LAND TO THE REAR OF HSBC BANK
53 HIGH STREET
ALCESTER
WARWICKSHIRE

ARCHAEOLOGICAL BOREHOLE SURVEY

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Preface

Every effort has been made in the preparation of this document to provide as complete a summary as possible within the terms of the method statement. All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.

Fieldwork for this project was overseen by David Ingham (Project Officer). The boreholes were drilled by Geotechnical Engineering Ltd, and analysis of the cores was undertaken by James Rackham (The Environmental Archaeology Consultancy). This report has been prepared by David Ingham with contributions from James Rackham and Joan Lighting (CAD Technician), and has been edited by Mike Luke (Project Manager). All Albion projects are under the overall management of Drew Shotliff (Operations Manager).

Albion would like to thank George King of Carillion plc, who commissioned the project; Anna Stocks, who monitored the project in her role as Planning Archaeologist for the Warwickshire Museum Field Services; and Emma Jones of the Warwickshire Historic Environment Record.

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Structure of the Report

Section 1 is an introduction to the project, the methodology for which is given in Section 2. Sections 3 describes and appraises the results, while Section 4 discusses the findings and assesses the archaeological impact of the development. Section 5 is a bibliography, and Appendix 1 contains the borehole logs.

Key Terms

The following terms or abbreviations are used throughout this report:

Client	Carillion plc
IFA	Institute of Field Archaeologists
Procedures Manual	*Procedures Manual Volume 1: Fieldwork*, 2nd edition, 2001, Albion Archaeology
WMFS	*Warwickshire Museum Field Services*

Non-Technical Summary

The installation of a new attenuation tank and associated pipelines is proposed to the rear of the HSBC bank, 53 High Street, Alcester, Warwickshire. Due to the high archaeological sensitivity of the development area, the Warwickshire Museum Field Services' Planning Archaeologist requested a programme of borehole sampling. This was designed to test for the presence of peat and/or other organic deposits, while also characterising any other archaeological or geological deposits present.

Albion Archaeology was commissioned by Carillion plc to produce a Project Design (Albion Archaeology 2008) in line with the Planning Archaeologist's Brief, and to carry out the borehole survey. The results of the survey are presented in this report, and will be used to determine the archaeological impact of the tank and pipelines.

The development area lies within the town of Alcester (Fig. 1). It is centred on SP 0889 5735 at a height of c. 40m OD, and covers an area of c. 450m^2. The site is situated in a loop of the River Arrow, west of its confluence with the River Alne, near the southern end of an area of marsh. The underlying geology is Keuper Marl, overlain by river terrace gravels and alluvium. The development area is currently used as a car park.

The modern town of Alcester has its origins in the Roman period. The Roman town, lying adjacent to the line of Ryknild Street, was partly fortified, but with an extra-mural component substantially greater than the walled area. The development area lies approximately on the line of the town defences, the north, east and south-west sides of which have previously been identified.

Excavations within the Roman settlement have identified numerous buildings, timber and masonry, with high-status structures both inside and outside the walled area. A large granary which may have had a military function was revealed at Coulters Garage, immediately west of the development area. The road network is at least Flavian in origin, while the town continued to exist into the late fourth century, with possible evidence of continued activity in the fifth.

The only archaeological remains positively identified by the borehole survey, undertaken on 8–9 October 2008, comprise building floors and foundations, a probable cobbled surface, and garden soil, all of which are post-medieval in date. The clays and gravelly clays underlying the post-medieval remains represent a combination of make-up layers and alluvial deposits, the date of which is uncertain. However, if these clays are Roman in date, then the potential exists for Roman features to have been cut into them, outside the specific locations of the boreholes. The earliest post-glacial deposits comprise a peat deposit in BH1 and organic silts in BH1, BH4 and BH7.

The archaeological impact of the development depends on the precise location of the attenuation tank. The impact is likely to be greatest at the south-eastern end of the site, where post-medieval building foundations, possible Roman alluvium and organic silts would be threatened. However, a lower level of post-medieval remains and a negligible depth of organic silts were revealed in the area between BH2 and BH3, meaning a lesser archaeological impact for this location, although this area still contains probable Roman make-up layers and may potentially contain Roman features.

1. INTRODUCTION

1.1 Planning Background

The installation of a new attenuation tank and associated pipelines is proposed to the rear of the HSBC bank, 53 High Street, Alcester, Warwickshire. Due to the high archaeological sensitivity of the development area, the Warwickshire Museum Field Services' Planning Archaeologist issued a Brief (WMFS 2008) requesting a programme of borehole sampling. This was designed to test for the presence of peat and/or other organic deposits within the development area, while also helping to determine the character of any other archaeological or geological deposits present.

The results of the borehole survey will be used to determine whether the tank and pipelines can be inserted without causing unacceptable damage to any archaeological deposits within or adjacent to the development area.

Albion Archaeology was commissioned by Carillion plc to produce a Project Design (Albion Archaeology 2008) in line with the Planning Archaeologist's Brief, and to carry out the borehole survey. The results of the survey are presented in this report.

1.2 Site Location and Description

The development area lies within the town of Alcester (Fig. 1). It is centred on SP 0889 5735 at a height of *c*. 40m OD, and covers an area of *c*. 450m^2.

The site is situated in a loop of the River Arrow, west of its confluence with the River Alne, near the southern end of an area of marsh that is know to contain extensive peat deposits. The underlying geology is Keuper Marl, overlain by river terrace gravels and alluvium. The development area was in use as a car park at the time of the survey.

1.3 Archaeological Background

The modern town of Alcester has its origins in the Roman period. The Roman town, lying adjacent to the line of Ryknild Street, was partly fortified, but with an extra-mural component substantially greater than the walled area (Burnham and Wacher 1990). Finds suggest that a Roman fort identified by aerial photography on Primrose Hill, *c*. 1km south-east of the town, is Claudian in date. There is evidence to suggest that it moved on to lower ground in the Bleachfield Street area before the town was subsequently established.
The road network in the town is at least Flavian in origin, while the town continued to exist into the late fourth century, with possible evidence of continued activity in the fifth.

A simple earthen bank was constructed round the town in the late 2nd century AD, the remains of which have been identified close to the development area (SMR WA 506 and WA 5001). This was replaced by a stone wall in the final quarter of the 4th century, the line of which is tentatively thought to pass either through or along the north-eastern side of the development area.

Excavations within the Roman settlement have identified numerous buildings, timber and masonry, with high-status structures both inside and outside the walled area. One such structure identified at the Coulters Garage site (Fig. 1; subsequently renamed Brooklyn) was a very large stone granary, possibly used for military supplies (Booth 1985; Cracknell 1996; Hawtin 2006). A less substantial stone-walled building was revealed to the north of the development area (Cracknell 1985).

Evidence for the town's existence in Saxon times is insubstantial, with no listing in the Domesday Book, but the town is known to have thrived during the medieval period, with some of the later medieval buildings still surviving. The earliest known activity within the development area itself dates to the post-medieval period, with several outbuildings shown on the 1886 OS map that have since been demolished (Fig. 2). A pit was identified during the repair of a water culvert that runs along the south-western edge of the site (White 1984), but its date is unknown.

1.4 Project Objectives

The primary objective of the borehole survey was to determine whether the proposed development area contains peat and/or other organic deposits, whilst also characterising any other archaeological or geological deposits present. The methods used to obtain this information are described in Section 2.

2. METHODOLOGY

Drilling of the boreholes took place on 8–9 October 2008. A small terrier drilling rig was used for the coring, fitted with a sampler tube containing a plastic sleeve for removing the cores intact (Fig. 3).

Initially, a 0.3 x 0.3m pit was excavated by hand to a depth of 1.1–1.2m in order to avoid any unknown services; the excavated deposits were laid out in sequence on a plastic sheet and checked for archaeological finds (Fig. 3). Excavation of the pit for BH5 revealed a modern layer of gravel at a depth of 0.85m, indicating the presence of a service trench associated with the water culvert that crosses the site (White 1984); the position of the borehole was therefore relocated (BH5a).

Coring commenced at the base of each hand-excavated pit. The first core for each borehole was sunk to a depth of 2.0m, using an 84mm diameter plastic sleeve; the sampler tube was reduced to a 74mm sleeve for subsequent cores. The first borehole (BH1) was sunk to 4m to test the undisturbed geology and establish the depth to which each borehole would probably need to be taken. Subsequent boreholes were taken to 3m only. The cores were left within their sample sleeves and were removed off site to be recorded under laboratory conditions.

3. RESULTS

3.1 Deposit Sequences

The natural sequence was tested by drilling to four metres in BH1 (Figs 4 and 5). The basal deposit comprises a red brown marl, the top of the Keuper Marl, which is overlain by well-rounded, quartzite-pebble gravel, that changes in colour upwards from reddish brown to grey. This terrace gravel is recorded in the base of all the boreholes. Its upper levels are clearly disturbed in some boreholes and there is some local survival of organics, probably root material. There is no visible palaeosol horizon in any of the boreholes, and the upper surface of the gravels most closely defines the base of the post-glacial sediments on the site. This surface dips to the north-west and the south-east, the latter towards the River Arrow, creating a slight ridge across the middle of the site.

The lowest post-glacial horizons occur in the north-western borehole, BH1, and the two south-eastern boreholes, BH4 and BH7. In BH1, an organic silt overlies the gravels and changes upwards into a peat deposit. This would appear to be a continuation of the peats recorded on the sites immediately north and north-west of the site (Cracknell 1996, 7), but does not extend further south-east within the car park. The organic sediments in BH4 and BH7 may relate to a different series of deposits towards the River Arrow; organic waterlain silts overlie the gravels, fining upwards into alluvial clays.

Despite minor variations, the deposits above the organic sediments in BH1–3 are clayey pebble gravels that appear to have been dumped on the site to make up the ground level, presumably to raise it above the wet ground, although perhaps in relation to construction of the nearby Roman defences. Apart from a few minor inclusions such as charcoal, these deposits appear devoid of archaeological debris. The sequence is different in the south-eastern half of the site, with clays predominating (see Fig. 5, BH4). These appear at first glance to be alluvial clays, and in BH4 1.6m of clay overlies the organic silts that lie on the gravels. These may reflect overbank flood sediments from the River Arrow, but with the inclusion of frequent pebbles locally in the clays, they could also be make-up deposits to raise the ground level across the site.

The upper 1.2–1.4m contained post-medieval features and deposits, most of which were dug out by hand. In BH1 and BH2, a cobble layer above the gravels suggests a cobbled surface. Between this and the car park surface were friable ‘garden’ soils with inclusions of brick, tile, stone and rubble, along with clay pipe fragments and 19th-century ceramics. In BH3, lime-mortar lumps of concrete were underlain by brick, tile and stone (see Fig. 3) suggesting an internal floor, and a continuous layer of stone across the bottom of the hand-dug hole suggests foundations for this surface. In BH4, a brick-rich fill is likely to have been a brick floor; this in turn overlay a flagstone (presumably itself part of a floor) laid on mixed clay and mortared stones which are suggestive of building foundations. A building is marked in approximately this location on the 1886 OS map (Fig. 2). A flagstone floor was also recorded in BH7, further suggesting that this end of the car-park once had several outbuildings on it.

3.2 Limitations of the Cores

Several of the cores were incomplete or unfilled. This can arise from a number of factors, such as compression of the deposits, pushing through softer sediment; material slipping out of the bottom of the sampler; material becoming wedged in the sampling chamber and pushing through the lower deposits; or the sampler being driven through less than 1m. It is not always possible to explain each occurrence, but a piece of stone wedged in the first sampling sleeve from BH3, for example, is clearly the reason for this core's being largely empty. The core therefore failed to sample the lower 60cm of this sequence, so several layers may be missing from the recovered deposits.

It is clear from the diagrammatic section (Fig. 4) that there may be several minor deposits missing from the recorded sequence, but the results show a broad sequence of deposits across the site. The borehole logs can be found in Appendix 1.

4. CONCLUSION

4.1 Discussion

Post-medieval deposits are concentrated in the top 1.2–1.4 metres. A post-medieval garden soil is indicated to the back of the plot, probably underlain in BH1 and BH2 by a cobbled yard surface, with associated finds suggesting a late post-medieval date. To the front of the plot, the evidence indicates post-medieval buildings with mortar and flagstone floors; these may relate to buildings shown on the 1886 OS map (Fig. 2). The front of the plot also contains less evidence for the garden soils found to the rear, with the upper deposits in this area apparently derived from the underlying clays.

The organic sediments in boreholes BH1, BH4 and BH7 have some potential for palaeoenvironmental study, but their maximum thickness in these boreholes is 0.29m. It may be possible to obtain a palaeoenvironmental sequence from the sediments above and below the peats, whilst the study of pollen from the 1.5m of organic mud, clays and stony clays on the adjacent Coulters Garage site (Woodwards and Greig 1985) suggests that pollen is likely to survive in the deposits above the peats on the HSBC site, where the sequence in BH1 is fairly similar. The organic silt and peats of BH1 lie between 37.9 and 38.18m OD; this is slightly lower than on the Swan Court site to the south, where the top of the organic layer was recorded at 38.60m OD (Warwickshire Museum Field Services 2006), while broadly comparable with the Coulters Garage site.

The clays towards the front of the HSBC car park also have a corollary on the Coulters Garage site, where up to 0.8m of clays are interpreted by reference to earlier work in the Arrow valley as alluvial deposits (Booth 1985). Shotton (1978) has suggested a middle Iron Age date for the onset of alluviation in the Arrow Valley, and the alluvial clays at Coulters Garage are thought to predate the 2nd century AD. The long clay sequence in BH4 at the front of the HSBC site might therefore seal earlier Iron Age organic silts, while the top of these clays might correlate with the Roman settlement at Alcester, despite the apparent absence in the cores of any archaeological debris from earlier than the post-medieval period.

A very rich black horizon full of charred cereal debris was recorded on Coulters Garage and the recent Brooklyn excavations (Colledge 1985; Hawtin 2006), but no similar horizon was recognised during the HSBC borehole survey.

4.2 Impact of Development on Archaeological Remains

The only archaeological remains positively identified by the borehole survey comprise building floors and foundations, a probable cobbled surface, and garden soil, all of which are post-medieval in date and are likely to relate to buildings shown on the 1886 OS map (Fig. 2). These remains extend to a depth of 1.2–1.4m. They are considered to be of low significance, but would be completely destroyed in the area of the new attenuation tank.

The clays and gravelly clays underlying the post-medieval structural remains represent either make-up layers or alluvial deposits, and their date is uncertain. However, if these clays are Roman in date, then the potential exists for Roman

features to have been cut into them, outside the specific locations of the boreholes. Such features would most likely be of moderate to high significance, and would be partially or completely destroyed in the area of the new attenuation tank.

The earliest post-glacial deposits comprise a peat deposit in BH1 and organic silts in BH1, BH4 and BH7. In the last two, the top of the silts is at a depth of only 1.82m below ground level (38.46 – 38.51m OD), whereas the top of the peat in BH1 is at a depth of 2.4m below ground level (38.18m OD). It is likely that installation of the new attenuation tank would require sufficiently deep excavation to have a negative impact on the organic silts in BH4 and BH7, and possibly on the silts and peat in BH1. However, only traces of organics were seen on the top of the gravel terrace deposits in BH5a–6, at a depth of at least 2.65m below ground level, whilst no organics were observed in BH2–3.

The archaeological impact of the development depends on the precise location of the attenuation tank. The impact is likely to be greatest at the south-eastern end of the site, where post-medieval building foundations, possible Roman alluvium and organic silts would be threatened. However, a lower level of post-medieval remains and a negligible depth of organic silts were revealed in the area between BH2 and BH3, meaning a lesser archaeological impact for this location, although this area still contains probable Roman make-up layers and may potentially contain Roman features.

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6. APPENDIX 1: BOREHOLE LOGS (FIG. 4)

6.1 Borehole 1 – BH1

Ground level = 40.58m OD

Hand excavated:

0–60cm	tarmac over soily rubble, with brick and stone
60–100	mixed soil layers with stone and brick fragments
100–105	river pebble layer: possible surface
100–120	cobble/pebble-rich deposit

	BH1 Core 1 (1.2–2m below ground level)
Depth (cm)	
0–20	Dug out
20–28	Empty
28–36	Dark grey, silty clay loam with freq. pebbles – well rolled, up to *c*. 3cm in diameter. Small amount of charcoal
36–50	Brown clay with freq. rounded quartz pebbles up to *c*. 3cm in diameter. Well packed surface
50–76	Grey/brown silty clay with freq. quartz pebbles up to *c*. 6cm in diameter
76–100	Grey silty clay with v. freq. quartz pebbles up to *c*. 5cm in diameter

(36–100cm = same dumping event?)

	BH1 Core 2 (2–3m below ground level)
Depth (cm)	
0–20	Empty
20–40	Dark grey silty clay loam with freq. quartz pebbles up to *c*. 5cm in diameter. Browning to base
40–53	Dark brown peat. Silty towards base
53–68	Very dark grey organic silt with visible organics
68–80	Grey, slightly clayey, silty, sandy gravel with quartz pebbles up to *c*. 3cm in diameter (disturbed terrace gravel)
80–90	Grey, organic, silty, sandy, quartz gravel (disturbed terrace gravel)
90–100	Sandy quartz gravel (top of undisturbed terrace gravel)

	BH1 Core 3 (3–4m below ground level)
Depth (cm)	
0–11	Empty
11–24	Mixed ‘slop’
24–38	Grey pebble gravel, mostly quartz pebbles. 1 large stone/mudstone *c*. 8 x 5cm (terrace gravel)
38–73	Dense, slightly sandy, pebble gravel, fining upwards. Pebbles up to *c*. 5cm in diameter (terrace gravel)
73–100	Red brown marl with occasional grey patches

6.2 Borehole 2 – BH2

Ground level = 40.42m OD

Hand excavated:

0–50cm tarmac and fill
50–100 'garden' soil layer, with stone, brick, tile, clay pipe stems and post-medieval pot
100–110 cobble layer

	BH2 Core 1 (1.1–2m below ground level)
Depth (cm)	
0–10	Dug out
10–27	Empty
27–71	Densely packed quartz gravel in grey clay. Pebbles up to *c*. 3cm in diameter. Large stones at top, *c*. 8 x 5cm. Patches of brownish yellow sandy clay
71–82	Dark grey clay. Very few pebbles, up to *c*. 3cm in diameter. Occasional charcoal frags
82–87	Grey clay with modern roots showing
87–100	Light grey, slightly silty clay, soft. Mottled with dark grey clay and iron-stained rootlets

	BH2 Core 2 (2–3m below ground level)
Depth (cm)	
0–50	Empty
50–64	Large stones, up to *c*. 7cm in diameter (terrace gravels)
64–79	Quartz gravel in grey, silty clay with patches of dark grey clay and light brown sand. Pebbles up to *c*. 4cm in diameter (terrace gravels)
79–100	Quartz gravel in greyish brown sandy silt. Pebbles up to *c*. 7cm (terrace gravels)

6.3 Borehole 3 – BH3

Ground Level = 40.30m OD

Hand excavated:

0–30cm	tarmac and chips
30–75	'garden' soil with white china
75–110	mortar-rich layer with brick and tile, stone and large lumps of lime mortar with stone across the whole of the base of the hand-dug hole – internal floor?

	BH3 Core 1 (1.1–2m below ground level)
Depth (cm)	
0–10	Dug out
10–65	Empty
65–74	Grey, slightly silty clay with a few stones up to *c*. 8cm in diameter
74–84	Flagstone. Wedged (probably the reason there is nothing in the first 65cm)
84–89	Light grey, silty clay, soft. A few quartz pebbles up to 4cm in diameter
89–95	Brownish grey, very silty, sandy clay and quartz gravel mix. Pebbles up to *c*. 5cm in diameter
95–100	Grey, very silty sandy clay with quartz gravel. Pebbles up to *c*. 3cm in diameter

	BH3 Core 2 (2–3m below ground level)
Depth (cm)	
0–28	Empty
28–43	Gravel with grey, silty clay. Pebbles up to *c*. 4cm in diameter. Some stones up to *c*. 6cm in diameter. 1 piece of rock sandstone (disturbed gravels)
43–74	Brown, silty, sandy quartz gravel. Pebbles up to *c*. 7cm in diameter. Some stones up to *c*. 9cm in diameter (terrace gravel)
74–100	Brown, silty, sandy quartz gravel. Becoming greyer towards the base and finer gravel towards the top. Pebbles up to *c*. 7cm in diameter (terrace gravel)

6.4 Borehole 4 – BH4

Ground Level = 40.28m OD

Hand excavated:

0–15cm	tarmac
15–40	brick fill/floor
40–50	flagstone floor
50–90	mixed clay and mortared stones – possible building?
90–100	brown mixed clay
100–110	lighter brown silty clay with occasional charcoal and small brick fragments

	BH4 Core 1 (1.1–2m below ground level)
Depth (cm)	
0–10	Dug out
10–25	Greyish brown clay, soft, with iron-stained roots
25–81	Brown clay with small patches of very dark grey clay. Reddens towards base. Decayed roots between 48cm and 52cm
81–100	Very dark grey clay (almost black) with a patch of organics between 82cm and 92cm

	BH4 Core 2 (2–3m below ground level)
Depth (cm)	
0–17	Empty
17–32	Grey clay with very dark grey clay patches
32–45	Brownish grey, slightly silty clay
45–62	Grey, silty clay – fine
62–73	Dark grey silty clay with patches of organics
73–84	Dark brownish grey silty clay. Very organic. Wood at base, sample taken at 83cm for potential C14
84–100	Quartz gravel in silty sandy clay. Pebbles up to *c*. 8cm in diameter (top of terrace gravels)

6.5 Borehole 5a – BH5a

Ground Level = 40.44m OD

Hand excavated:
0–25cm tarmac
25–120 black clay with brick and tile

	BH5a Core 1 (1.2–2m below ground level)
Depth (cm)	
0–20	Dug out
20–25	Empty
25–34	Dark grey clay with freq. pebbles up to *c*. 5cm in diameter
34–63	Brownish grey clay with very freq. pebbles up to *c*. 3cm in diameter. Patches of brownish yellow sandy clay
63–63.5	Greyish yellow silty clay band/layer
63.5–71	Dark grey silty clay with some pebbles up to *c*. 2cm in diameter
71–81	Grey silty clay and gravel mix. Very pebbly – pebbles up to *c*. 5cm in diameter. Stones up to *c*. 9cm in diameter.
81–100	Light grey clay. A few pebbles up to *c*. 3cm in diameter. Patches of iron-stained roots

	BH5A Core 2 (2–3m below ground level)
Depth (cm)	
0–37	Empty
37–65	Grey silty clay with freq. quartz pebbles and stone inclusions – very gravelly. Pebbles up to *c*. 7cm in diameter. Stones up to *c*. 9cm in diameter. 1 large broken quartz pebble *c*. 7 x 5cm.
65–90	Dark grey silty sandy clay and gravel mix. Pebbles up to *c*. 8cm in diameter. Traces of organics (top of gravel terrace)
90–100	Grey, slightly clayey, sandy gravel (terrace gravels)

6.6 Borehole 6 – BH6

Ground Level = 40.32m OD

Hand excavated:

0–15cm	tarmac and hardcore
15–60	slightly clayey soil with brick, stone and cobbles
60–90	'garden' soil with a little pot, pipe stem, and tile
90–120	soil with tile, cobbles, glass and post-medieval pot, including blue transfer ware

	BH6 Core 1 (1.2–3m below ground level)
Depth (cm)	
0–17	Dug out
17–30	Grey, slightly sandy clay with patches of charcoal. Stone and pebble inclusions, up to *c*. 5cm in diameter
30–42	Brownish grey clay with patches of decaying roots and a small amount of pebble gravel
42–54	Grey clay with patches of dark grey clay. Occasional pebbles
54–87	Stiff brown clay with patches of iron-stained roots between 65cm and 80cm. Paling at base
87–100	Gravel in grey, silty sandy clay. Pebbles up to *c*. 3cm in diameter

	BH6 Core 2 (2–3m below ground level)
Depth (cm)	
0–33	Empty
33–66	Grey, very gravelly sandy silt with occasional stones
66–75	Dark grey silty pebble gravel with traces of organics
75–100	Brown, sandy pebble gravel. Pebbles up to *c*. 4cm in diameter (top of terrace gravels)

6.7 Borehole 7 – BH7

Ground Level = 40.23m OD

Hand excavated:

0–15cm	tarmac
15–20	flagstone floor
20–115	black sandy clay with brick and tile

	BH7 Core 1 (1.15–2m below ground level)
Depth (cm)	
0–15	Dug out
15–19	Building stone
19–47	Grey, slightly silty clay. Freq. pebbles up to *c*. 7cm in diameter. Patches of brownish yellow sandy clay.
47–58	Grey, slightly silty clay, stiff, with patches of brown clay. Freq. pebbles up to *c*. 3cm in diameter. Small amount of charcoal
58–66	Brown clay with patches of iron stained roots
66–82	Grey, slightly silty clay with a few pebbles up to *c*. 3cm. Patches of dark grey clay. Thick patch of iron-stained roots at base
82–93	Very dark grey/brown, organic, slightly clayey silt
93–100	Grey, organic, clayey silt. Patches of brown, organic, clayey silt

	BH7 (2–3m below ground level)
Depth (cm)	
0–30	Empty
30–37	Grey, organic, clayey silt. Occasional pebbles
37–41	Grey, organic, clayey silt, fine, with bone
41–50	Compacted, slightly silty, sandy gravel. Mostly large pebbles up to *c*. 9cm in diameter (terrace gravels)
50–85	Compacted gravel layer. Mostly small pebbles up to *c*. 3cm in diameter (terrace gravels)
85–100	Sandy cobble gravel. 1 large quartz stone (terrace gravels)

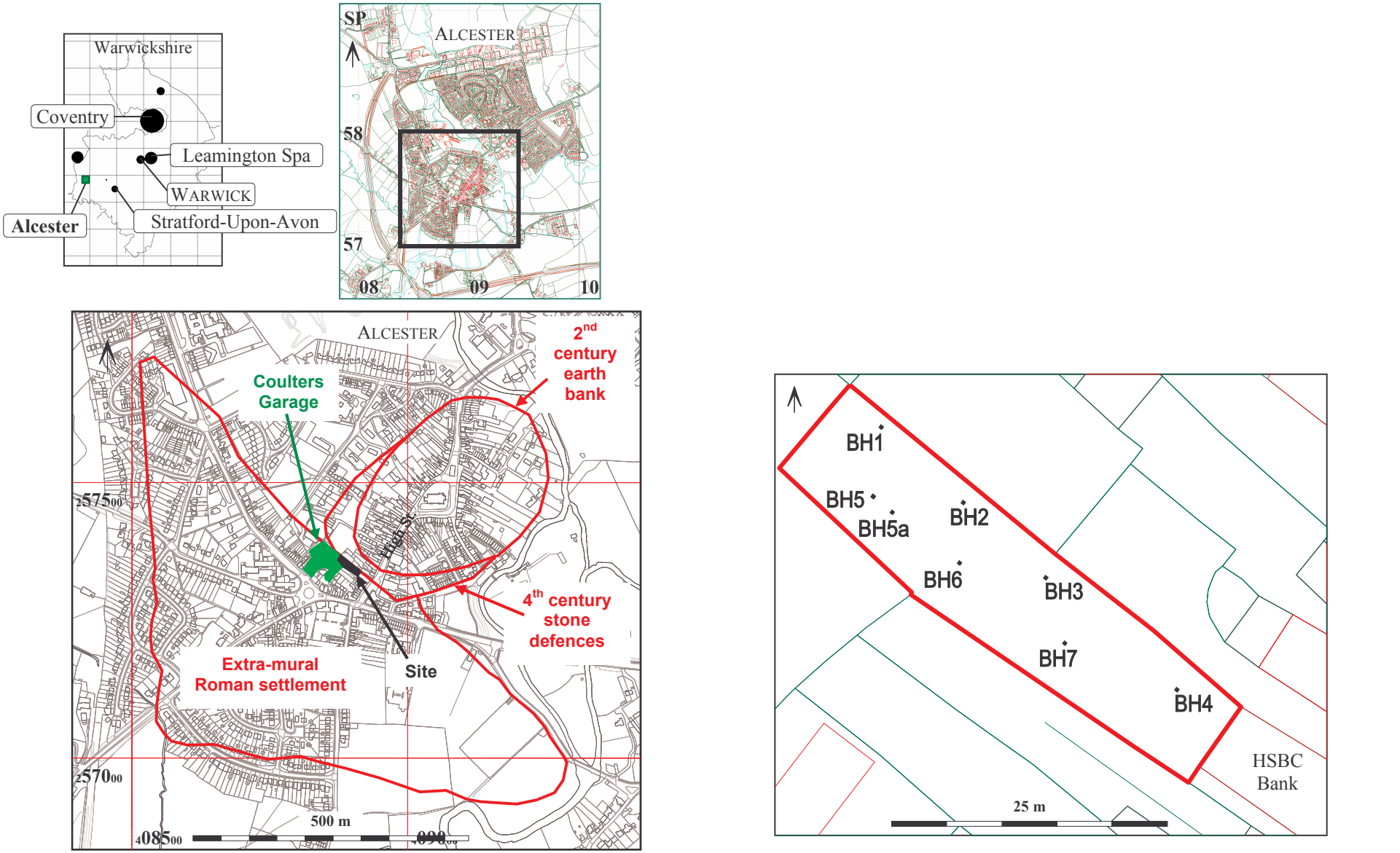


Figure 1: Site location plan

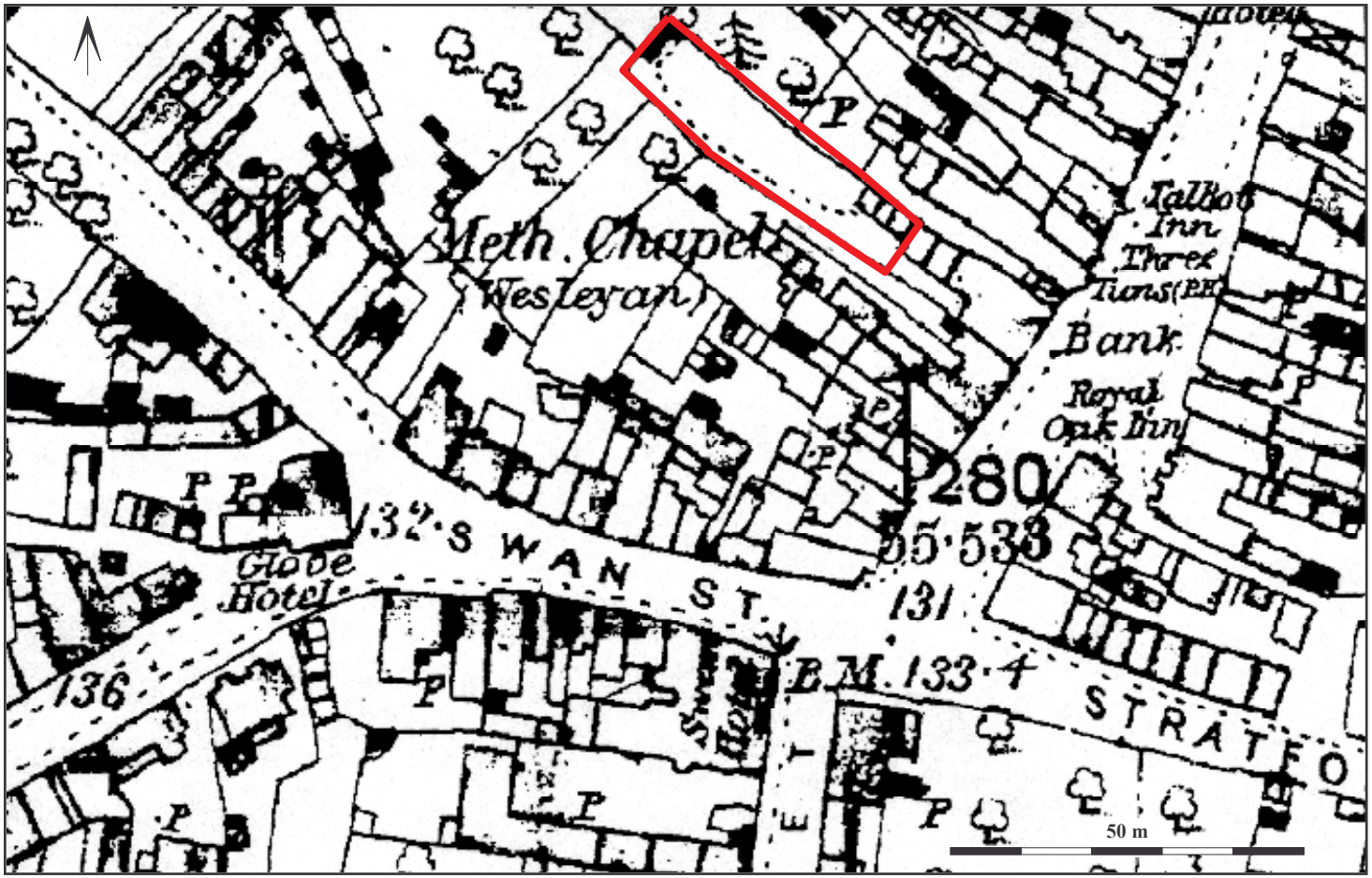


Figure 2: 1886 Ordnance Survey map

Terrier rig in operation over BH6.

Spoil from the hand-excavated part of BH4 laid out for checking.

Figure 3: Selected photographs during excavation of boreholes

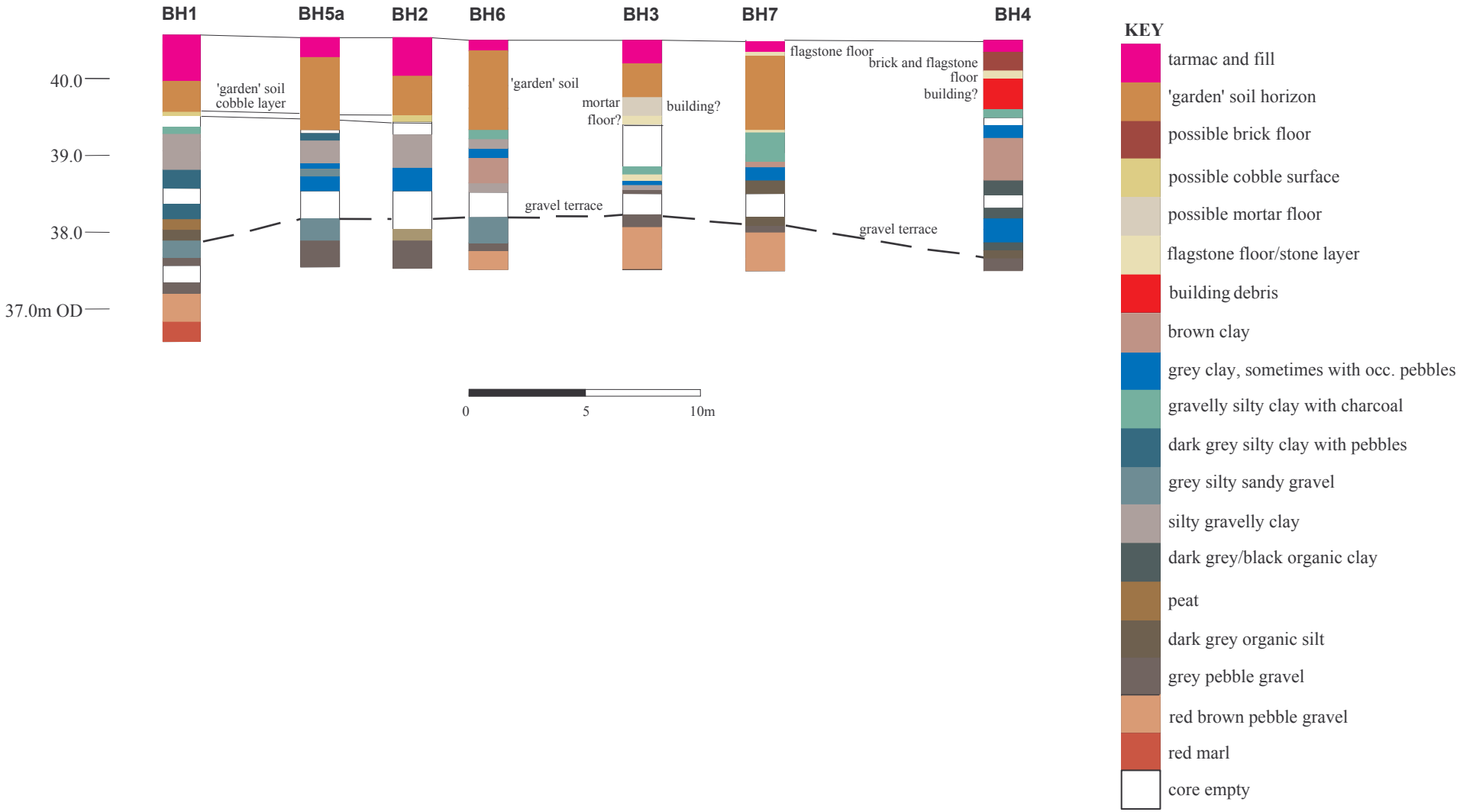
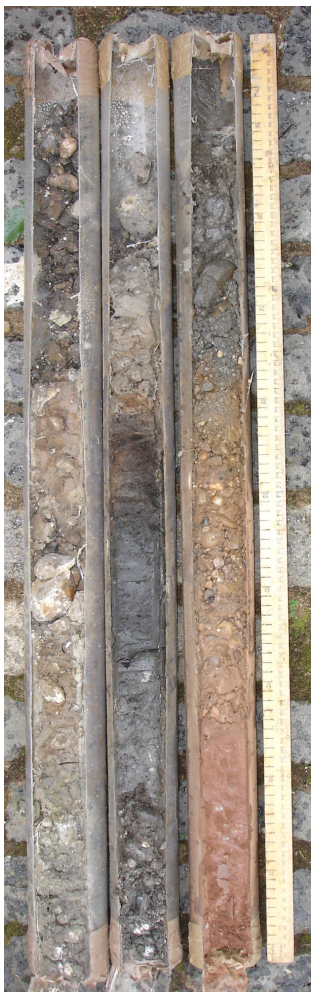
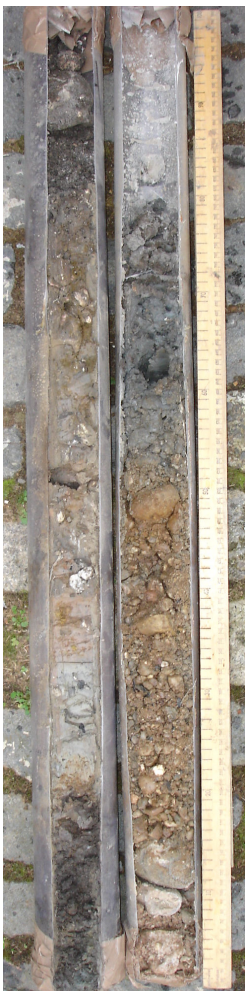


Figure 4: Diagrammatic section through the cored deposits.



BH1: cores from 1.2–4.0m depth (left to right). Peats are present in the centre of the second core.

BH4: cores from 1.2–3m (left to right). An organic silt horizon is present towards the base of core 2 (the small hole is where a wood sample was removed).



BH7: cores from 1.2–3m (left to right). An organic silt horizon is present at the base of core 1

Figure 5: Photographs of cores from BH1, BH4 and BH7