food waste), charcoal and piece of burnt flint = floodplain alluvium with possible colluvial inclusions
Fe iron pan horizon (@ 73-80 cm)
85 – 95 cm [horizon 7a] pale grey silty clay with much broken and some complete mollusc (almost all snail) = channel alluvium

Testpit 6

0 – 10cm [horizon 1] turf and topsoil
10 – 28cm [horizon 2] brown earth topsoil with taproots = a ‘modern soil’
28 – 35 cm [horizon 3] a lumpy broken-up topsoil with inclusions of light brown clay-silt subsoil = colluvium (plough disturbed)
35 – 50cm **Fe** [horizon 4] a fine light brown silty-clay subsoil incl. residual flint flake = colluvium/alluvium?
migrating **iron pan** horizon (35-54cm)
50 – 80 cm [horizon 5] grey - orange-brown sandy silt + chalk flecks =mix alluvium – colluvium
Fe alluvial horizon of mollusc shell towards top (i.e.50-55cm)
80-90 cm [horizon 7c] a light grey shelly (marly) sandy silt with broken and complete snails and bivalves and some charcoal = alluvium

An interpretation of the alluvial/colluvial sequence associated with this section of the River Granta from the horizons identified within test pits 1-6 and comparison with Boreham’s interpretation of the environmental history of the Granta floodplain within

the area of the Babraham Roman settlement (Timberlake 2006) can be made. It must be appreciated however, that no clear chronological markers were recovered from the stratigraphy of the examined test pits, with the sole exception of the Roman surface within Test pit 1. The two mollusc-rich Horizons 7a and 5 were the most obviously recognisable alluvial marker horizons; though the molluscs from these have not been properly identified. Nevertheless, it seems likely that the snail-dominated fresh water assemblage represented is probably quite similar to that reported by Boreham from the Babraham Riverside site (Trench 4) in 2006; namely *Bythinia, Lymnaea*, and the bivalve *Pisidium*.

The suggested sequence from the lowest horizon sampled, at approx 160 cm depth within Test pit 4 closest to the east bank of the river is as follows:

The base of the river channel, or one of the river channel(s) lay approximately in its current position during the late prehistoric period, evident from the silty re-worked top of the underlying terrace gravels in the region of the channel river bed [Horizon 7d]. The shallow river contained a number of deeper sand-filled channels [Horizon 7c]; the absence of molluscs within this suggesting fairly fast flowing conditions free of weed.

Elsewhere were partly abandoned or slower-flowing channels, such as those identified close to the eastern bank of the river (Test pit 6 [Horizon 7c]), the latter containing the highest numbers of molluscs inhabiting these weed-fringed habitats. The presence here of an overlying more silty horizon attests to the amount of channel migration, the latter shelly silts perhaps representing Late Bronze Age to Iron Age sedimentation.

Overlying this is a phase of deposition of silty flood alluvium [Horizon 7b], indicative of bank overspill sediments, and in terms of the dynamic of the river, a much wider river bed and an altogether slower and/or larger volume of flow. The lack of molluscs within this probably reflects the more turbid water conditions. The return to moderate river flow and channel conditions (within the area of Testpit 4) is then suggested by an increase in the fine sandy-silt content [Horizon 7a], and it is tempting also to equate this with the Late Iron Age – Early Roman period, given an increasing incidence of anthropogenic material such as charcoal, and also the proximity (stratigraphically) of the Roman bank defences which lay just above this on the west side of the river (located within Testpit 1).

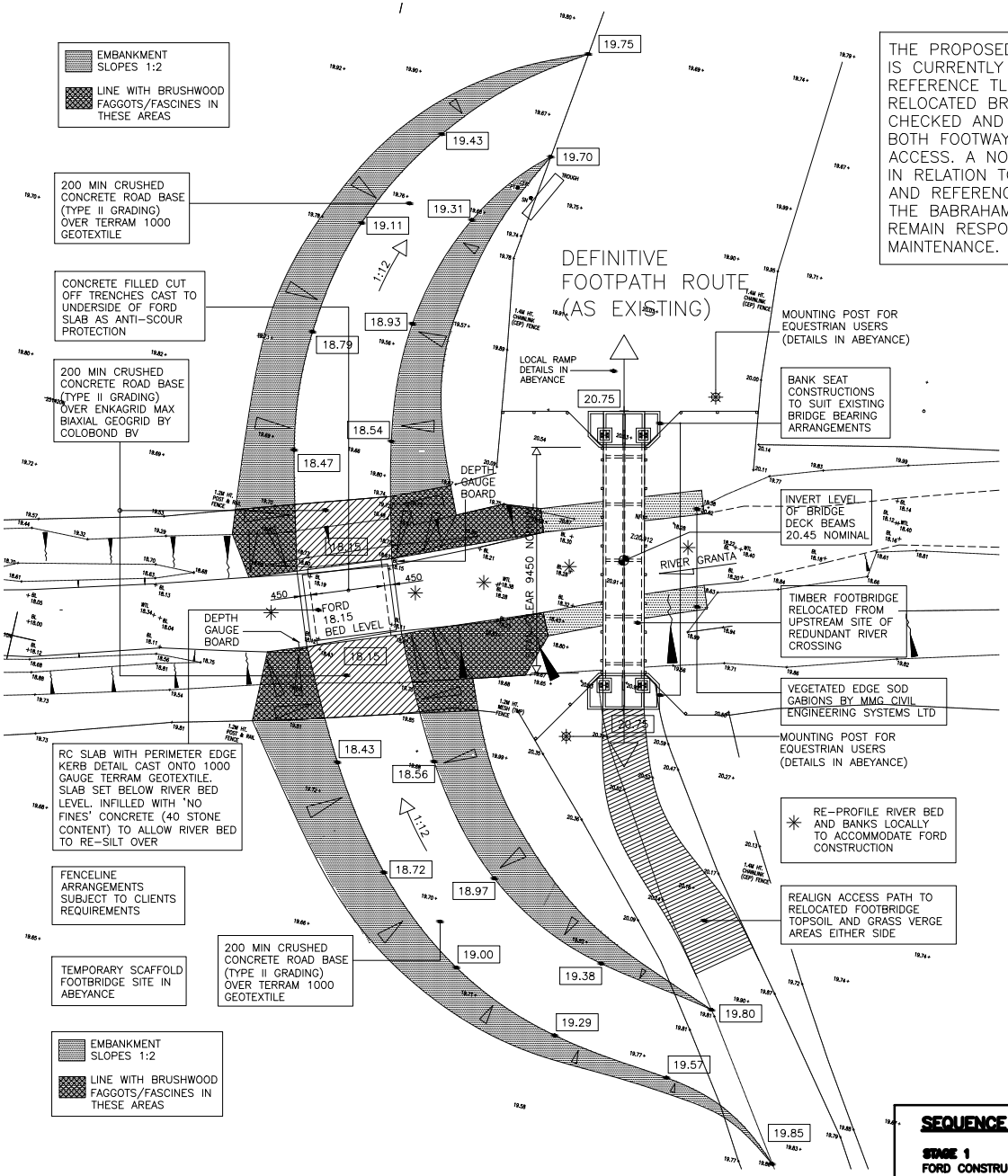
The Romano-British riverside alteration, with its metalled surface may well relate to the same phase of river management works previously noticed along the riverfront at Babraham; for example, the gravel-metalled causeway established at the beginning of the 2nd century AD at the Riverside site (Timberlake *ibid.*). It would seem that the latter was constructed in response to rising water levels and also to the periodic inundation of previously occupied but lower parts of the floodplain. The partial excavation of the current river bank defence has also helped to place in context the dating of the overlying clay-rich alluvium [Horizon 6]. It seems probable that this can be equated with the Late Roman flooding sequence referred to by Boreham (2007) and identifiable elsewhere as an ubiquitous horizon of grey silt (see Timberlake *forthcoming*). This horizon is evident in Testpit 4, but particularly so in Testpit 5b where it appears as a dark grey silt locally enriched in anthropogenic material, the latter evident from the amount of charcoal present in addition to washed-in animal

bone and burnt flint. In fact the amount of floodplain alluvium present suggests the presence of a periodically wide and moderately slow-flowing river with periodically encroaching/ eroding banks and a predominance of wet ground conditions.

The top alluvial marker horizon [Horizon 5] within this sequence is a poor to moderately shelly silty alluvium which happens to suggest that the river course was in approximately the same position, but was almost certainly wider than the current example; this was a river of moderate to slow flow yet was still prone to flooding. At a guess, this horizon is probably post-Roman, possibly even Early Medieval, the latter perhaps equating with Boreham's clay-rich overbank (floodplain) deposit examined within Trench 4 of the Riverside evaluation (Timberlake *ibid.*). Horizon 4 above this is, as before a mixed colluvial/ alluvial horizon indicative of slow water flow rate and periodic flooding, with both an erosional and a soil solifluction imput. The colluvial imput at this point probably exceeds any deposition of alluvium as the soil build-up in the agricultural land either side of this would have raised the average height of this in relation to the river level. This may have been taking place sometime during the Medieval – Early Postmedieval period(s). The base of the overlying colluvium and subsoil [Horizon 3] is recognisable through the presence of a thin but intermittent marker horizon of exceedingly degraded pot or tile recognisable by the ghost outline of larger pieces and the reduced black (internal) and reddened (external) surfaces of the fabric. Almost certainly these represent redeposited pieces of Roman tile or possibly even amphora sherds, the widespread dispersion of these relating to considerable disturbance of the Roman site and environs on the west (and perhaps eastern) sides of the river and extensive colluviation relating to a considerably more intense phase of agriculture. Most likely Postmedieval- Modern in date, it is tempting to relate this to either the Victorian modernisation expansion of cultivation on the Babraham Estate, or else the digging up and deep ploughing of previously uncultivated pasture as part of the post-war intensification of agriculture in the 1950s. By this time the width of the channel of the River Granta would have been much the same size as we see it now and the relative ground surface will have risen in this area. Some of this disturbance and colluviation may well relate to groundworks involved in the construction of the bridge. It seems possible that the upper layer of ground disturbance and soil accumulation [Horizon 2] is all modern and relates to ploughing and cultivation undertaken here since the 1950s.

The presence of zones of iron pan suggests oscillation of the water table within this area of the now-infilled and once much larger River Granta. Almost certainly this reflects changing groundwater conditions since colluviation, given that high water levels present within the river now are rarely expressed in the form of flooding.
However, the degree of oxidation experienced within these buried soils and sediments will undoubtedly have some bearing on the preservation of archaeology. Apart from the overall porosity in these sediments, the current level of water table appears to lie be well below the interface between the anthropogenic and sterile riverine sediments.

DO NOT SCALE

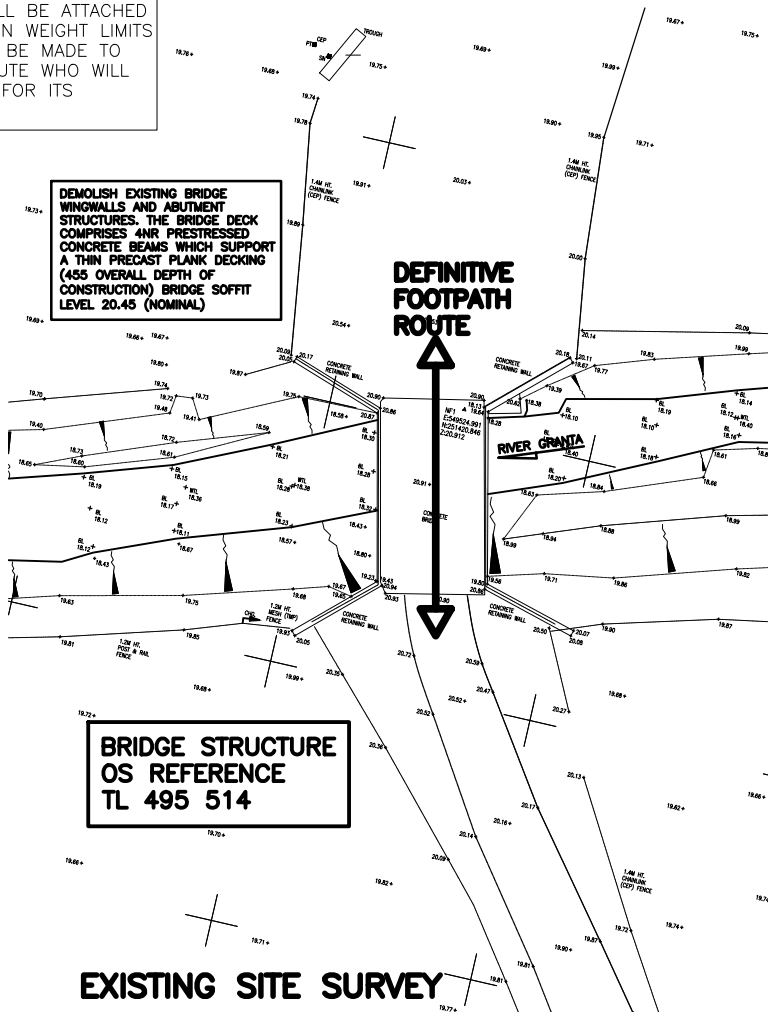


THE PROPOSED REPLACEMENT BRIDGE IS CURRENTLY SITED AT OS GRID REFERENCE TL508 506. THE RELOCATED BRIDGE HAS BEEN CHECKED AND DEEMED SUITABLE FOR BOTH FOOTWAY AND BRIDLEWAY ACCESS. A NOTICE WILL BE ATTACHED IN RELATION TO DESIGN WEIGHT LIMITS AND REFERENCE WILL BE MADE TO THE BABRAHAM INSTITUTE WHO WILL REMAIN RESPONSIBLE FOR ITS MAINTENANCE.

AMENDMENTS TO THIS DRAWING HAVE BEEN MADE IN CONSULTATION WITH THE COUNTY COUNCILS COUNTRYSIDE ACCESS TEAM (CC CAT)

PROPOSED BRIDGE AND FORD ARRANGEMENT

DEMOLISH EXISTING BRIDGE WINGWALLS AND ABUTMENT STRUCTURES. THE BRIDGE DECK COMPRISES 4NR PRESTRESSED CONCRETE BEAMS WHICH SUPPORT A THIN PRECAST PLANK DECKING (455 OVERALL DEPTH OF CONSTRUCTION) BRIDGE SOFFIT LEVEL 20.45 (NOMINAL)



BRIDGE STRUCTURE OS REFERENCE TL 495 514

EXISTING SITE SURVEY

SEQUENCE OF WORKS

STAGE 1
FORD CONSTRUCTION (EXISTING RIVER BRIDGE TO REMAIN IN OPERATION)

STAGE 2
ERECT TEMPORARY SCAFFOLD FOOTBRIDGE. LOCATION TO BE ADVISED (FOOTPATH DIVERSION)

STAGE 3
DEMOLISH EXISTING CONCRETE RIVER BRIDGE. BUILD BANK SEATS. RELOCATE/ERECT TIMBER FOOTBRIDGE (FROM UPSTREAM). REMOVE TEMPORARY SCAFFOLD BRIDGE

REV	DATE	DESCRIPTION
B	DEC09	CC CAT REQUIREMENTS ADDED
A	NOV09	FORD RE-POSITIONED

DESIGN
CIVIL/STRUCTURAL CONSULTING ENGINEERS
ARNWA HOUSE, GREAT CHESTERFORD COURT
GREAT CHESTERFORD, SAFFRON WALDEN
ESSEX CB10 1PF
TEL: (01799) 531313 FAX: (01799) 531291
EMAIL: OFFICE@GSFDESIGN.COM

CLIENT
THE BABRAHAM INSTITUTE
PROJECT
REPLACEMENT RIVER CROSSING
THE BABRAHAM INSTITUTE
BABRAHAM
CAMBS
DRG
STRUCTURAL ARRANGEMENTS

ENGINEER GSF DATE JUL 09
CHECKED SCALE 1:100
DRG NR
09-092F-1(B)

Appendix 3

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OASIS ID: cambridg3-82979

Project details

Project name	An Archaeological Evaluation of Proposed River Ford, Rowley Lane, Babraham
Short description of the project	A series of test pits were excavated within the footprint of a proposed ford and access road through the river Granta at Babraham. A Romano-British riverside track or riverbank consolidation deposit was identified as well as a full alluvial and colluvial sequence for the formation of the site.
Project dates	Start: 25-08-2010 End: 27-08-2010
Previous/future work	No / Not known
Type of project	Field evaluation
Current Land use	Cultivated Land 3 - Operations to a depth more than 0.25m
Monument type	UNASSIGNED Roman
Significant Finds	TILE Roman
Methods & techniques	'Test Pits'
Development type	Estate management (i.e. maintenance of existing structures and landscape by capital works and on-going maintenance)
Prompt	Direction from Local Planning Authority - PPG16
Position in the planning process	After full determination (eg. As a condition)

Project location

Country	England
Site location	CAMBRIDGESHIRE SOUTH CAMBRIDGESHIRE BABRAHAM Babraham Research Campus
Study area	500.00 Square metres
Site coordinates	TL 495 514 52.1401998197 0.184869158770 52 08 24 N 000 11 05 E Point
Height OD / Depth	Min: 19.50m Max: 19.80m

Project creators

Name of Organisation	Cambridge Archaeological Unit
Project brief originator	Local Authority Archaeologist and/or Planning Authority/advisory body

Project design originator	Robin Standring
Project director/manager	Robin Standring
Project supervisor	Adam Slater
Type of sponsor/funding body	Developer
Name of sponsor/funding body	Babraham Bioscience Technologies

Project archives

Physical Archive recipient	Cambridge Archaeological Unit
Physical Contents	'Animal Bones','Ceramics'
Digital Archive recipient	Cambridge Archaeological Unit
Digital Contents	'Survey'
Digital Media available	'Database','Images raster / digital photography','Survey'
Paper Archive recipient	Cambridge Archaeological Unit
Paper Contents	'Stratigraphic','Survey'
Paper Media available	'Context sheet','Drawing','Matrices','Photograph','Plan','Report','Survey '

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	An Archaeological Evaluation of Proposed River Ford, Rowley Lane, Babraham
Author(s)/Editor(s)	Slater, A and Timberlake, S.
Other bibliographic details	CAU report number 962
Date	2010
Issuer or publisher	Cambridge Archaeological Unit
Place of issue or publication	Cambridge Archaeological Unit
Description	Unpublished Grey Report

Entered by	Adam Slater (as813@cam.ac.uk)
Entered on	21 September 2010

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