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**BANBURY TOWN CENTRE REDEVELOPMENT:
Below-ground archaeological evaluation of the Castle site
(Zone 1)**

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BANBURY TOWN CENTRE REDEVELOPMENT:
An inventory of the archaeological evaluation reports

The following reports are listed chronologically:

- I. Ferris, P. Leach and S. Litherland 1991 *Banbury Town Centre Redevelopment: An Archaeological Assessment. Implications and Response.* BUFAU Report No.94/01.
- R. Cuttler 1996 *Banbury Town Centre Redevelopment: An Archaeological Watching Brief.* BUFAU Report No.94/02.
- I. Ferris and S. Litherland 1996 *Banbury Town Centre Redevelopment: A Project Design for Archaeological Evaluation.* BUFAU Report No.94/03A.
- G. Coates and S. Litherland 1997 *Banbury Town Centre Redevelopment: Below-ground Archaeological Evaluation of the Bridge Street and Mill Lane (Zone 2) Urban Landscape.* BUFAU Report No.94/03B.
- S. Litherland 1997 *Banbury Town Centre Redevelopment: An Investigative Appraisal of the Standing Buildings in the Bridge Street and Mill Lane (Zone 2) Urban Landscape.* BUFAU Report No.94/04.
- S. Litherland, D. Moscrop, and K. Nichol 1997
Banbury Town Centre Redevelopment: Evaluation of the Canal and Riverside Urban Landscape (Zone 3). BUFAU Report No.94/05.
- Stratascan 1997A *Banbury Town Centre Redevelopment: A Geophysical Survey.*
- Stratascan 1997B *Ground Probing Radar Survey: Castle Street, Banbury, Volume 1 - Radargrams of Site 1.*
- Stratascan 1997C *Ground Probing Radar Survey: Castle Street, Banbury, Volume 2 - Radargrams of Site 2.*
- Stratascan 1997D *Ground Probing Radar Survey: Castle Street, Banbury, Volume 3 - Radargrams of Site 3.*
- Stratascan 1997E *Ground Probing Radar Survey: Castle Street, Banbury, Volume 4 - Radargrams of Site 4.*
- Stratascan 1997F *Ground Probing Radar Survey: Castle Street, Banbury, Volume 5 - Radargrams of Site 5.*
- Stratascan 1997G *Banbury Town Centre Redevelopment: A Geophysical Survey.*

Stratascan 1997H *Detailed GPR Survey: Castle Street, Banbury,
Volume 6 - Text and Illustrations.*

Stratascan 1997I *Banbury Town Centre Redevelopment:
Ground Probing Radar Survey (Phase 3).*

Stratascan 1997J *Banbury Town Centre Redevelopment
Geophysical Survey (Phase 4).*

**BANBURY TOWN CENTRE REDEVELOPMENT:
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1.0 SUMMARY

This report describes the results of the below-ground evaluation of the site of Banbury Castle for Banbury Shopping Centre Limited. Three evaluation trenches were excavated within the Castle Gardens car park, following an extensive ground probing radar survey. The main aim of the evaluation was to assess the survival and map the remains of Banbury Castle, demolished after the Civil War. Sparse artefactual evidence testifies to limited prehistoric and Roman activity in the area. Surprisingly, evidence for pre-Conquest activity, apparently predating the construction of the early-12th century castle, was found within two metres of the existing car park surface. A large moat or ditch ran from east to west through the area of the inner bailey of the later, 13th/14th century, castle. This ditch was re-cut a number of times and its silts contained valuable information about the environment nearly 1000 years ago. A causeway was constructed across the marshy silts which had accumulated in the early moat or ditch, probably when the first castle was being built. This causeway may have provided access to buildings inside the castle or equally it may have been built to service a series of adjacent quarry pits for building sand and gravel.

Elsewhere, excavation across the line of the inner ditch of the later 13th/14th castle indicated that the position of the inner moat lay slightly to the west of its previously acknowledged position. Late-medieval pottery was retrieved from the earliest inner ditch fills, as well as evidence of refortification during the Civil War. Evidence was also found of the 18th century development of the area as the Castle Gardens, within which the inner ditch was likely to have remained visible as a gradually diminishing earthwork up until as late as the mid-19th century. While these results complement and enhance the findings of rescue excavations to the south of Castle Street undertaken in the early 1970s, they have also shown that the majority of the inner platform of the later, 13th/14th century, castle has been scoured away.

2.0 INTRODUCTION

This report outlines the results of a below-ground archaeological evaluation of the Castle Gardens car park in the town centre of Banbury, Oxfordshire (fig. 1). The work reported upon here was undertaken during a period between August and October 1997 by Birmingham University Field Archaeology Unit (BUFAU), on behalf of Banbury Shopping Centre Limited.

In accordance with the guidelines laid down in Planning Policy Guidance Note 16 (DoE 1990), a recommendation for a phased programme of archaeological work to accompany a major redevelopment scheme in Banbury town centre was made by the County Archaeological Officer of Oxfordshire County Council. The scope of this work was defined in the *Eighth schedule (archaeological section) of the Draft 106 Agreement*, and a written scheme of investigation for the evaluation phase given in *Banbury Town Centre*

Redevelopment: a project design for archaeological evaluation (Ferris and Litherland 1996, 6-7), which was approved by Paul Smith (County Archaeological Officer) of the County Archaeology Office of Oxfordshire County Council. The purpose of the field evaluation stage of the archaeological work was to gather sufficient information to establish the presence/absence, extent, condition, character, quality and date of any archaeological deposits within the overall area of development. This area has been divided into three distinct, but physically and chronologically overlapping, zones;

- Zone 1* The Castle Precincts
- Zone 2* Bridge Street and Mill Lane urban landscape
- Zone 3* The Canal and Riverside.

This report outlines the results of the archaeological work carried out in *Zone 1* on the site of the castle. To understand the archaeological potential of the overall area of development reference should be made to the inventory of reports commissioned to date, which are listed at the beginning of this report. A more complete analysis of the historical development of the study area is presented elsewhere (Lobel 1969; VCH oxon, x; Rodwell 1976; Fasham 1983; and Ferris, Leach and Litherland 1991); however, a summary of the key points, together with an outline of the broader research aims for the evaluation of the Castle Zone, follows below.

3.0 THE STUDY AREA AND ITS SETTING (fig. 2)

Banbury is situated approximately 32 kilometres to the north-east of Oxford on the southern border of the Midland plain. It occupies an important position beside the River Cherwell at the junction of several arterial routes linking the east, west, south and north, routes that have been significant from as early as the Prehistoric period. It was early in the Medieval period, however, that Banbury began to take on an urban character comparable with the settlement that we know today, the shaping force of the settlement at this time being the construction of the castle.

Banbury Castle was built in the first half of the 12th century by Bishop Alexander de Blois (1123 - 1148), of the Sec of Lincoln. The castle was situated on a knoll of slightly higher and better-drained land just to the north of the market place, overlooking the crossing of the River Cherwell to the east. The Castle Zone is the best documented area within the proposed redevelopment, and approximately one third of the castle was excavated prior to the building of the Castle Centre in the 1970s (Fasham 1973 and 1983; Rodwell 1976). The proposed redevelopment affects the remaining two thirds of the castle complex.

The first castle was defended by a thick, embanked curtain wall with a relatively small ditch, possibly with rectangular interval towers at points around it (Rodwell 1976, 116). Excavation revealed a group of buildings within that were domestic in character. There is documentary evidence for a chapel within the walls, and reference to a prison which may have belonged to this phase of the castle.

In the late-13th or early-14th century the Castle of Alexander de Blois was remodelled. The new castle incorporated the latest innovations in military design proved in the Welsh campaigns of King Edward I. The rescue excavations of the early 1970s showed that two large concentric ditches were dug, and the upcast used to create a raised central platform for the new castle. The location of the outer ditch and bank and the design of the curtain wall with drum towers within the narrow outer bailey overlooking the marketplace were also established in the 1970s to the south of Castle Street, together with the location of some remains of buildings inside the castle. Information about the inner ditch was also obtained.

During the 16th century the castle fell into disrepair, but was rapidly refortified during the Civil War, when the castle successfully withstood two Roundhead sieges in 1644 and 1646. There are several documentary references to the repair and improvement of the fortifications in the time span between the two sieges. These final modifications included the creation of two new bulwarks and the addition of two sally ports. However, after the castle had surrendered on favourable terms in 1646, the defensive earthworks were slighted. Two years later, in 1648, the townspeople were granted permission to use stone from the castle to rebuild and repair the town that had suffered greatly during both sieges. Lord Saye and Sele, who then owned the castle, was paid £2,000 compensation. Towards the close of the 17th century a plan of the former castle area was made for the Lord Saye and Sele. This plan shows that in less than forty years the castle had almost completely disappeared, apart from two minor buildings and the outline of the large, but slighted, twin concentric ditches.

4.0 RESEARCH AIMS AND OBJECTIVES

Against this background a number of specific archaeological research aims were formulated to evaluate the castle site. Specific research aims and objectives were devised for the different precincts of the 13th/14th century castle, as the 1970s excavations showed these to be the best preserved. These were - Zone 1/I - the inner bailey, Zone 1/II - the area within, and inclusive of, the inner and outer ditches, and Zone 1/III the area outside the outer ditch of the castle.

The specific research aims and objectives for the evaluation of Zone 1/I were:-

- (a) to carry out a targeted programme of ground probing radar survey to detect any possible structural remains associated with the castle, or other related features, including an intensive survey of those parts of the castle known to be affected by any proposed new building, and to follow this up with selective testing of potential archaeological anomalies by trial trenching;
- (b) to confirm, by trial trenching, whether the deposit quality within the Inner Bailey was as good as that suggested by the excavations in the 1970s;
- (c) to conduct a programme of monitored machine excavation to reveal the first significant archaeological level/features, relating to the first, early-12th century castle, this level containing the best preserved buildings on the site in the 1970s excavations by Fasham.
- (d) to attempt to date the imported dumped layer overlying (c), not by its artefactual content, which was not considered to be a viable exercise, but by seeking to establish a date for those deposits immediately above and below the dumped layer;
- (e) to attempt to define the presence/extent of the Civil War cemetery partially revealed in Fasham's excavations.

The specific research aims and objectives for the evaluation of Zone 1/II were:-

- (a) to carry out a targeted programme of ground probing radar survey to accurately map the position of the inner and outer ditches of the castle, and detect any other related defensive features;
- (b) to verify by trial trenching the accuracy of the ground probing radar survey results in mapping the position of the inner and outer ditches and gain further information about their character, and also to test any further archaeological anomalies identified;
- (c) to establish whether the Civil War cemetery extended into this zone.

The results from the excavation of geotechnical test-pits and boreholes (Cutler 1996) in Zone 1/III, showed that the area outside the northern arm of the outer castle moat formerly consisted of low-lying marshy ground. Therefore, no ground probing radar work or trial trenching was carried out in Zone 1/III.

Further general research aims and objectives applying to all three sub-zones of Zone 1 were:-

- (a) to chart the post-Civil War development of the castle precinct;
- (b) to map the areas of the site that had been significantly affected by later disturbance;
- (c) to make a record of the site geometry which would enable a 3-Dimensional reconstruction of the recorded data;
- (d) to carry out an environmental sampling programme in order to identify datable deposits with the potential of providing data concerning the nature of the area during the pre-castle, castle and post-castle periods;
- (e) to conduct documentary research to set any identified archaeological features in context, especially in relation to earlier excavations on the castle.

5.0 METHOD (fig. 1)

The evaluation of the castle precinct consisted of geophysical survey followed by trial excavation. The ground probing radar survey (GPR) of the area was conducted by Stratascan (1997A-J), and used a combination of rapid transect scanning to establish areas of interest followed up by detailed gridded survey, to attempt to locate the line of the castle defences and other related features. Some modifications were made to the original evaluation strategy because of the constraints on carparking space in the town following the closure of the multi-storey car park. However, Trench 4 was excavated in order to test GPR anomalies within the inner bailey (Zone 1/I). The archaeology in Zone 1/II was assessed in Trenches 5 and 6, which were opened primarily to test the line of the inner ditch of the castle as interpreted by Stratascan, and to investigate other archaeological anomalies identified by the ground probing radar survey. A further proposed evaluation trench in the outer bailey was not dug due to the presence of a number of services. Instead, given the success of GPR as an evaluation technique, three further phases of intensive ground probing radar survey (Phases 5, 6 and 7) were commissioned.

After cutting the tarmac car park surface, modern overburden was removed by machine to the level of any undisturbed archaeological deposits. The trenches were then cleaned and recorded and a sample of all archaeological deposits was excavated by hand to characterise and date them. Deep excavation was anticipated within Trenches 4 and 5, therefore a protective box of hydraulic rams and steel shuttering was used in Trench 4, and acro-props and timber wallings in Trench 5. All excavation was carried out by qualified field archaeologists from Birmingham University Field Archaeology Unit, and recorded using *pro-forma* record sheets, complemented with scale drawings. A complete photographic record of the trenches was maintained and all finds were kept and processed. All the records from the evaluation will be held at BUFAU until completion of the overall project.

6.0 RESULTS

This section begins with a summary of the results of the ground probing radar survey conducted by Stratascan, followed by a description of the results from the excavations. The overall picture is then discussed in more detail in Section 7.0 of this report.

6.1 Summary of results from the Stratascan survey (fig. 1)

Ground Probing Radar (GPR) surveys were carried out on five areas within the castle precincts (Stratascan 1997A - 1997J). Three of these areas were intensively examined and two others had longitudinal traverses only. The depth of penetration of the survey was generally 1.5m - 1.7m ($\pm 10\%$) below surface ground level. The intensive surveys were targeted at the inner ditch and the inner bailey of the castle, less intensive survey was used to test the outer area of the precinct. The anomaly reference numbers below, in brackets, refer to Stratascan 1997H, figs. 47 and 80, for Surveys 3, 4, and 5, and Stratascan 1997J, fig. 8, for Surveys 6 and 7.

Survey 3 It was suggested that a linear structural anomaly (3/1), which ran parallel to the conjectural line of the inner ditch of the 13th/14th century castle, might represent a buried foundation or wall of part of the castle defences inside the inner bailey. In addition, two other shorter linear structural anomalies (3/4 and 3/5) were to be investigated in Trench 4.

Survey 4 A complex series of anomalies was revealed by the GPR survey where the north-western return of the inner ditch should have been located. These included a series of east-west aligned linear structural anomalies (4/1, 4/2, 4/3, 4/4, and 4/6). It was proposed that two trial trenches be dug to investigate this area; however, subsequent excavation of Trench 6, together with information from statutory authorities showed that the linear anomalies were recent services, including an armoured BT fibre-optic supply and two pressurised sewer runs. For this reason, the proposed excavation of the second evaluation trench here was abandoned.

Survey 5 An initial transect survey identified the north-west arm of the inner moat (5/1). The outer moat (5/4) was also picked up but its precise limits were not be defined. This was rectified by a second, more detailed, survey. Excavation of Trench 5 across the line of the inner moat revealed the complex returns adjacent to Castle Street (5/2 and 5/5) were infilled yards and cellars of a demolished terrace of houses.

Survey 6 A large curving linear ditch anomaly (Ditch A) was interpreted as the north-eastern return of the inner moat. A second ditch anomaly (Ditch B) appeared to be truncated by Ditch A and was probably the eastward continuation of the early ditch/moat F407 found in Trench 4.

Survey 7 A transect survey across the canal embankment suggested a linear ditch anomaly (Ditch C), possibly continuing the line of Ditch B east-west towards the River Cherwell. There was also tentative evidence for a shorter ditch (Ditch D), orientated north-south, in the centre of the site, which was probably an infilled canal spur.

6.2 Trench 4 (fig. 3; plate 1)

Approximately 1m of overburden (4000, 4081) was machined to levels of 93.5m and 92.8m A.O.D., in the south and north ends of the trench respectively. Subsequently, a combination of manual and mini-digger excavation was used. Hydraulic rams and steel shuttering were used to ensure a safe working environment. Trench 4 was excavated in three sections in order to ensure that a continuous deposit sequence was always visible within the trench. A group of pits in the southern third of the trench was sampled by three slots (A, B and C).

A buried soil

The earliest phase within Trench 4 comprised a layer of reddish brown clay-silt (4019), c.0.25m in depth, interpreted as a buried soil. It had a very clean matrix, containing only occasional charcoal flecks, small rounded pebbles, and a total of nine pieces of worked flint. This deposit was visible in plan in the southern part of the trench where it had been truncated by a series of pit cuts along the southern-most edge of the trench. It was cut to the north by a large linear ditch (F407). This deposit directly overlay the natural orange sand (4050). Layer 4019 was partially overlain by an isolated, 0.25m deep, dump of redeposited natural sand and gravel (4080), in the south-west corner of the trench, which was also cut by F407. The natural subsoil mirrored the existing slope of the site. The natural was encountered at a height of 92.50m A.O.D. at the southern end of the trench, and at 91.60m A.O.D. at the northern edge of excavation.

Ditch F407 (fig. 4; plate 1)

The southern edge of a large, east-west orientated ditch (F407) was cut from 4019 down into the natural orange sand and gravel. The ditch was 6.6m wide and 2m deep, with a steep-sided, bowl-shaped profile and a flat base. The southern edge was steeper than the northern side because of the natural topography. A deep organic deposit of dark grey/black silt (4032) had accumulated in the bottom of the ditch. Deposit 4032 was water-logged, containing much rotted wood, and a single residual unretouched flint flake, but no other datable material. Environmental analysis indicated that water in the ditch was either still or slow-flowing, and contained emergent vegetation such as rushes or water reeds (Appendices IV and V). The softer natural material into which the northern edge of ditch F407 was cut had weathered markedly prior to, and during, a second accumulation of soft, organic, grey silts (4031), which overlay the darker primary deposit (4032).

Overlying 4031 was a deposit of heavily iron-panned, very compact, grey-brown clay (4030), which contained a single piece of animal bone. In turn, 4030 was overlain on the southern side of the ditch by a very sandy deposit (4056) weathered from a soft band of natural sand and gravel in the edge of F407. Overlying 4056, was a red-brown silty clay layer (4020) containing small pieces of stone, fragments of natural flint, and mortar flecks. A plastic, brown silty clay (4009), which yielded two 11th-to-early-12th century pottery sherds (including a rim), a flint flake, and 201 pieces of animal bone, overlay 4020. Soil accumulation against the higher levels of the northern edge of ditch F407 contained more charcoal flecking and less sand (4036), and probably had weathered from secondary material dumped to form an outer bank beyond the northern limit of Trench 4.

Re-cuts of ditch F407 (fig. 4; plate 2)

The large linear ditch F407 was re-cut several times. All of the re-cut ditches followed the alignment of F407, but were much smaller. The earliest of these re-cut ditches (F405) was severely truncated by subsequent re-cuts, but may originally have been about 2m wide and 1m deep, with a flat base and 45° sides. In the bottom of the cut was a deposit of clean brown sand (4054) packing an *in situ* oak plank. The plank had been laid horizontally in the bottom of the ditch, but there was no evidence of mortices for uprights. Above the plank the ditch was filled with a light brown, iron-stained clay (4027), containing small pebbles and charcoal flecking. The plank was too degraded to be dendrochronologically sampled (pers. comm. during site visit by Robert Howard of the University of Nottingham).

Truncating F405 was the cut for a third ditch (F409). It had a bowl-shaped profile with a flat base, and was probably of a similar size to F405. It was filled by a charcoal-rich grey silty clay (4024), which produced 11th-to-early-12th century pottery sherds, as well as containing burnt ironstone fragments, occasional small river pebbles and white chalky flecks, and a secondary fill of greenish-brown clay (4034) containing much charcoal, white chalky flecks and an occasional piece of natural flint, which contained no datable material. These fills probably represented deliberate backfilling of the ditch, rather than a natural silting process.

Both F405 and F409 were truncated to the north by a fourth ditch (F408). This later ditch had a wider, flatter, V-shaped profile, measuring 3m wide and 0.8m deep. The primary fill was a greenish-brown silty clay (4035) with occasional charcoal flecks, some small pebbles, fragments of burnt ironstone, animal bone, a flint core and a fragment of a flint blade. Overlying this was a band of dark purple-grey silty clay (4025) containing animal bone. The latest fill of F408 was a greenish-brown silty clay (4033), which produced a corroded iron blade, 154 fragments of animal bone and an iron nail.

An extensive layer of greenish-brown silty clay (4008) overlay 4033, but was not visible in the east-facing section of the trench where 4008 was truncated by causeway F403. In turn, 4008 was overlain by a second extensive layer of browner silty clay (4007), which contained four 11th-to-early-12th century sherds of pottery, including a fragment of a base and part of a rim, as well as 59 fragments of animal bone. Both 4007 and 4008 may represent the final infilling of deposits into the earthwork depression of F407 from the south, these deposits being derived from an occupation surface rather than from direct weathering of the natural sands and gravels.

Pit F413 (fig. 4)

F413 was a sub-circular pit with quite steep-sides, rounding off towards a flattish base at 91m A.O.D. The pit was adjacent to an area of extremely disturbed ground in the southern end of the trench where several intercutting pits had been dug. These intercutting pits had truncated the level from which the pit had been cut, both in section, and in plan. A narrow lens of natural light orangey-brown sand and gravel (4082) had weathered off the northern edge of F413 into the base of the pit. Overlying this was a shallow deposit of grey silty clay (4063), from which three, possibly intrusive, late-11th-to-early-13th century pottery sherds, as well as two residual humanly struck flints, including a blade and a flint flake, and six fragments of animal bone, were recovered. A further narrow band of natural sand and gravel (4083) overlay 4063, and would appear to have weathered from the unstable northern edge of F413. The upper fill of F413 was a greyish-brown silty clay (4079), containing a substantial amount of ironstone rubble which had slumped into the pit from the north and west. An 11th-to-early-12th century pottery sherd was recovered from 4079.

The general absence of refuse in the fill of F413 raises the possibility that the pit was dug to quarry a soft band of natural sand and gravel for building material as the base of the pit corresponded exactly with a much harder gravel deposit, which was difficult to excavate. While the stratigraphic evidence for when F413 was cut has been lost, the slumping of 4079 into the pit would appear to indicate that this pit was open, or only partially backfilled, when the next phase of activity, the construction of a causeway over the soft fills of F407, was started.

The causeway (fig. 4; plate 3)

A construction trench for a north-south aligned, ironstone rubble causeway (F403) was cut from 4007 into the upper fills of ditch F407. Four courses of F403 were partially exposed along the western side of the trench before the causeway turned in a south-westerly direction just beyond the southern edge of F407, possibly in order to avoid the then open pit F413. Only part of the causeway was seen because the rest of the structure was located behind the east-facing section of Trench 4. The lowest course of the causeway (4028) had been compacted into the upper fill (4033) of the latest of the re-cuts of F407 (F408).

The second course of the causeway (rubble 4021, soil matrix 4029) slumped slightly from south to north. This was overlain by a course of larger ironstone blocks (4004, soil matrix 4022), which contained some burnt stones. The artefacts recovered from 4004/4022 consisted of eight sherds of 11th-to-early-12th century pottery, including three pieces of rim and one base sherd, as well as several fragments of animal bone, and a single flint flake. At the southern end of F403, 4004/4022 was overlain by a deposit of compacted greyish brown silty clay (4059), which produced three sherds of pottery of a similar date. Overlying 4059 and 4004/4022 was the final course of smaller, less frequent ironstone rubble pieces (4053), in a light greenish-brown silty clay matrix (4058). This final layer (4053) extended approximately 1.4m further to the south than the earlier layers of ironstone rubble. The finds from 4053 consisted of nine 11th-to-early-12th century pottery sherds from the same vessel, along with two fragments of animal bone. At the southern end of F403, part of the make up of the causeway (4053 and 4059) appeared to have slumped as one deposit (4079) into pit F413.

Post-causeway

Causeway F403 was overlain by a greyish-brown silty clay (4003), which produced eleven 11th-to-early-12th century pot sherds, and a few pieces of animal bone. Machine clearance of Trench 4 was terminated at this level, the first coherent archaeological horizon to be identified and which extended over most of the trench at a depth of 93.5m A.O.D. at the south end of the trench, and 92.8m A.O.D. at the north end of the trench.

The intercutting pits (fig. 4 and fig. 5, S2 and S4; plate 4)

Following cleaning of 4003, a number of partially exposed intercutting pits were identified in the southern end of Trench 4. However, because the overlying layer (4081) had been severely compacted and disturbed during construction of the modern car park it was not possible to establish if any of the following features were originally cut from 4003. Therefore, the following description of the sequence of pit-digging is provisional and in summary form only, given the fact that several of the pits were only identified in the course of excavation. For further information the reader should refer to the illustrated section drawings, and the context summaries given in Appendix VI. The figures do not show all of the recorded fills of the various pits. The excluded contexts are depicted on the original field drawings held in the site archive.

The largest pit (F410) was only partially exposed. F410 appeared to be sub-oval in shape, with a steep-sided profile and a step 0.5m from its base (91.3m A.O.D.). The pit continued under the southern bank of the trench, and had to be excavated in a series of slots (A, B and C) as the fills were very unstable. F410 was filled with a large number of different deposits and lenses of material, several of which had slumped, or tilted, into the pit. Two deposits of light orangey-brown natural sands and gravels (4066, 4067), appeared to have weathered off the edges of the pit, and suggest that the pit silted-up gradually at first. Two of the fills of F410 (4044, 4052) were heavily ironstained, and several other fills had various degrees of iron-staining (4043, 4044, 4052, 4060). Datable material was only recovered from three of the fills of F410. The heavily iron-stained layer 4052 produced 21 pottery sherds dating from the late-11th-to-the-12th century, including three fragments each of rim and base, and 29 fragments of animal bone, and an isolated narrow band of light brown sandy clay (4061), observed in the east-facing section of Slot A, also produced one late-11th to 12th century sherd of pottery. The latest fill of F410, another heavily iron-stained sandy silt (4016), yielded a total of 400 pottery sherds which, apart from a single residual Roman sherd, all dated from the late-11th-to-12th century. Over 300 of these sherds came from a very large storage jar decorated with applied thumbstrips and wavy combing. Most of this vessel was excavated in a 'seam' of broken pottery within 4016. A flint flake, as well as 131 fragments of animal bone were also recovered.

A number of later pits in the southern end of Trench 4 had been truncated by the construction of the car park, and, in the absence of any datable material, cannot be ascribed a clear place in the chronological order of events. In the southwest corner of Trench 4, F410 was cut by a small pit (F414) filled by a grey silty clay (4064), which was only observed in the east-facing section (fig. 4, S1A). This pit was truncated by another small pit with a bowl-shaped profile (F401) which contained lenses of charcoal-rich material (4013) and two fragments of animal bone.

In the southeast corner of the trench part of a small pit (F402), which was similar in character and fill to F401, was observed in the west-facing section of the trench (fig. 5, S3). F402 was cut by a very steep-sided feature (F415) cut through F410 to a depth of 91.3m A.O.D. F415 was cut, in turn, by a shallow, bowl-shaped feature (F416; fig. 5, S2), which was filled by orangy-brown sandy clay (4084).

Other Later Activity

In the north end of Trench 4 a further east-west aligned ditch (F400) and a robbed wall foundation (F404) truncated causeway F403. For clarity, both features are not depicted on the overall trench plan (fig. 3) because they would appear to represent a completely different and later phase of activity. Instead, the physical relationship between F400 and causeway F403 is shown on fig. 4, S1A, and the wall foundation F404 is shown on plate 5.

The east-west orientated ditch (F400) cut the northern end of F403. F400 was filled by a compact blue clay (4005) which contained several fragments of animal bone. The ditch shelved steeply from the eastern side of the excavation down to the west where only a tiny portion was visible in the east-facing section. Although severely truncated, ditch F400 was probably in the region of 4m wide and 1m deep. The slope of the ditch suggested that it was cut as a drain.

Ditch F400 was truncated by the construction cut of an east-west aligned wall foundation (F404), which was nearly 2m wide. Only the lowest course of the foundation, which contained several burnt stones and charcoal lenses, had not been truncated when the car park was built.

6.3 Trench 5 (fig. 6; plate 6)

Trench 5 dissected the inner moat of the 13th/14th century castle. The trench had to be excavated against the southern boundary of the car park through 2m of modern levelling and demolition deposits. This was subsequently shored using acro-props, timber wallings and sheeting. Due to the depth of the trench, and the instability of the surrounding below-ground deposits, excavation of the castle ditch was continued in a slit-trench which was also shored as excavation progressed. The middle of the trench could not be examined because of the discovery of an *in situ*, water-filled, Victorian well. A ramp of rammed demolition material provided access into and out of the west end of the trench.

The inner moat (plate 7)

The cut of the eastern lip of the inner moat was first identified as a large linear feature (F500), orientated north-south, cut into the natural orange sand (5022) at 92.87m A.O.D. However, the level from which F500 was cut had been truncated by the sunken backyards of a terrace of mid-Victorian buildings. Consequently, the chronology of medieval activity was largely reliant upon the recovery of datable artefactual material, and it was difficult to relate activity which occurred inside of the moat to that outside of the moat.

The ditch had a stepped profile, and was filled by a series of sedimentary silty-clay fills which shelved down towards the bottom of the moat (fig. 6, S1). The water-table was reached at a depth of 91.28m A.O.D. and excavation stopped at 90.78m A.O.D., before the bottom of the moat was reached. Both 5020, a mottled grey-brown plastic sediment containing four fragments of animal bone, and 5021, a plastic dark blue-grey deposit containing a sherd of glass and pottery ranging from the 14th-to-16th-century suggest that the moat was silting up during that period. Another potentially early deposit was a friable red-brown pebbly, charcoal flecked clay-sand (5009), containing one fragment of animal bone but no datable material, which had built up against the second step of the ditch. This was sealed by a narrow band of dark brown sandy material (5004), containing charcoal and animal bone and residual pottery dating to the 11th and 12th centuries, slumped over 5009. The relationship between 5004 and 5009 and the later-medieval phase of silting (5020 and 5021) was probably truncated by a Civil War re-cut.

Cut into the natural on the eastern edge of the moat was a small straight-sided, flat-bottomed post-hole (F502, fig. 6, plan). It was filled by a charcoal-rich silty clay (5014), containing decayed ironstone flecks, pockets of red and yellow clay, three chunks of fired clay, and a large piece of ironstone rubble. The clay and ironstone may have been packing for a post. The post-hole cut the lower moat deposits, but was sealed by a later fill (5019), belonging to the Civil War re-cut. There were no datable finds from this feature.

After the Civil War

Analysis of the pottery suggests that the majority of the moat deposits can be dated to the 17th century. The moat was re-cut during a period of refortification following the siege of the castle in 1644 (Rodwell 1976, 112), but was deliberately backfilled during the demolition of the castle in the aftermath of the Civil War. The following contexts, including those excavated in the sondage at the west end of the trench, are probably related to that later episode.

A dark brown silty sandy clay with some charcoal flecking (5002) containing animal bone, shell, a fragment of clay pipe and a musket ball, directly overlay the deposits belonging to the medieval phase of the moat, and in turn, was overlain by a brown clay deposit with charcoal flecking (5013), rich in animal bone with some shell, and containing a single struck flint flake and 17th century pottery. A dark reddish-brown, charcoal flecked clay (5007) containing snail shells, animal bone fragments of brick, tile, and plaster, a piece of sheet lead, a sherd of glass and 17th century pottery overlay 5013. Both 5007 and 5013 were partially truncated by the cut of a drain (F501), which was built into one of the backyards of the mid-Victorian terrace.

The western edge of the inner moat (fig. 6, S2)

The western side of the ditch was not visible in plan, but may have been located under the ramp at the western end of the trench. A sondage was excavated at a distance of c.12m from the known eastern lip, in an attempt to locate the west side of the cut. The sondage was excavated to a depth of 90.96m A.O.D. but no ditch cut was found. Layers excavated within the sondage itself were very different in character from those encountered at the east side of the ditch, but analysis of the pottery suggests that these were also 17th century in date.

The earliest deposit excavated in the sondage was a green-brown clay (5012) that contained some animal bone and a large quantity of ironstone rubble - including an ironstone voussoir and a quantity of burnt stone. Directly above 5012 lay a green-brown sandy clay (5011), with occasional ironstone fragments and charcoal flecks, also containing a quantity of animal bone, a shell, a fragment of clay pipe and 17th century pottery. Above this was a layer of green-brown silty clay (5010) containing much animal bone, some iron, shell, clay-pipe, glass, clinker, a copper stud, and pottery dating to the late-17th and early-18th centuries. It was notable that deposits 5010, 5011 and 5012 did not shelve rapidly into the moat.

Early demolition deposits (fig. 6, S3)

At the very eastern extremity of the trench a banded series of demolition deposits had not been truncated by the mid-Victorian terrace. However, in the absence of dating evidence it was difficult to be sure exactly where these deposits fit into the chronology offered for the moat. Directly overlying the natural orange sand (5022), above 92.87m A.O.D., was a thin band of orange-brown silty sand (5026) containing peagrit and occasional charcoal flecks. A layer of dark brown sandy silt (5025), heavily charcoal flecked with some fired clay fragments, overlay 5026. In turn, 5025 was overlain by a deposit of brown sandy silt (5024) containing pebbles and the occasional charcoal fleck. The latest deposit in this sequence was a layer of orange-brown sandy silt (5023) containing a large quantity of ironstone rubble, pebbles, and some charcoal flecking. There was no datable evidence found in any of the deposits. The car park overburden (5001) and tarmac (5000) lay over this series of deposits. Test Pit 14 cut these deposits to the south.

The mid-Victorian terrace

Archaeological deposits were severely truncated by the cellars and partially sunken yards of a mid-Victorian terrace, built between 1852 and 1881 (VCH oxon, x, 25). The north-facing section of Trench 5 constituted the back wall of this terrace, and the trench was situated in the sunken yard to the rear. Such yards are visible today where part of the terrace still stands further west along Castle Street. It was evident that over time the terrace had settled into the soft moat deposits. A drain and soakaway (F501/5015), and a well (F503) were cut into the upper fills of the moat. The well was lined with unbonded bricks, and had been dug roughly in the centre of the moat. A large piece of medieval ornamental architectural masonry (5008) had been dumped within the disturbed construction layer beneath the yard surface. The sunken yards were backfilled with demolition material from the terrace when the car park was built.

6.4 Trench 6 (fig. 7)

Trench 6 was sited to establish the northwestern return of the inner moat and explore various structural anomalies identified by the ground probing radar survey (4/1, 4/2 and 4/3). The precise location of the trench was determined by the necessity to maintain a safe flow of traffic around the car park. Modern overburden was removed by JCB-excavator, whereupon it was discovered that the GPR anomalies were in fact modern armoured services (4/1 being a BT fibre-optic cable, and 4/2 and 4/3 a drain). Excavation was immediately terminated in the vicinity of both services and only the southern part of the trench was investigated. Here, machine clearance continued to a depth of 92.2m A.O.D. At this level a curving band of

ironstone rubble (6011) clearly demarked the northwestern return of the inner lip of the inner moat. Superficial modern and post-medieval deposits (6001, 6004, 6005 and 6006) were seen to dip from south to north and from east to west, presumably infilling the depression left by the inner moat (fig. 7, S1). Six sherds of late-17th/early-18th century pottery, animal bone, oyster shell, clay pipe and wine bottle glass were recovered from 6006.

Two slots were excavated in order to examine and date 6011 and the deposits underneath. Slot 1 was excavated to reveal the profile of 6011 shelving into the moat. In Slot 2 excavation terminated at the ground water level of 91.2m A.O.D. before natural deposits were found. The slumping of deposits into the moat under 6011 was very apparent (fig. 7, S2). The earliest deposit was a charcoal-rich, sandy clay (6018) which was overlain by two very similar dark brown clay silts. The lower layer (6017) was distinguished by a concentration of ironstone rubble, while a large quantity of animal bone, including a horse mandible, and a poorly preserved human femur, was recovered from 6016 above. A thick layer of reddish brown sandy clay (6015) overlay 6016. In turn, 6015 was sealed by a thin horizontal layer (6013). No dating evidence was recovered from any of the deposits under 6011. Excavation of 6011 yielded residual 12th/early-13th century pottery, and a sherd of possible pre-Conquest St Neots-type ware, together with a number of small finds more representative of a post-medieval deposit, including a stone roof tile, ceramic tile fragments, animal bone, pieces of clay pipe, iron nails, and glass wine bottle fragments. Of the sequence of deposits which overlay 6011, only 6010, which directly overlay 6011, contained one sherd of pottery of 18th century date. Therefore, it may only be suggested that the extensive ironstone rubble spread (6011) was part of the late-17th century demolition of the castle, and that while the evidence for a cut was too inconclusive to depict on fig. 7, S2, 6013 was probably related to the slighting of the defences after the Civil War. The recovery of a human femur and horse mandible from 6016 also suggest that this deposit may be Civil War in date. A further hand-dug sondage was excavated to sample the 18th century moat fills for environmental evidence about the Castle Gardens. Excavation ceased when the water-table was contacted at a height of 91m A.O.D. An auger was used to examine and sample deposits beneath the water-table and was successful to a depth of 90.25m A.O.D., where a layer containing rubble (?6017) prevented further coring. Waterlogged samples of 6010, 6011 and 6012 were taken and analysed for insect and charred plant remains (see Appendices IV and V).

7.0 DISCUSSION (fig. 1)

At this stage the differentiation between the pre-castle and first castle (1123-48) phases requires further clarification. The following interpretation and phasing is therefore provisional. However, further excavation will hopefully clarify the dating of the earliest types of pottery upon which the chronology of development is currently largely based.

7.1 Pre-castle

Early documentary evidence refers to Banbury as part of a large estate belonging to the See of Dorchester-on-Thames in the Anglo-Saxon period (Beesley 1841, 431). The See was transferred, along with other North Oxfordshire estates, to that of Lincoln around 1070. Banbury is recorded in 1086 in Domesday Book as a manorial centre, having become the administrative centre of the Bishop of Lincoln.

Following the excavation of a small section of the inner bailey, Fasham interpreted some vague stone alignments and a number of pits as being stratigraphically and physically earlier than the first buildings associated with the castle. It would appear that the majority of the archaeological evidence found in Trench 4 of the recent evaluation may also be related to this pre-castle period, and it is tempting to suggest that this archaeology may be dated to the occupation of the manor mentioned in Domesday. The large ditch F407 was one of the earliest features in Trench 4, and while moats are generally associated with manorial residences of a slightly later period, it is not inconceivable that a manorial complex belonging to a powerful organisation such as the See of Dorchester-on-Thames, or, later, the See of Lincoln might not be encircled by a moat. Examination of all the evidence for this important transition period must be a research priority for any future work undertaken in the area, particularly as so little is known about this period of history in Banbury, and at this stage the limited results from Trench 4 may be interpreted in a number of ways.

It would appear from the nature of its fills that ditch F407 had been allowed to gradually silt up prior to the cutting of a series of three similarly aligned, but smaller, ditches one after the other. This activity may reflect broader changes within the set up of the manorial establishment itself. As at most manorial sites, the large ditch was probably partly of a defensive nature, as well as being symbolic of status. It is unlikely that the later smaller ditches were dug for these reasons, which suggests an alternative, more mundane, function, and perhaps indicates a decline in the importance of the manor, or a perception that such a statement concerning defence or status was no longer necessary. Possible pre-Conquest pottery was recovered from the second re-cut ditch F409 which suggests that it, and the earlier ditch F405, might also date to the period of the earlier manor. The consecutive re-cutting of the ditch seems to imply activity over a significant period of time. Therefore, the last of this series of ditches (F408) may be concurrent with the end of the life of the manor, which probably occurred not long before the construction of the castle by Bishop Alexander de Blois of the See of Lincoln (1123 - 48). This scenario, if a start date of c.1070 is accepted for significant changes at the manor site, puts the re-cutting episodes of F407 within a 50 to 75 year timespan. However, the possibility of a degree of continuity between the late-Saxon and Norman periods cannot be ruled out, in which case there would be a consequent increase in the timespan represented by the activity in and around F407.

The first castle

It is extremely tempting to view the laying of causeway F403 and the cutting of pit F410 for sand and gravel as part of the construction activity associated with the building of the first castle in the early-12th century. The character of the mixed upper fills of F410 suggest rapid backfilling with waste building material, and the absence of much domestic refuse would indicate that this pit was not part of a regime of domestic rubbish disposal. Comparison may also be made between F410 and pit 245 excavated by Fasham which he placed within a pre-gravel phase, before the construction of the 13th/14th century castle (1983, 76, fig.4). However, none of this can be proved at present. The truncation of activity above the causeway further compounds this problem of accurate dating, as it is far from certain if any of the activity represented in Trench 4, and by inference the whole of the Zone 1/1 inner bailey, may be related to the 13th/14th century remodelling of the castle.

The inner bailey of 13th/14th century castle?

The features which probably belong to the rebuilding of the castle in the 13th/14th century (F400 and F404) were both situated in the northern end of Trench 4. Here, the natural slope of the ground towards the River Cherwell and the canal meant that the levelling of the car park did not cut so deeply into archaeological deposits. The sharp fall of ditch F400 in a westerly direction against the lie-of-the-land must be significant, and the best suggestion for this is that it drained into a moat.

However, the truncation of F400 by F404 may mean that ditch F400 was part of the earlier castle. There is a good correlation between F404 and structural anomaly 3/1 identified by the GPR survey running parallel with the inner ditch. Although very little of F404 has survived, the massive character of the masonry is clearly consistent with a defensive wall. Rodwell noted that the outer curtain wall was between 1.4m and 2m wide, and that its foundations occurred at different depths around the site. Significantly, she also suggested that the lower parts of the curtain wall were constructed before the ground level of the motte was raised, which may explain the absence of Fasham's gravel phase around F404 (Rodwell 1976, 111). Moreover, Stukeley (1776, 48) recorded that a cottage was built on to the only remaining portion of the castle wall still standing in the 18th century, and a 'castle cottage' is shown in the vicinity of F404 on the First Edition Ordnance Survey map (fig. 8).

The inner moat

It is now clear that the inner moat lies some 10m further west than suggested by Lobel (1969, 1-8) and duplicated by Rodwell (1976, 91). The revised plan of the layout of the castle precincts to the north of Castle Street (fig. 9c), based upon the results of the ground probing radar survey and the trial excavations, most closely corresponds to that given by Fasham (1983, 72).

The pottery recovered from Trench 5 and Trench 6 had a wide time-span, from the 11th to the 19th century. The presence of 14th and 15th century pottery in the two lowest fills of the moat which were excavated in Trench 5 would suggest that the moat was allowed to silt up during this period. The majority of the deposits excavated in Trench 5, however, belong to the 17th century, and fit in well with the picture of hectic re-entrenchment that the Civil War documentary sources provide. Rodwell (1976, 112) suggests that the moat was re-cut during the Civil War, and this is supported by the results of the evaluation. Indeed it can be argued that prior to the Civil War the eastern side of the inner defences appeared to have silted up quite considerably, possibly as a result of material weathering off the castle mound. This may imply that the inner bailey was encroaching westwards, requiring the ditch to be re-cut further from the castle, which may explain why its anticipated western edge was not encountered in Trench 5. It is clear that a significant percentage of the pottery recovered during the evaluation was residual. No doubt this is a reflection of the remodelling of the castle in the 13th/14th century, the Civil War re-entrenchment and the subsequent slighting of the defences. Trench 6 provided confirmation of the northwestern return of the inner moat and further information about the development of the area in the aftermath of the Civil War. Dating evidence from Trench 6 suggests that the infilling of the moat occurred primarily in the late-17th and early-18th centuries, with later landscaping activities occurring in the 19th century,

when the earthwork was rather less apparent. The topographical changes in this area probably relate to landscaping and infilling operations associated with the laying out and subsequent development of the Castle Gardens. Preservation of reduced earthworks belonging to the castle defences seems likely, as they later conditioned the pattern of boundaries and subdivisions inside the Castle Gardens. A section of the northern part of the outer ditch was recorded on the 1st Edition Ordnance Survey map of 1881 (fig. 8), although this does not concur with the results of evaluation, being situated too far to the north.

The evaluation of the castle site has shown that the area of the inner bailey has been extensively reduced. Rodwell (1976, 92) wrote that between 1m and 3m of soil was removed over most of the site prior to the building of the shopping centre, and it would appear that this also occurred in the car park immediately to the north of Castle Street, apparently without any provision for archaeological recording. This situation can be compared with that described in the early years of this century by the surveyor for **Volume 2 of the Victoria History of the County of Oxfordshire** (1907, 322):

“the site (of the castle) was occupied by gardens and by streets of houses...The making of streets and the cutting of the canal through the site have destroyed much of the evidence of the ground, but it is possible, from traces found in digging for draining and building, to lay down the course of the outer moat (no plan included)...In the centre of this area is a mound 9ft. above the ground-level at its base, now occupied by a rather ruinous cottage built at the demolition of the castle on to the only remaining portion of its wall. This mound, according to the plan above referred to (1685 Saye and Sele map), was surrounded by a ditch now filled in, but the course of which was apparently immediately round the base of the mound and enclosing an area of 3 roods 3 poles. At the south-west corner the mound is now disguised by the streets which run up to it, but the ground here has been partly made up in recent times, while the road from the Market Place was the original roadway up to the castle...”

The survival of later deposits in Trench 6 compared with Trench 4 may indicate that while later deposits within the inner court of the castle have been scoured away by recent development it is possible that the survival of late-medieval and post-medieval deposits is higher outside the area defined by the inner lip of the inner ditch. This is because in reducing the gradient of the slope towards the River Cherwell in the area of the car park it is probable that the archaeological deposits outside of the inner court were not scoured away, and may even have been encapsulated under levelling material for the car park.

8.0 CONCLUSIONS

In this final section of the evaluation report a brief review is made of the success of the various evaluation techniques employed. This review is followed by a brief discussion of the survival of archaeological deposits in the Castle Zone and the potential of further archaeological research, as a result of the redevelopment proposals, to answer any outstanding questions concerning the development of the castle. Detailed proposals for further archaeological mitigation are not within the scope of this present report, but should be worked out in consultation with Paul Smith, the County Archaeological Officer for Oxfordshire.

Evaluation trenching has confirmed that the ground probing radar survey (GPR) successfully mapped the line of the castle ditches. While interpretation of the structural anomalies identified by the GPR survey was more problematic, - for example, several structural anomalies turned out to be modern services when excavated - the inner defensive wall F404 was successfully identified, together with the line of the causeway F403. In addition, once the presence of a moat was established by excavation in Trench 4 it was possible to 'tune' later surveys to track the alignment of this feature. Therefore, it would appear that exchange of information between GPR and trial trenching is of crucial importance in ensuring that the maximum potential of each technique is realised. This is equally true of the geotechnical test pitting. While it was very difficult to understand the results from the test pits when first observed, subsequent reinterpretation in the light of the results of the evaluation trenching has proved to be very useful (Appendix VII). Finally, while the scope and size of the evaluation trenches had to be modified because of the pressure on car parking space following the closure of the multi-storey car park, the aims of the evaluation have been met in almost every respect, and the archaeological potential of further work may be characterised as extremely high.

In particular, the excavation of Trench 4 has indicated that the survival of important pre-castle deposits within the former inner bailey to the north of Castle Street is actually better than that found in the 1970s. As well as the causeway F403, ditch F407 and pit group (F410, etc.), the possibility that more informative archaeological remains of this early period have survived in close proximity to Trench 4 is highly likely. Such remains might include foundations and floors of buildings, and domestic refuse pits which might tell us about the material culture of the people who lived here, together with further information about the surrounding environment which the evaluation has clearly demonstrated to have survived and to be of a very high quality indeed. Moreover, these deposits are extremely vulnerable to disturbance because they lie so close to the present day ground surface. In many ways this survival has opened up the means for excavation of the castle to continue in the 1990s in a way that will complement the shortfalls in knowledge inherited from the earlier excavations, which, not surprisingly, were biased towards the defensive remains of the castle. While it is unlikely that the imported dumped gravel layer, identified by previous excavations as sealing the pre-castle and first-castle remains, has survived throughout most of the inner bailey, the deposits encountered at the eastern end of Trench 5 may represent the survival of the dumped gravel layer at the base of the castle mound. Furthermore, the survival of later archaeological deposits will be greater downslope of the inner bailey, and even within the inner bailey the depth to which the foundations of any structural features belonging to the later castle were dug means that there is potential for further survival, as demonstrated by F404 in Trench 4.

Open area excavation of the remaining sections of the inner bailey is necessary to answer several outstanding questions from the evaluation (to trace the line of the large ditch (F407), establish if the causeway (F403) was part of the first-castle; clarify the nature and sequence of the intercutting pits at the southern end of Trench 4 and determine if F404 is a robbed-out defensive wall) in addition to realising the potential of the surviving archaeological deposits to provide detailed information about the development and topography of the whole of the castle site from the earliest period. Outside the inner bailey selected excavation of further trenches and open areas may also be envisaged through the inner and outer moats, and to clarify if the outer curtain wall continued into this area, or if the marshy land around the castle served as a natural line of defence.

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10.0 REFERENCES

Beesley, A. 1841 *A History of Banbury*.

Chambers, R.A., Miles, D. and Roberts, M. 1991 *Banbury Inner Relief Road; Stages II and III: Archaeological Excavations North of Bridge Street*.
Oxford Archaeological Unit.

Cuttler, R. 1996 *Banbury Town Centre Redevelopment: An Archaeological Watching Brief*.
BUFAU Report No.94/02.

DoE 1990 *PPG 16: Planning Policy Guidance Note 16: Archaeology and Planning*
Department of the Environment.

Fasham, P.J. 1973 'Excavations in Banbury, 1972: First Report', *Oxoniensia* 38, 312-338.

Fasham, P.J. 1983 'Excavations in Banbury, 1972 Second and Final Report',
Oxoniensia 48, 71-118.

Ferris, I., Leach, P. and Litherland, S. 1991 *Banbury Town Centre Redevelopment: An Archaeological Assessment: Implications and Response*
BUFAU Report No.94/01.

Ferris, I. and Litherland, S. 1996 *Banbury Town Centre Redevelopment: A Project Design for Archaeological Evaluation*
BUFAU Report No.94/03A.

Lobel, M.D. (ed.), 1969 *Historic Towns Atlas*, Vol. 1.

Rodwell, K.A. 1976 'Excavations on the Site of Banbury Castle, 1973-4',

Oxoniensia 41, 90-147.

Smith, P. and Rosier, C. 1995 *Eighth Schedule (archaeological section) of the Draft 106 Agreement*, Oxfordshire County Council internal report..

Stratascan 1997A *Banbury Town Centre Redevelopment: A Geophysical Survey*.

Stratascan 1997B *Ground Probing Radar Survey. Castle Street, Banbury. Volume 1. Radargrams of Site 1.*

Stratascan 1997C *Ground Probing Radar Survey. Castle Street, Banbury. Volume 2. Radargrams of Site 2.*

Stratascan 1997D *Ground Probing Radar Survey. Castle Street, Banbury. Volume 3. Radargrams of Site 3.*

Stratascan 1997E *Ground Probing Radar Survey. Castle Street, Banbury. Volume 4. Radargrams of Site 4.*

Stratascan 1997F *Ground Probing Radar Survey. Castle Street, Banbury. Volume 5. Radargrams of Site 5.*

Stratascan 1997G *Banbury Town Centre Redevelopment: A Geophysical Survey*.

Stratascan 1997H *Detailed GPR Survey. Castle Street, Banbury. Volume 6. Text and Illustrations.*

Stratascan 1997I *Banbury Town Centre Redevelopment. Ground Probing Radar Survey (Phase 3).*

Stratascan 1997J *Banbury Town Centre. Geophysical Survey (Phase 4).*

Stukeley, W. 1776 *Itinerarium Curiosum*.

VCH oxon, ii 1907 *Victoria History of the County of Oxford*, Vol. 2.

VCH oxon, x 1972 *Victoria History of the County of Oxford*, Vol. 3, 1-125.

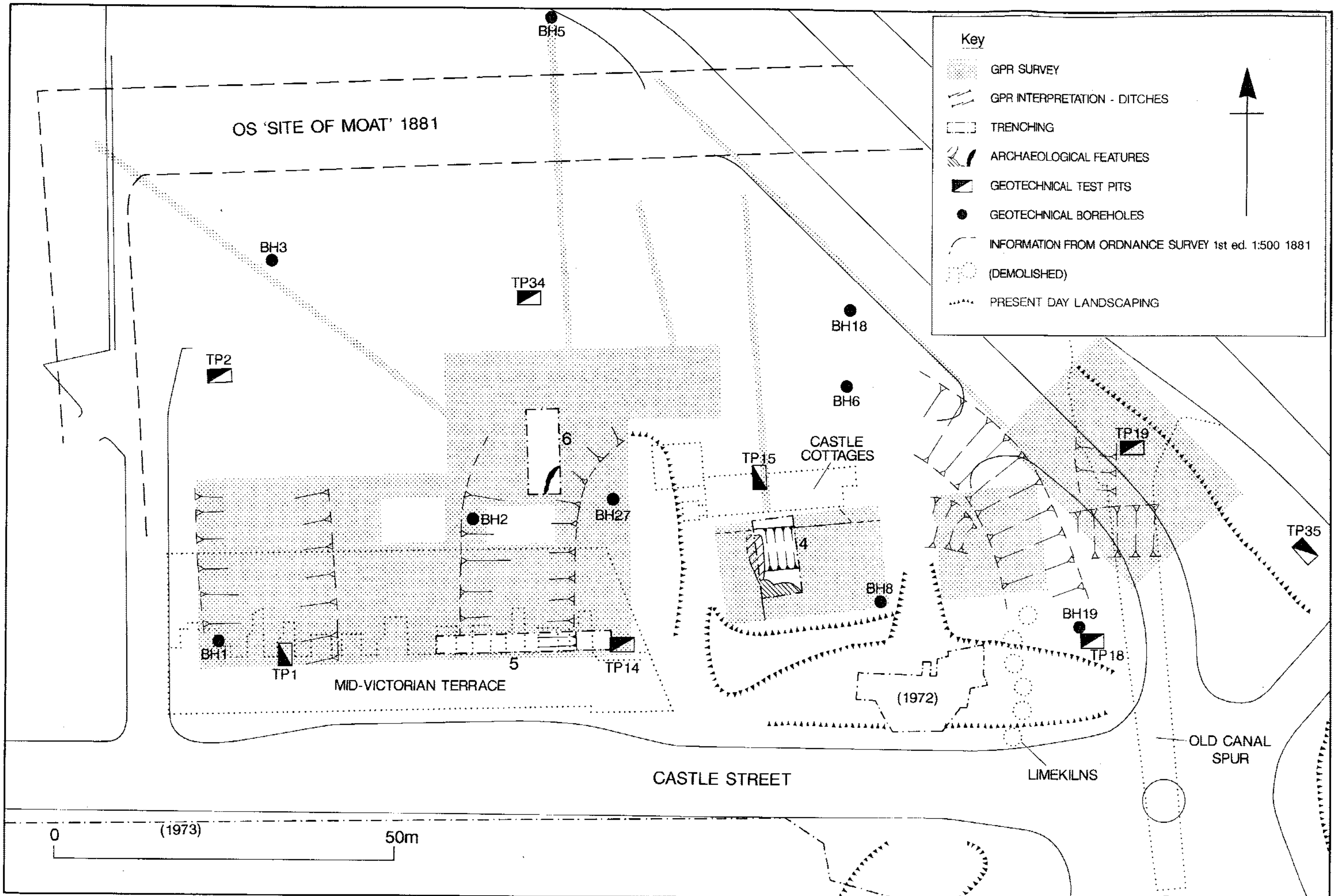


Fig.1

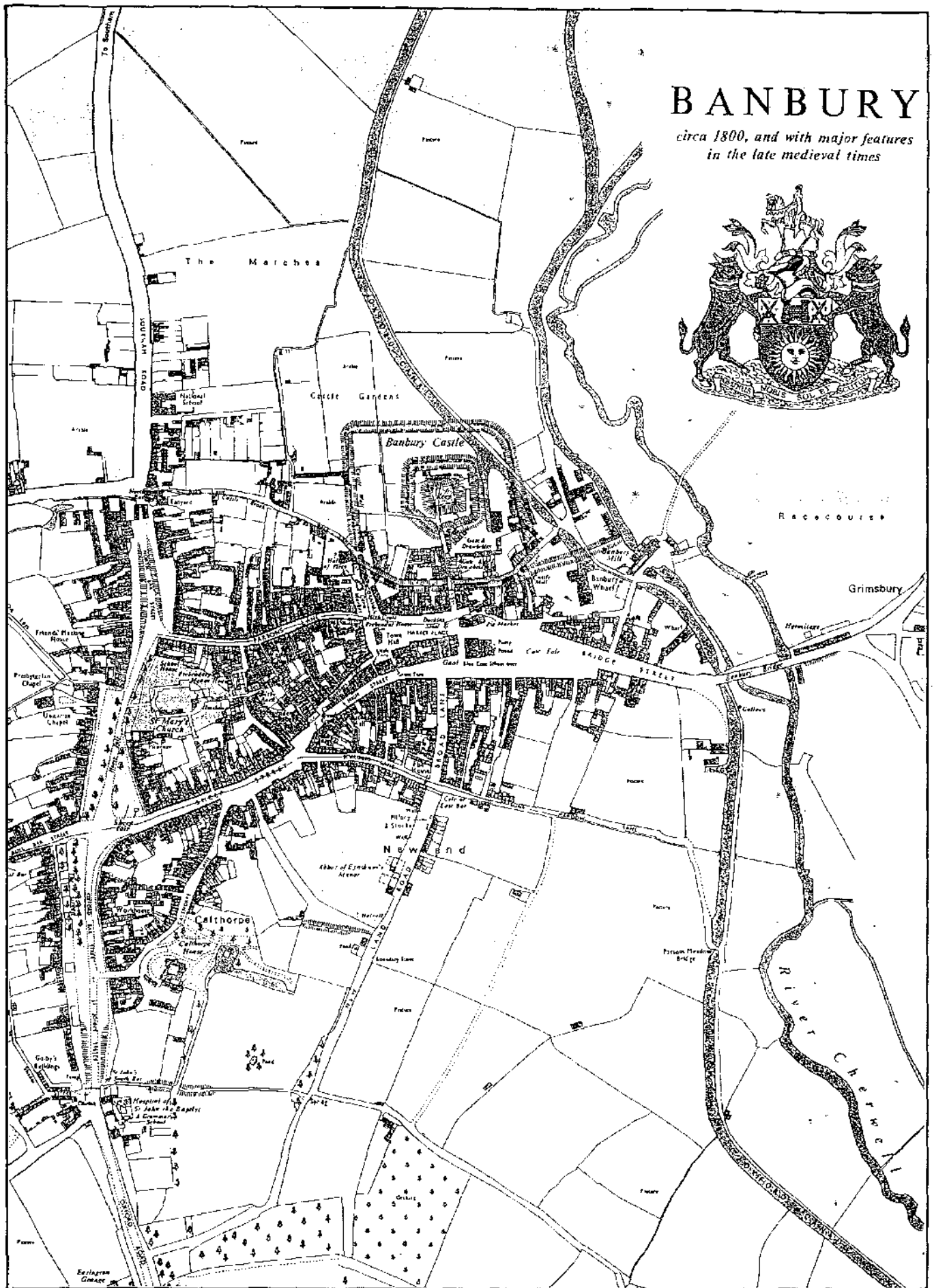
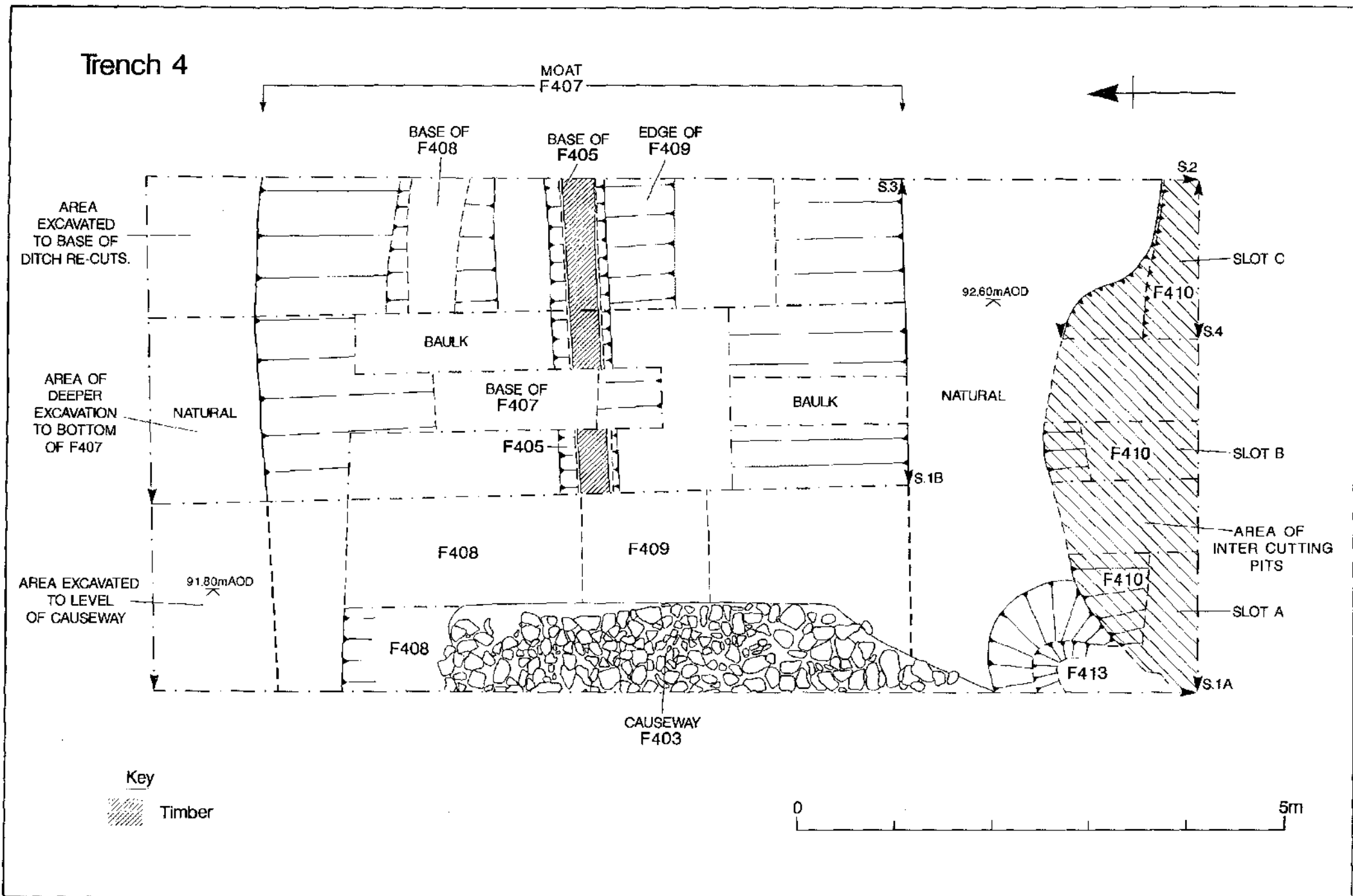


Fig.2 (Lobel 1969)



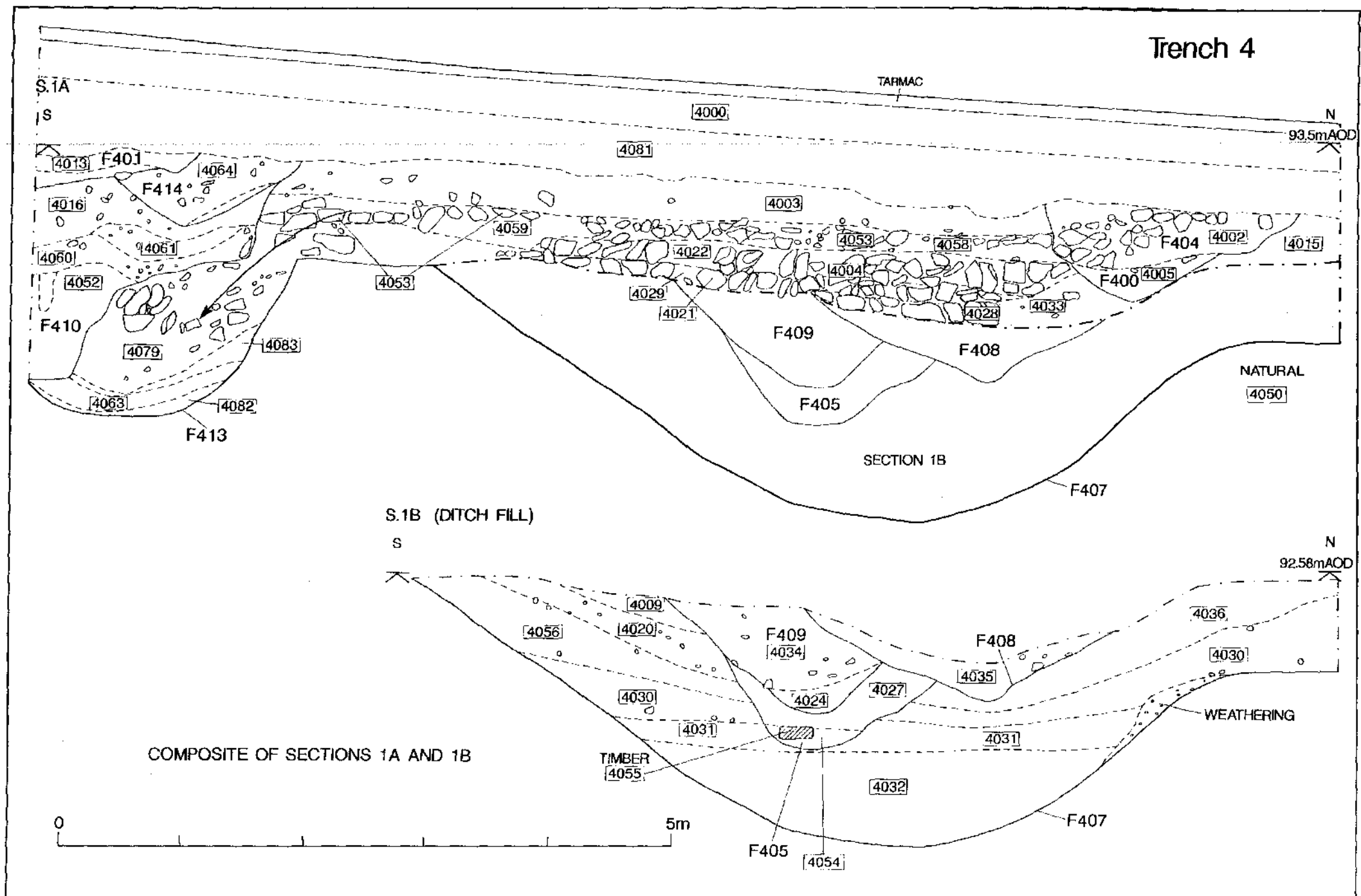


Fig.4

Trench 4

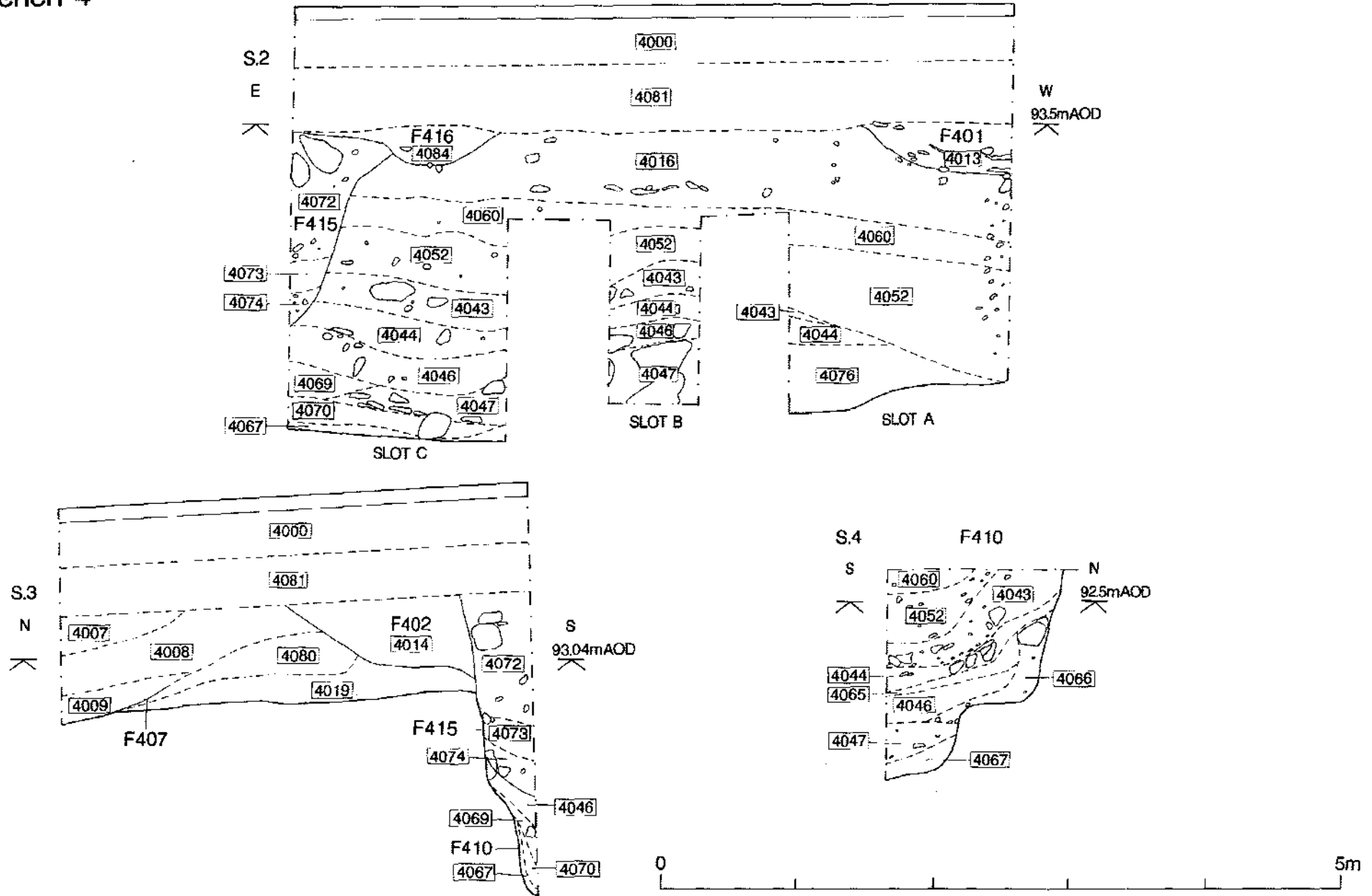


Fig.5

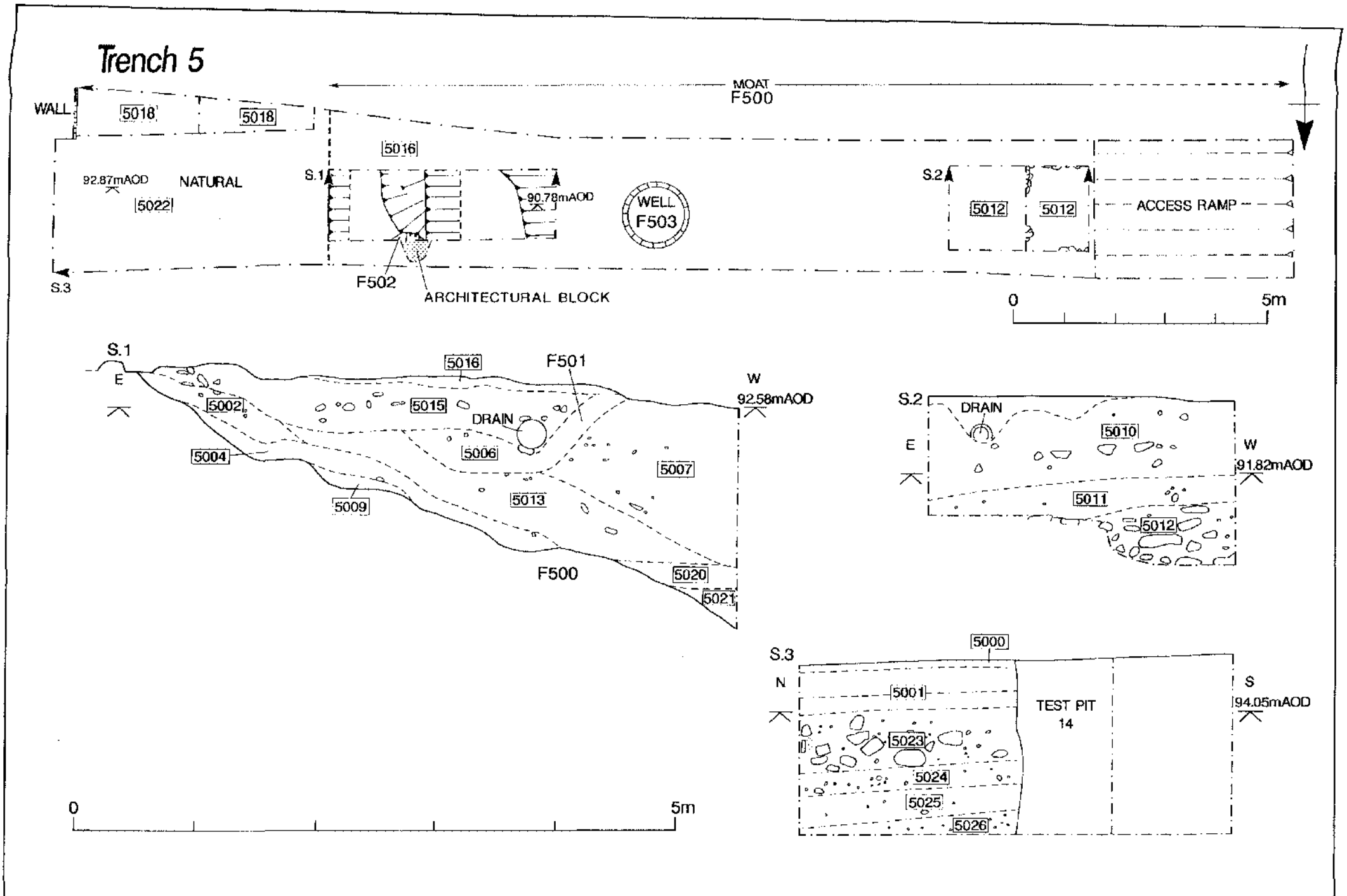


Fig.6

Trench 6

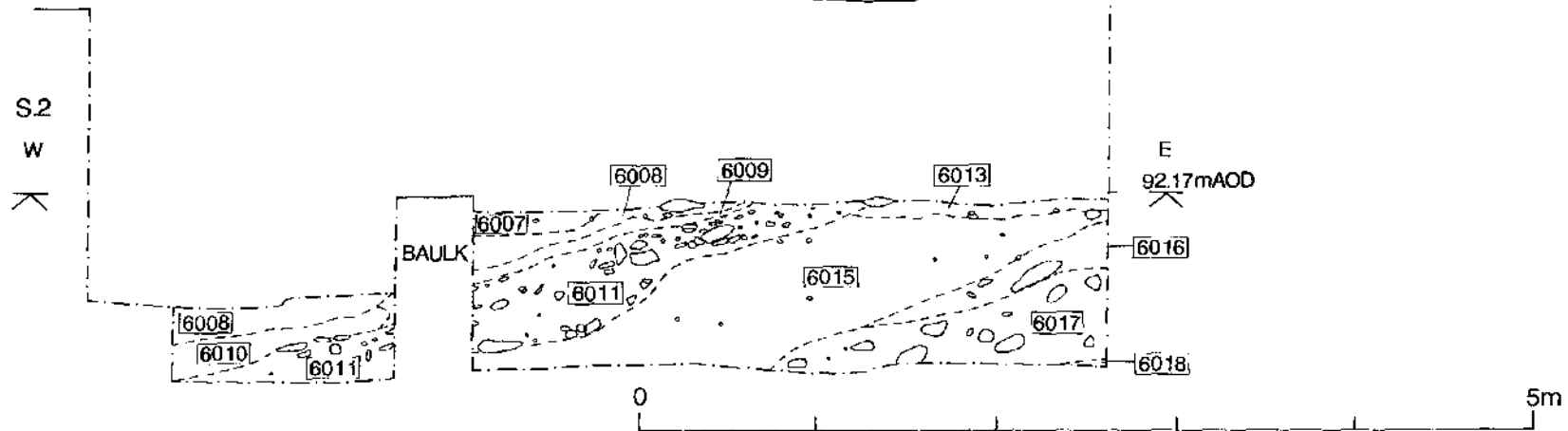
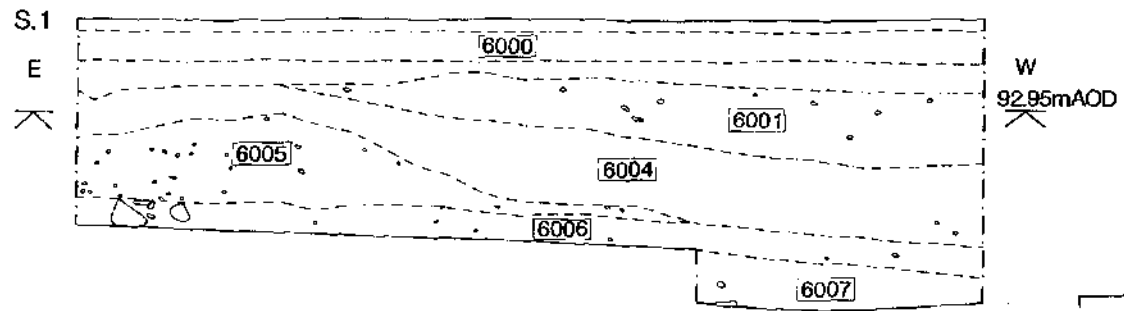
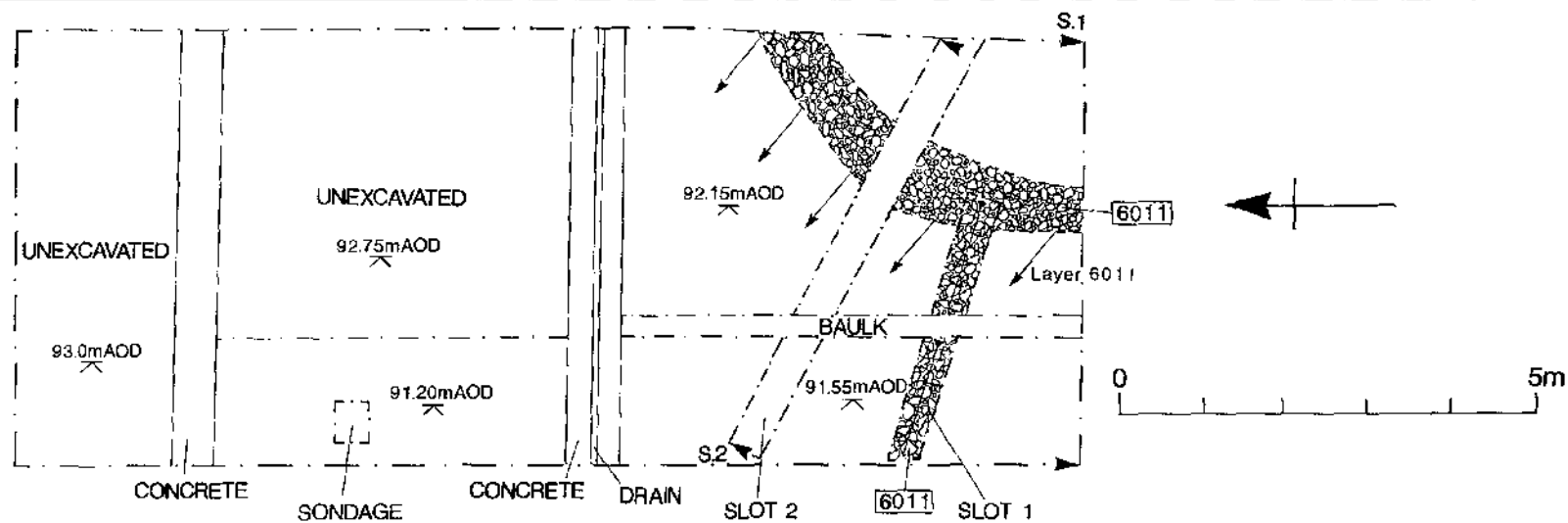


Fig.7

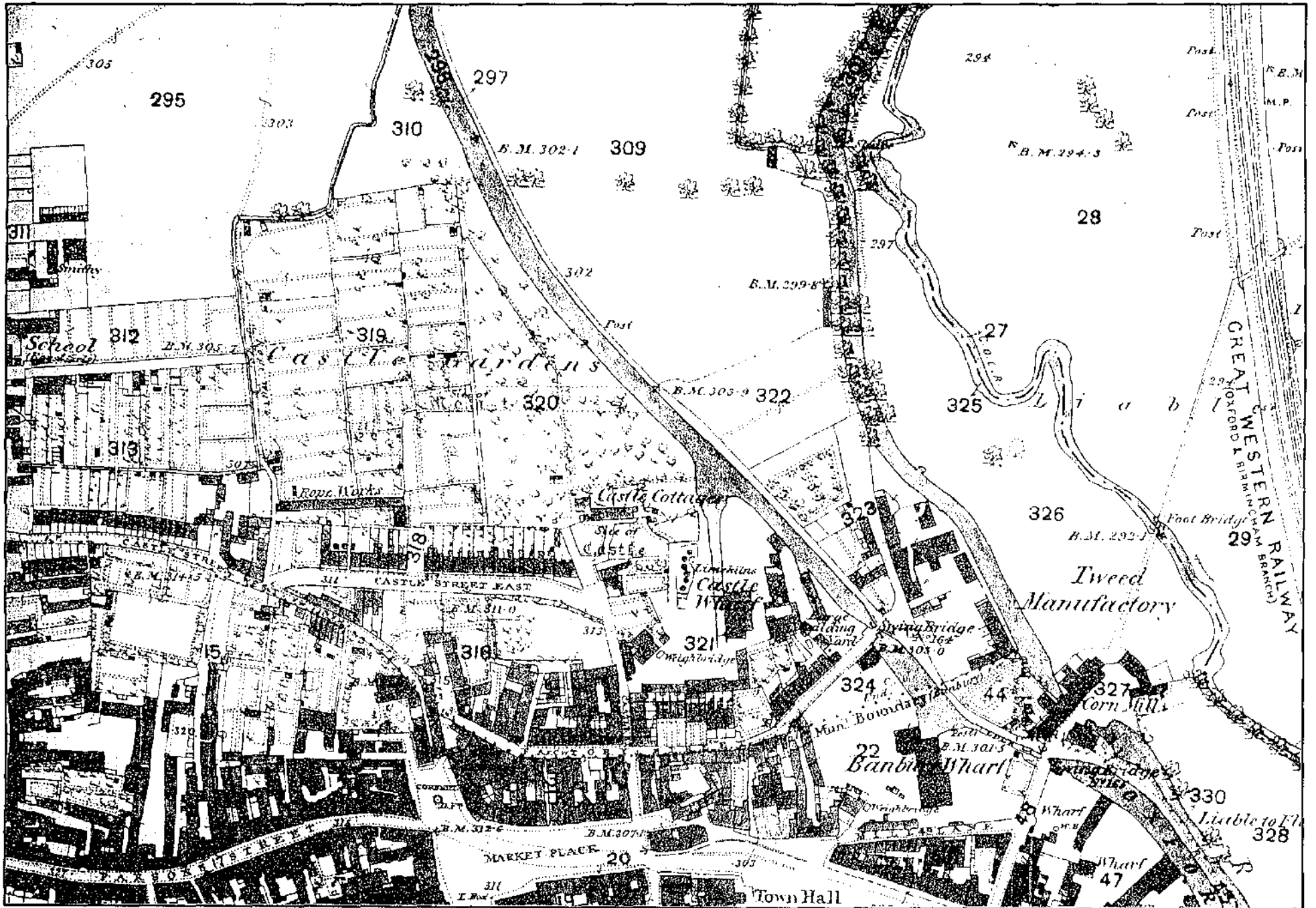


Fig.8

Fig. 9a Detail from Lobel (1969)
 'Map of Banbury circa 1800, with
 major features in late medieval
 times'.
 Scale approx. 1:2500.
 North at top of page.

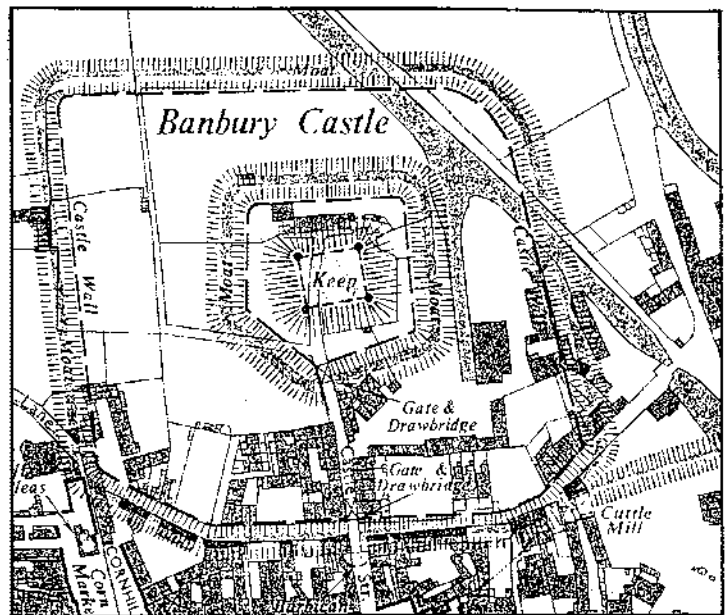


Fig. 9b Detail from Fasham (1983)
 'Location map of the southern part
 of the castic area'.
 Scale approx. 1:2500.
 North at top of page.

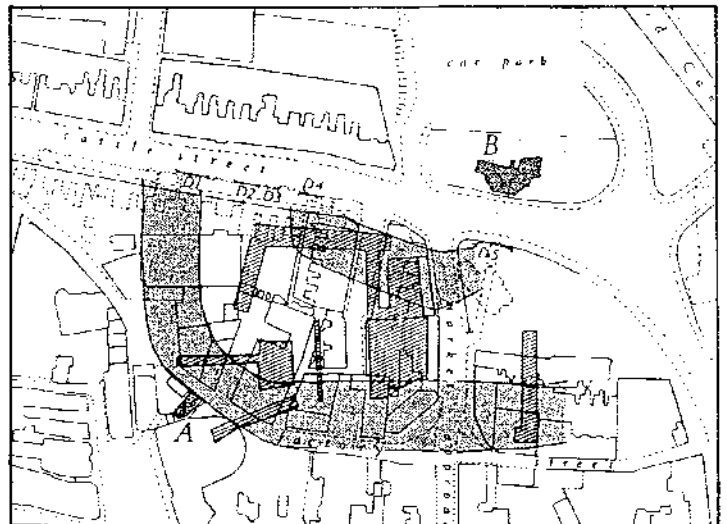


Fig. 9c Provisional reconstruction
 of castle based upon GPR and
 evaluation trenching.
 Scale approx. 1:2500.
 North at top of page.

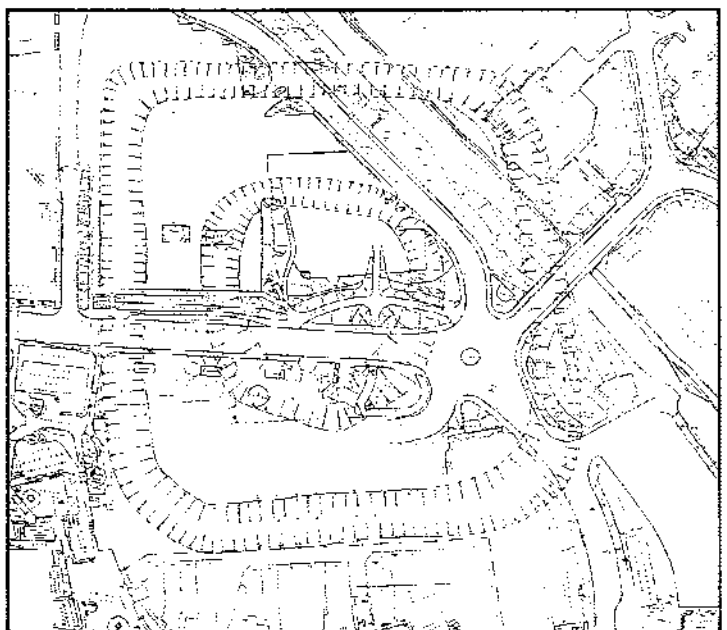


Fig.9

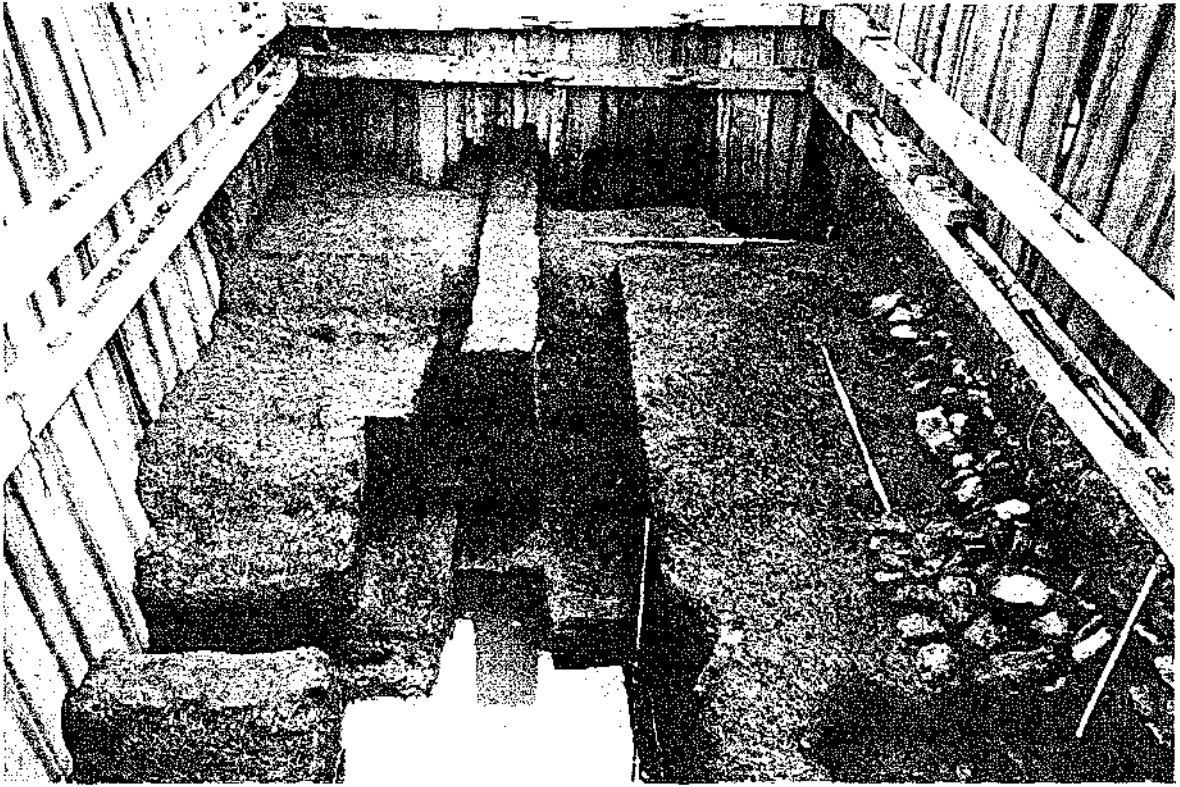


Plate 1



Plate 2

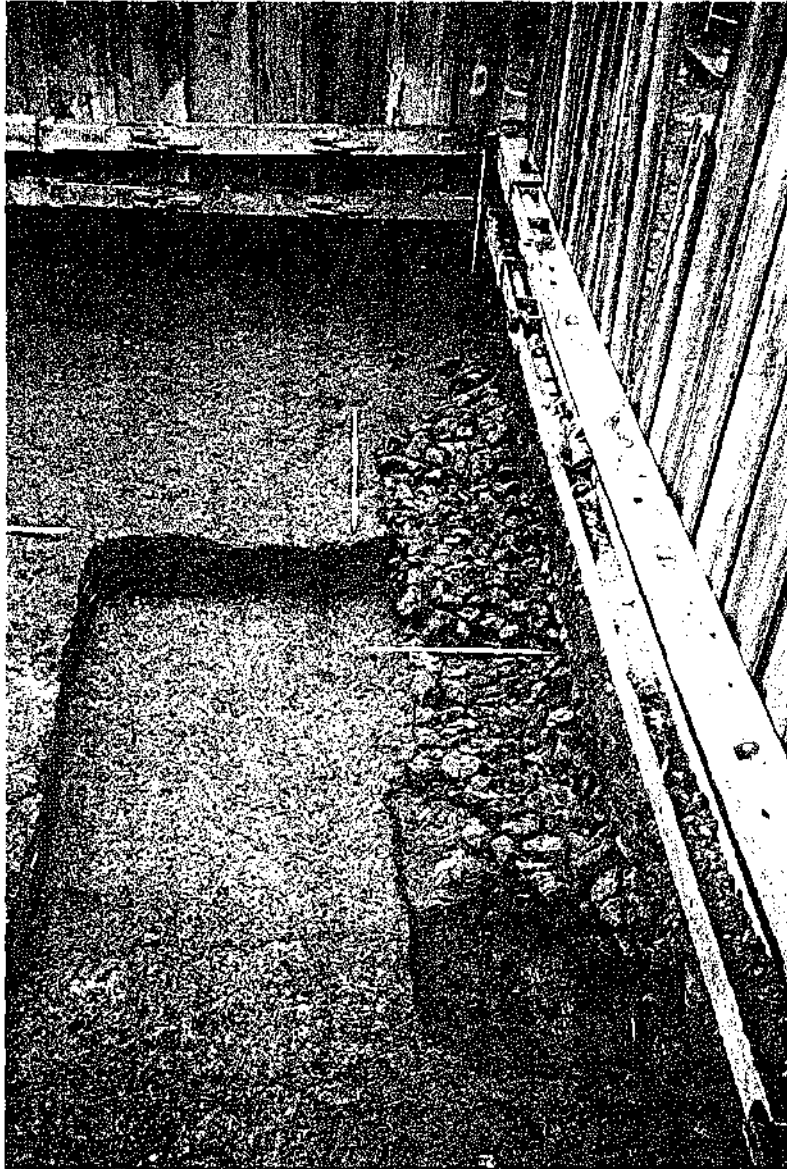


Plate 3



Plate 4



Plate 5

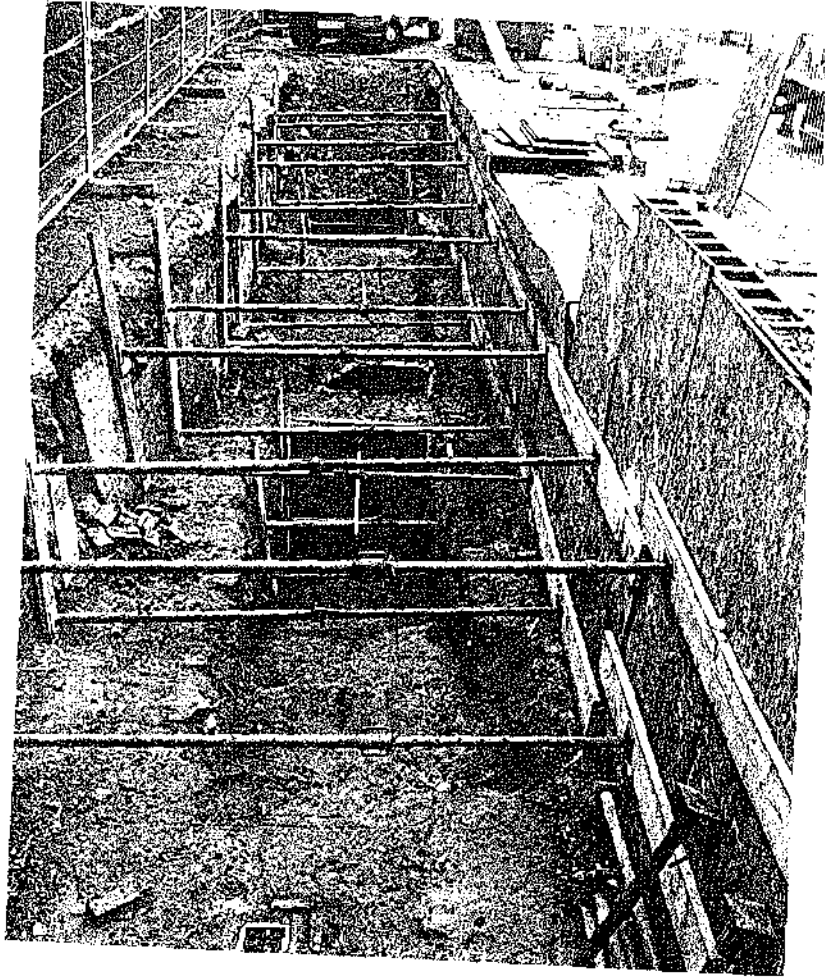


Plate 6



Plate 7

APPENDIX I

FINDS CATALOGUE

QUANTIFICATION

| | | | |
|----------------|------|-----------|----|
| ANIMAL BONE | 1316 | GLASS | 13 |
| POTTERY | 720 | CHARCOAL | 4 |
| CLAY PIPE | 57 | FIRE CLAY | 3 |
| SHELL | 54 | SLAG | 3 |
| STONE | 26 | COIN | 1 |
| FLINT | 20 | CLINKER | 1 |
| METALWORK | 16 | PLASTER | 1 |
| BRICK AND TILE | 11 | | |

QUANTIFICATION BREAKDOWN (by trench)

TRENCH 4 (Table 1)

| CONTEXT | BRICK | STONE | FLINT | AN.BONE | NAIL | IRON | SLAG | CH'L | COIN |
|--------------|----------|----------|-----------|-------------|----------|----------|----------|----------|----------|
| machining | 2 | | | 140 | | | | 4 | |
| 4001 | | | | 154 | 1 | 1 | | | |
| 4002 | | | | 9 | | | | | |
| 4003 | | | | 6 | | | | | |
| 4004 | | 1 | 1 | 18 | | | | | |
| 4005 | | | | 15 | | | | | |
| 4007 | | | | 59 | | | | | |
| 4008 | | | 1 | 17 | | | | | |
| 4009 | | | 1 | 201 | | | | | |
| 4012 | | | | 24 | 1 | | 1 | | |
| 4013 | | | | 2 | | | | | |
| 4016 | | 1 | 1 | 131 | | | | | |
| 4019 | | | 9 | | | | | | |
| 4020 | | | | 44 | | | 1 | | |
| 4022 | | | | | | | | | 1 |
| 4024 | | | | 101 | | | 1 | | |
| 4025 | | | | 41 | | | | | |
| 4030 | 1 | | | 1 | | | | | |
| 4032 | | | 1 | | | | | | |
| 4035 | | | 2 | 51 | | | | | |
| 4041 | | | | 5 | | | | | |
| 4049 | | | | 24 | | | | | |
| 4052 | | | | 29 | | | | | |
| 4053 | | | | 2 | | | | | |
| 4063 | | | 2 | 6 | | | | | |
| U/S | | | | 35 | | | | | |
| TOTAL | 3 | 2 | 18 | 1115 | 2 | 1 | 3 | 4 | 1 |

TRENCH 5 (Table 2)

| | CONTEXT | BRICK | TILE | PLASTER | STONE | FLINT | AN.BONE | SHELL | CL.PIPE |
|--------------|----------|-------|----------|----------|-----------|----------|------------|-----------|----------|
| 5002 | | | | | | | | | 1 |
| 5003 | | | | | | | 17 | 1 | |
| 5004 | | | | | | | 8 | | |
| 5005 | | | | | | | 6 | | |
| 5006 | | | | | | 1 | 8 | | |
| 5007 | 1 | | 1 | 1 | | | 13 | 31 | |
| 5008 | | | | | 21 | | | | |
| 5009 | | | | | | | 1 | | |
| 5010 | 2 | | | | | | 26 | 11 | 5 |
| 5011 | | | | | | | 20 | 1 | 1 |
| 5012 | | | | | 1 | | 6 | 1 | |
| 5013 | | | | | | 1 | 24 | 3 | |
| 5015 | 2 | | | | | | 2 | | |
| 5016 | | | | | | | 21 | 1 | |
| 5020 | | | | | | | 4 | | |
| TOTAL | 5 | | 1 | 1 | 22 | 2 | 156 | 49 | 7 |

CONTEXT NAIL IRON LEAD M.BALL GLASS CLINKER BUTTON F.CLAY

| | | | | | | | | | |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 5002 | | | | | 1 | | | | |
| 5007 | | | | 1 | | 1 | | | |
| 5010 | | 6 | | | | 4 | 1 | 1 | |
| 5012 | 1 | | | | | | | | |
| 5014 | | | | | | | | | 3 |
| 5021 | | | | | | 1 | | | |
| U/S | | | | | | 1 | | | |
| TOTAL | 1 | 6 | 1 | 1 | 1 | 7 | 1 | 1 | 3 |

TRENCH 6 (Table 3)

CONTEXT TILE STONE AN.BONE SHELL CL.PIPE NAIL IRON LEAD GLASS

| | | | | | | | | | |
|--------------|----------|----------|--|-----------|----------|--|-----------|----------|----------|
| machining | 1 | 1 | | 4 | | | 44 | 1 | 1 |
| 6004 | | | | | | | 1 | | |
| 6005 | | | | 1 | | | 1 | | 1 |
| 6006 | | | | 3 | 2 | | 1 | | 2 |
| 6008 | | | | 1 | | | 2 | | |
| 6010 | | | | | 2 | | | | |
| 6011 | 1 | 1 | | 4 | 1 | | 1 | 1 | 3 |
| 6015 | | | | 6 | | | | | |
| 6016 | | | | 25 | | | | | |
| 6017 | | | | 1 | | | | | |
| TOTAL | 2 | 2 | | 45 | 5 | | 50 | 1 | 1 |

POTTERY QUANTIFICATION (Table 4)

| Trench | Context | Sherd Count | Description |
|---------------|------------------|--------------------|---|
| 4 | 4002 | 2 | |
| 4 | 4003 | 11 | very fragmentary |
| 4 | 4004 | 8 | 3 x rim 1 x base |
| 4 | 4007 | 4 | 1 x base 1 x rim |
| 4 | 4009 | 2 | 1 x rim |
| 4 | 4012 | 15 | 2 x rim 1 x base |
| 4 | 4016 | 400 | 303 x same vessel 9 x rim 7 x base |
| 4 | 4018 | 1 | |
| 4 | 4024 | 1 | 1x rim |
| 4 | 4035 | 1 | |
| 4 | 4052 | 21 | 3 x rim 4 x base |
| 4 | 4053 | 9 | 9x same vessel |
| 4 | 4059 | 3 | |
| 4 | 4061 | 1 | |
| 4 | 4063 | 3 | |
| 4 | 4079 | 1 | |
| 4 | u/s | 3 | |
| 4 | machining | 47 | 6 x rim 7 x base |
| | Sub-total | 533 | |
| 5 | 5004 | 1 | |
| 5 | 5005 | 3 | |
| 5 | 5006 | 1 | |
| 5 | 5007 | 22 | 1 x base 1 x handle 1 x rim 1 x glazed roof tile |
| 5 | 5010 | 18 | 2 x base 4 x rim (2 x-join) |
| 5 | 5011 | 21 | 1 x base 11 x same vessel |
| 5 | 5013 | 23 | 3 x rim 1 x base |
| 5 | 5015 | 3 | |
| 5 | 5016 | 2 | |
| 5 | 5020 | 2 | 1 x rim/handle |
| 5 | 5021 | 1 | |
| 5 | u/s | 2 | 1 x base |
| | Sub-total | 99 | |

| Trench | Context | Sherd Count | Description |
|---------------|------------------|--------------------|-----------------------------------|
| 6 | 6004 | 1 | 1 x rim |
| 6 | 6005 | 2 | 1 x base |
| 6 | 6006 | 5 | 1 x handle 1 x base 1 x rim |
| 6 | 6008 | 10 | 1 x rim |
| 6 | 6010 | 1 | |
| 6 | 6011 | 5 | |
| 6 | machining | 65 | 5 x base 15 x rim |
| | Sub-total | 89 | LARGELY POST MED |

TOTAL SHERD COUNT FOR ZONE 1 = 721 sherds

APPENDIX II

Small Finds Assessment by Lynne Bevan

Although relatively small in size, the finds assemblage contains both prehistoric material, in the form of worked flint, and Medieval material including an architectural fragment (5008), a coin (4002), and possibly a worked bone object (5006).

Leaving aside the pottery, which is reported separately, the finds assemblage represents a low level of material culture which, with the exception of an elaborate architectural fragment, does not signify exclusively high status activity on the site.

Flint

A total of 20 pieces of humanly-struck flint was recovered, comprising one core (4035), two blades (4035 and 4063), one retouched flake (4019), two chunks (4019), and 14 unretouched flakes (4004, 4008, 4009, 4016, 4019 x 6, 4032, 4063, 5006, 5013).

The raw material was a translucent light to medium grey coloured flint with the thin, compacted cortex characteristic of a pebble origin from river gravels. No chronologically-diagnostic implements were present in this small collection which probably dates to the later Neolithic to Bronze Age rather than to earlier prehistoric periods. Small amounts of worked flint were found during previous excavations on the site, an end scraper (Fasham 1983, Fig. 22:8, 114), and 19 flints including a (Neolithic) leaf-shaped arrowhead (Rodwell 1976, Fig. 20:1-7, 143). While the presence of humanly-struck flint denotes prehistoric activity on the site, the small size of the assemblages hitherto recovered does not suggest occupation of any longevity, but will contribute ultimately to an increased knowledge of prehistoric settlement in the area.

The Worked Stone

Eight fragments of worked, locally-derived limestone (Dr.R.Ixer pers. comm.) were recovered, including a large, curved piece of possible window tracery or vaulting with elaborate mouldings (5008), and a triangular-shaped stone block, dressed on all faces and probably a keystone for a window or door arch (5012). The remaining stone consisted of four small, degraded fragments of limestone with at least one worked edge (5007, 5013, unstratified Trench 6 x 2), and three fragments of stone roof tile (5015, 6011, unstratified Trench 6). The stone moulding is obviously derived from a building of some architectural sophistication within the castle.

Worked Bone

One piece of worked bone was recovered, a fragment of long bone, possibly a sheep tibia, with two incised lines at one end and a series of gouges near the centre (5006). This object, which was probably intended as a handle but was abandoned before completion, may be of Medieval date.

Metalwork

The following metal objects were recovered: one copper alloy coin (4033), one broken copper alloy stud (5010), a corroded iron knife blade (4001), six nails (4001, 4012, 5010, 5012, 6011, Trench 6 machining), five corroded iron lumps (5010), two fragments of lead sheet (5007, Trench 6 machining) and a musket ball 4002). With the exception of the coin, a possible 12th century penny requiring specialist identification, none of this material was obviously Medieval.

Glass

Of the 17 fragments of glass recovered, three came from window panes, twelve came from wine bottles, and two from other vessels; a clear glass phial and the rounded base from a pale blue vessel with a star motif and the letter 'T', both from 5010. All of the glass is post-Medieval in date, but further research on the maker's mark on the rounded base might provide closer dating.

Contexts with bottle glass: Trench 6 machining x 4, 5010 x 2, 6005, 6006 x 2, 6011 x 3.

Contexts with window glass: 5007, 5021, Trench 5 unstratified.

Clay Pipe

A total of 44 fragments of clay pipe was recovered from the following contexts: 5002, 5010 x 5, 5011, 6004, 6005, 6008 x 2, 6011 x 6, unstratified Trench 6 x 27. The larger fragments included seven pipe bowls of a similar, flat-based form with rouletted rims, for which it should be possible with further research to establish fairly close dating. No stamped fragments were recovered.

Brick and Tile

Ten fragments of ceramic tile (5007, 5011, 6008 x 3, 6011 x 4, 5015), and seven fragments of brick (4030, 5007, 5010 x 2, 5015, unstratified Trench 4 x 2) were recovered. All of this material appeared to be post-Medieval in date. One fragment of Medieval green glazed roof tile dating to the 14th-15th century (S. Ratkai pers. comm.) was recovered from Trench 5 (5016).

Miscellaneous Finds

Small quantities of the following material were recovered:

Charcoal: 4041, Trench 4 machining.

Coal: 5010.

Fired clay: 5014.

Oyster shell: 5007, 5010, 5011, 5012, 5013, 5016, 6006, 6010.

Slag: 4012, 4024, 4020, 5007.

Animal Bone by Lynne Bevan with specialist identifications by Umberto Albarella

A total of 1316 fragments of bone was recovered from the evaluation of Zone 1. The standard of preservation was generally good and the most common species represented were cattle and sheep in fairly equal amounts, followed closely by pig, with small amounts of horse bone, bones from poultry (chickens and, to a lesser extent, geese), roe deer, a cat and a dog. Approximate percentage by species is as follows: cattle 35%, sheep 35%, pig 25%, other species 5%.

The largest concentrations of bone came from the following contexts: 4009 (201), 4001 (154), 4016 (131), 4024 (101), 4007 (59), 4035 (51) 4020 (44) and 4025 (41).

The 201 fragments from 4009 consisted of bones from cattle and sheep, as well as pig bones, including a number of heavily-chopped longbones and teeth, among which several pig incisors were identified. 4001 again consisted mainly of cattle, sheep and pig, but also included a cat mandible and a roe deer humerus. The other large contexts also featured similar amounts of the three most common species with the addition of horse bones and chicken bones in 4016, and horse bones in 4007.

The smaller quantities of bone from the remaining contexts consisted of single bones or various combinations of bones from the same three main species with the occasional addition of horse, dog, deer and poultry. Horse, cattle and pig bones from 4008 all showed signs of having been gnawed by scavengers. Horse bones were also present in 5007, 5010, 5011 and 6016, as well as a dog bone in the case of 5010 and a roe deer bone in 5016. Chicken bones came from 4049 and goose bones from 4063.

The kinds of species represented in Zone 1 and the degree of bone fragmentation among the animals exploited for meat is suggestive of waste from food refuse and butchery practices, and is to be expected among the refuse from a Medieval castle.

Human Bone by Lynne Bevan with specialist identification by Umberto Albarella

A badly preserved fragmentary human femur was found in 6016, together with a horse mandible.

APPENDIX III

Pottery Assessment by Stephanie Ratkai

Range of fabrics

[Fabric names and codes are those used in Mellor 1994 unless otherwise stated]

A fairly limited range of fabrics was present. The dominant fabric was late Saxon-Medieval Banbury ware (Ox 234). Late Saxon-medieval Oxford ware (OXY) and early medieval Oxford ware, "calcareous gravel tempered ware", (OXAC) were fairly well represented. These fabrics, together with a single St Neots type ware sherd, represent the earliest pottery used on the site. There was also a single developed Stamford ware sherd which may date to the early occupation of the site but could equally well date to the early-13th century.

Later medieval pottery was represented mainly by Brill/Boarstall type ware (OXAM) and Potterspury type ware (OX 68). Other fabrics which occurred in very small quantities were Chilvers Coton A (Mayes and Scott 1984), sand and calcareous tempered wares, ?Nettlebed, a fine orange ware, ?proto Midlands purple, ?Northants/?Bedford shelly ware and possible Wychwood-type (OXCX) products. There were also a few sherds of a thin bodied whiteware with a thin blue-black core. This fabric has been found in southern Warwickshire at Burton Dassett (Ratkai forthcoming), Fenny Compton (Ratkai, assessment for Warks Museum) and Admington (fieldwalking material collected by C. Dyer and examined by the author). As yet this fabric is unsourced, although it shares several characteristics in common with early Potterspury and early Brill/Boarstall (OXAW) products.

Late medieval and post-medieval pottery was not common. It consisted of Cistercian wares, blackwares, yellow wares, coarsewares and manganese mottled wares. Odd sherds of tin glazed earthenware and German stonewares were present. There were a few sherds of white salt glazed ware and of factory produced glazed earthenwares of the 18th and 19th centuries.

Two Roman sherds were found. These were Milton Keynes pink grogged ware (fabric O81 in the Oxfordshire type series) and an Oxford colour coat mortarium (fabric M41), form type C100 (Young 1977), which dates to the 4th century (Dr J. Evans, pers. comm.).

Dating

There is some difficulty in dating the earliest post-Roman activity on the site. The putative St Neots ware sherd (6011) is most likely to be pre-Conquest. The calcareous gravel tempered wares have several different production sites and dating may differ according to the region in which they are found (Mellor 1994, 51-52). There are certainly pre-conquest occurrences but this type of pottery is in use from the 11th century through to the mid-12th century. It is perhaps significant that several contexts contain only this type of pottery. These contexts are marked "could be pre-Conquest" in the spot dating (see below). Late Saxon-early medieval Banbury ware may pre-date the construction of the motte at Deddington Castle whereas late Saxon-early medieval Oxford ware is not found in pre-castle layers at Oxford and

Deddington. Both fabrics flourish in the 12th century and continue in use into the 13th century. By the middle of that century both fabrics had probably gone out of use. They were subsequently replaced by Brill/Boarstall wares and Potterspury type wares which were produced from the 13th century and into the post-medieval period. There is a scattering of pottery from the 16th to 19th centuries.

Distribution of pottery by trench

The pottery from Trench 4 is most numerous and largely restricted to the early life of the castle and possible pre-castle manor. There is no glazed pottery and most of the sherds appear to come from cooking pots. A notable exception to this is a very large storage jar in late Saxon- medieval Banbury ware from pit F410. There were at least 300 sherds from this vessel which was decorated with applied thumbed strips and wavy combing. A sherd from a similar vessel, also from Banbury Castle, is illustrated in Mellor (1994: fig 30,7).

Trench 5 produced a greater variety of pottery dating from the 11th century to the 17th century. There was much more evidence of residuality and disturbance in pottery from this trench than was apparent in that from Trench 4

Trench 6 contained mainly 16th and 17th century pottery, with some residual medieval wares.

Significance of the pottery

The trenches within the castle contained a reasonable quantity of pottery, which in Trench 4 in particular appeared to have suffered little disturbance and sherds were generally large and unabraded. The area within the inner moat seems to have been the focus of early activity.

Pottery from Trenches 5 and 6, which was mainly associated with the fill of the moat, tended to consist of rather smaller sherds with a wider date range than those from Trench 4. The ceramics suggest that the moat began to fill up in the 14th century but that this process was intensified and finished in the 17th century, presumably associated with the aftermath of the Civil War.

Despite many years archaeological research in Oxfordshire there are still many questions regarding the ceramics, clearly set out by Mellor (1994, 57-60, 90-93, 147-150, 156), which need to be answered. The further study and recovery of pottery from Banbury Castle should go some way to answer some of these.

Banbury: medieval and later pottery
Spot Dating and Assessment

Trench 4 (Table 5)

| Context/Feature | Date | Comments |
|-----------------|--------------------|-----------------------|
| 4002 F404 | late 11th-12th c | |
| 4003 | 11th-e12th c | Could be pre-Conquest |
| 4004 F403 | 11th-e12th c | Could be pre-Conquest |
| 4007 | 11th-e12th c | Could be pre-Conquest |
| 4009 F407 | 11th-e12th c | Could be pre-Conquest |
| 4012 F410 | 12th-?e13th c | |
| 4016 F410 | late 11th-12th c | One Roman sherd |
| 4018 F410 | 11th-e12th c | Could be pre-Conquest |
| 4024 F409 | 11th-e12th c | Could be pre-Conquest |
| 4052 F410 | late 11th-12th c | |
| 4053 F403 | 11th-e12th c | Could be pre-Conquest |
| 4059 F403 | 11th-e12th c | Could be pre-Conquest |
| 4061 F410 | late 11th-12th c | |
| 4063 F413 | late 11th-?e13th c | |
| 4079 F413 | 11th-e12th c | Could be pre-Conquest |

Trench 5 (Table 6)

| Context/Feature | Date | Comments |
|-----------------|-------------------|---|
| 5004 F500 | 11th-e12th c | Could be pre-Conquest |
| 5005 F500 | late 11th-12th c | Possibly pre-Conquest |
| 5006 F501 | 17th c | |
| 5007 F500 | 17th c | Residual material, also roof tile frags |
| 5010 F500 | late 17th-e18th c | |
| 5011 F500 | 17th c | Residual material |
| 5013 F500 | 17th c | Mainly residual material |
| 5015 F500 | 17th c | |
| 5016 | 14th-15th c | Dating based on glazed roof tile |
| 5020 F500 | 14th-15th c | |
| 5021 F500 | late 15th-16th c | |

Trench 6 (Table 7)

| Context/Feature | Date | Comments |
|-----------------|-------------------|-------------------------------|
| 6004 F600? | 19th c | |
| 6005 F600? | ?17th c | |
| 6006 F600? | late 17th-c18th c | |
| 6008 F600? | ?? | Brick/tile frags |
| 6010 F600 | 18th c | |
| 6011 F600 | 12th-c13th c | Section 2A |
| 6011 F600 | pre-Conquest | St Neots type ware Section 2B |

Bibliography

Mayes, P. and Scott, K. 1984 'Pottery kilns at Chilvers Coton, Nuneaton',
Soc. for Med. Archaeol. monogr. ser. No 10.

Mellor, M. 1994 'Oxfordshire pottery: a synthesis of middle and late Saxon, medieval and early post-medieval pottery in the Oxford Region', *Oxoniensia* LIX, 17-217.

Ratkai, S. (Forthcoming) in N. Palmer, *Excavations at the deserted medieval settlement of Burton Dassett, Southeast Warwickshire.*

APPENDIX IV

Assessment of Insect Remains by Dr David Smith.

Introduction.

The insect remains discussed here were recovered from a range of samples collected by BUFAU in the Summer of 1997 from a variety of deposits from the castle precincts at Banbury.

Several of the samples examined were associated with the two larger moats surrounding the late Medieval castle at Banbury, one of these (6010) was from a levelling deposit dated to the 18th century. Two samples (4032 upper and 4032 lower) came from a black organic deposit encountered in the lower fills of the moat which possibly surrounded the 11th century manor.

It was hoped that an assessment of the insect remains from these deposits would address the following questions:

1. Were insect remains present? and, if so, are the faunas of interpretative value?
2. Would the study of the insect remains provide information on the hydrology and water conditions within these moats?
3. Could the insect remains from these moats provide information on the nature of the surrounding environment and land use at the time of silt deposition?
4. Do the insects provide information on the nature of living conditions and settlement within the nearby structures?
5. Would it be possible to tell if the insect faunas recovered showed that settlement material had been dumped into the moats?

Methods.

The insect fragments examined here were recovered from general biological samples taken from the deposits involved. The weights, volumes and context details of these samples are listed at the top of Table 1. In all cases a 2 litre sub-sample has been retained to be processed for plant macro fossil analysis. The remainder of the samples were then processed using the standard method of paraffin flotation as outlined in Kenward *et al.* (1980).

The faunas were assessed using the "scanning" system as outlined by Kenward *et al.* (1985). On average the time taken to scan each sample was around 20 minutes. All the taxa present have been identified as far as was possible.

When discussing these faunas recovered two considerations should be taken into account.

- 1) The identifications of the insects present are provisional. Equally, many of the taxa present could be identified down to species during a full analysis, producing more detailed information. As a result, these faunas should be regarded as incomplete and possibly biased.
- 2) The various proportions of insects presented in Table 8 are very notional and subjective.

Results.

Only three of the samples examined here produced insect remains (4032 upper, 4032 lower and 6010). The remainder of the samples (6011, 6012) were blank. This suggests that, unless clearly organic deposits are encountered, these features and sections do not need to be sampled for insect analysis again.

The insect taxa recovered are listed in Table 8. The majority of the species present are beetles (Coleoptera) although several of the samples did contain numbers of caddis fly (Tricoptera) head capsules. The numbers of individuals present is estimated in the following way: * = 1-2 individuals ** = 2-5 individuals *** = 5-10 individuals **** = 10+ individuals. The taxonomy used for the Coleoptera (beetles) follows that of Lucht (1987).

Discussion.

All of the samples which contained insects (upper and lower 4032 and 6010) produced moderately sized, although not very diverse, faunas. The size of the faunas recovered and the possible interpretation of the insects present suggests that further analysis is warranted. Equally if these features are cut again they should be re-sampled.

The insect faunas from the two deposits (the 11th/12th century moat and the 18th century levelling deposit from the later castle moat) are discussed together due to their essential similarity.

Hydrology and Water Conditions.

The majority of the species present are water beetles from slow flowing or still water environments. In particular the *Hydroporus* species, *Ochthebius* and aquatic *Cercyon* species are typical of these conditions. The 11th/12th century moat seems to also have contained emergent vegetation such as rushes and water reeds to judge from the number of phytophage (plant feeding) insects present such as the *Donacia* and *Plateumaris* reed beetles and the *Limnobaris* and *Notaris* weevils. The 18th century moat, on the other hand, seems to have been free of these species. A more detailed reconstruction of this aspect of the moat would result from a full identification of these species.

Surrounding Environment and Land Use.

In terms of the environments near to the moat, the insects in these faunas clearly suggest grassland and pasture were present. In particular there are relatively large numbers of *Aphodius* dung beetles in these samples. *Pyllopertha horticola* also suggests the presence of grassland since the larvae of this species are often found feeding at the base of grasses in old meadowland. In addition, some of the phytophage species such as the *Sitona* and *Apions* which are present in large numbers are associated with clovers, docks and plantains, commonly found in such meadow-land. A full identification of these species would allow a more detailed reconstruction of the vegetation and ground conditions present in this pasture-land.

There are no indicators for the presence of woodland in the insects recovered.

Human Settlement.

No synanthropic (associated with humans) insects were recovered from these two deposits. This suggests that it is unlikely that dumping of domestic or settlement material into the moat occurred here. Equally, it suggests that the area around the moat must have been relatively clear of settlement waste.

Conclusions and Recommendations for Further Research.

The insect faunas assessed clearly have the potential to be informative as to water conditions, the landscape and land-use of the area surrounding these moats during the time of their deposition.

It is suggested that unless clearly organic deposits are encountered in the later castle moat, should these features be recut, there is no further need to collect samples for insect analysis from these deposits.

The 11th/12th century manor moat does contain well preserved insect remains. It is important that the analysis started as part of this assessment is completed. In addition to these insect faunas being informative to this specific period of the history of Banbury, these faunas provide other important information. At a national level there are very few insect faunas associated with moated manors of this date which have been analysed. Should this moat be recut in subsequent excavations, any further deposits of organic material should be sampled. This is particularly important if the deposit appears to contain large quantities of settlement waste.

Given that the faunas recovered from Banbury at present do not provide any information on the living conditions and hygiene in the structures present on site, it is particularly important that waterlogged settlement deposits such as pits, dumps, floors and wells are sampled if encountered.

Bibliography

- Kenward, H.K. , Hall, A.R., and Jones, A.K.G. .1980. A Tested Set of Techniques for the Extraction of Plant and Animal Macro-fossils from Waterlogged Archaeological Deposits. *Scientific Archaeology*. 22. 3-15.
- Kenward H.K., Engleman C., Robertson A. and Large F. 1985. Rapid Scanning of Urban Archaeological Deposits for Insect Remains. *Circaea*. 3. 163-72.
- Koch, K 1992. *Die Käfer Mitteleuropas*. Ökologie. Band 3. Goecke and Evers Verlag. Krefeld.
- Lucht, W.H. 1987. *Die Käfer Mitteleuropas*. Katalog. Krefeld.

Table 8

The insects recovered from Banbury Assessment.

| | 4032 | 4032 | 6010 |
|--|-------|-------|------|
| | upper | lower | |
| weight kg | 6.4 | 6 | 6 |
| volume lt | 7.5 | 7 | 6 |
| COLEOPTERA | | | |
| Carabidae | | | |
| <i>Nebria</i> spp. | + | ++ | - |
| <i>Dyschirius</i> spp. | - | + | - |
| <i>Bembidion</i> spp. | ++ | +++ | ++ |
| <i>Trechus</i> spp. | + | ++ | - |
| <i>Harpalus</i> spp. | - | ++ | - |
| <i>Pterotichus madidus</i> (F.) | - | - | + |
| <i>P.</i> sp. | + | - | - |
| <i>Calathus fuscipes</i> (Goeze) | - | ++ | - |
| <i>Agonum</i> spp. | - | + | + |
| <i>Amara</i> spp. | + | - | + |
| Dytiscidae | | | |
| <i>Hydroporus</i> spp. | ++ | + | - |
| <i>Agabus</i> spp. | - | + | - |
| <i>Noterus</i> spp. | - | - | + |
| Hydraenidae | | | |
| <i>Ochthebius minimus</i> (F.) | - | + | - |
| <i>O.</i> spp. | ++ | ++++ | - |
| <i>Limnebius</i> spp. | - | - | + |
| <i>Heloporus</i> spp. | - | ++++ | + |
| Hydrophilidae | | | |
| <i>Coelostomu orbiculare</i> (F.) | + | - | - |
| <i>Cercyon</i> spp. | ++ | ++ | ++ |
| <i>Megasturum boleetophagum</i> (Marsh.) | - | ++++ | + |
| <i>Hydrobius fusipes</i> (L.) | + | - | - |
| <i>Enochrus</i> spp. | - | + | - |
| Staphylinidae | | | |
| <i>Megarthus</i> spp. | + | - | - |
| <i>Olophrum</i> spp. | + | - | - |
| <i>Lesteva</i> spp. | - | + | + |
| <i>Oxytelus</i> spp. | + | + | ++ |
| <i>Platystethus</i> spp. | + | - | - |
| <i>Stenus</i> spp. | +++ | ++ | +++ |
| <i>Xantholinus</i> spp. | - | ++ | + |
| <i>Philonthus</i> spp. | + | - | + |
| <i>Tachyphorus</i> spp. | - | + | + |
| Aleocharinae Gen. & spp. Indet. | - | - | + |
| Elateridae | | | |
| Elateridae spp. | - | + | - |
| Dryopidae | | | |
| <i>Dryops</i> spp. | + | - | + |

| | | | |
|-----------------------------------|-------|------|----|
| Heteroceridae | | | |
| <i>Heterocerus</i> sp. | - | - | + |
| Scarabaeidae | | | |
| <i>Onthophagus</i> sp. | - | + | - |
| <i>Geotrupes</i> sp. | - | ++ | - |
| <i>Aphodius</i> spp. | +++++ | +++ | ++ |
| <i>Pyllopertha horticola</i> (L.) | ++ | +++ | - |
| Chrysomelidae | | | |
| <i>Donacia</i> spp. | ++ | ++++ | - |
| <i>Plateumaris</i> spp. | - | + | - |
| <i>Lema</i> spp. | - | + | - |
| <i>Hydrophassa glabra</i> (Hbst.) | - | + | + |
| <i>Prasocuris phellandri</i> (L.) | - | + | - |
| <i>Phyllotreta</i> sp. | + | + | ++ |
| <i>Chaetocnema</i> spp. | - | + | - |
| Cuculionidae | | | |
| <i>Apion</i> spp. | ++++ | ++ | - |
| <i>Sitona</i> spp. | + | + | + |
| <i>Tanysphyrus lemnae</i> (Payk.) | + | + | - |
| <i>Notaris acridulus</i> (L.) | - | ++ | - |
| <i>N.</i> spp. | + | - | + |
| <i>Hypera</i> sp. | +++ | + | - |
| <i>Limnobaris</i> spp. | - | - | + |
| <i>Ceutorynchus</i> sp. | + | ++ | - |
| <i>Gymnetron</i> spp. | + | + | - |
| TRICOPTERA | | | |
| Genus and spp. Indet. | ++ | +++ | ++ |

APPENDIX V

Assessment of Plant Remains by Lisa Moffett

Samples for plant remains were taken to test the potential of the site to provide botanical evidence of local environment and human activities. A few features on the site were waterlogged and preserved layers of organic material. Samples from these contexts were assessed for both seeds (below) and beetles (see Smith). The other contexts were well drained and did not preserve organic remains but samples were taken for charred plant remains.

Methods

The samples for charred plant remains were taken from the inner moat (5007, 5013), a layer above the inner moat relating to a phase of redesign (5025), and from a pit in the inner bailey (4016) which contained a late-11th/early-12th century pot. The waterlogged samples were taken from the return of the inner moat (6010, 6011, 6012), and the upper and lower fills of an organic layer from the inner bailey (4032).

The samples for charred material were processed by a technician using water flotation in a bucket, decanting the floating material onto a 500µm mesh sieve. The mineral residue was washed through a 2mm mesh sieve and the retained material sorted for bone, pottery and other small finds. The charred material was dried, then scanned under a binocular microscope at up to x40 magnification and the material present noted. Large flots were subsampled and only a portion of them scanned. As with the waterlogged material, the aim was only to characterise the potential of the sample for further analysis and all identifications are preliminary.

For the purposes of the assessment, a 100 ml. subsample from each of the waterlogged samples was wet sieved to 300µm and sorted under a binocular microscope by a technician. The sorted material was then scanned by the author under a binocular microscope at up to x40 magnification and the species present were noted. The aim was to make a general characterisation of the sample to assess whether further analysis was needed rather than to undertake the analysis itself. The identifications, therefore, should be regarded strictly as preliminary, as they were mostly made without reference to modern comparative material.

Results

The results of the assessment are given in Table 9 for charred plant remains, and Table 10 for waterlogged remains (below). The need for further analysis was assessed by the abundance of material, the range of species present and the quality of preservation. In a few cases the need for further analysis was not clear (indicated in the table by a '?') as the relative value of the samples for the interpretation of the site may depend on the potential of any further samples which may be taken when the site is excavated.

Table 9**Charred material**

| | | | | | |
|---------------------------------|--|---|--|---|--------------------|
| Feature | 410 | 500 | 500 | | |
| Context | 4016 | 5007 | 5013 | 5025 | |
| Sample size (litres) | 20 | 20 | 11 | 17 | |
| Flot size (mls) | 86 | 35 | 15 | 650 | |
| Amount scanned | 20 | 16 | 15 | 26 | |
| Further analysis needed | ? | ? | Yes | Yes | |
| Species | | | | | Common name |
| <i>Triticum aestivum</i> rachis | - | - | - | + | bread wheat |
| <i>Triticum</i> sp. grain | + | + | + | - | wheat |
| <i>Hordeum vulgare</i> grain | - | + | - | + | barley |
| <i>Avena</i> sp. grain | - | - | - | + | oat |
| <i>Avena</i> /large Poaceae | - | - | - | + | oat or large grass |
| Cereal indet. | + | + | + | + | |
| Cereal/large Poaceae culm nodes | - | - | - | - | |
| | - | - | - | + | hairy tare |
| Vicia hirsuta | | | | | |
| | + | - | + | - | vetch/tare |
| Vicia/Lathyrus | | | | | |
| | - | - | - | + | cornflower |
| Centaurea cyanus | | | | | |
| | - | - | - | + | stinking mayweed |
| Anthemis cotula | | | | | |
| <i>Bromus</i> sp. | - | - | + | - | brome |
| Poaceae | + | - | + | + | |
| Comments | Moderate amounts of cereal remains, some of the legumes are large. | Moderate amounts of grain, also some bone and lots of snails. | Moderately abundant grain with some weeds, also some snails. | Very abundant grain with little wood charcoal. Mostly wheat with a few other cereals. | |

Table 10

Waterlogged material

| Trench | 4 | 4 | 6 | 6 | 6 | |
|-----------------------------------|---------------------|---|---------------------------------------|--------------------|---|------------------------|
| Context | 4032 (lower) | 4032 (upper) | 6010 | 6011 | 6012 | |
| Further analysis needed | Yes | ? | No | No | No | |
| Species | | | | | | Common name |
| Ranunculus acris/repens/bulbosus | + | - | + | + | - | buttercup |
| Ranunculus subgenus Batrachium | + | + | + | - | - | water crowfoot |
| Urtica dioica | + | + | - | + | + | stinging nettle |
| Betula sp. | - | - | + | - | - | birch |
| Chenopodium album type | + | - | - | - | - | fat hen |
| Stellaria media type | + | - | - | - | - | chickweed |
| Stellaria sp. | + | - | - | - | - | chickweed |
| Caryophyllaceae | - | - | + | - | - | pink family |
| Persicaria maculosa/lapathifolium | + | - | - | - | - | persicaria |
| Fallopia convolvulus | + | - | - | - | - | black bindweed |
| Rumex sp. | + | - | - | - | - | dock |
| cf. Rorippa sp. | + | - | + | - | - | ? water-cress |
| ? Brassicaceae | + | - | - | - | - | ? cabbage family |
| cf. Berula erecta | + | - | - | - | - | ? lesser water-parsnip |
| ? Anethum graveolens | + | - | - | - | - | ? dill |
| Lamium sp. | - | - | - | - | + | dead-nettle |
| Galeopsis tetralix | + | - | - | - | - | hemp-nettle |
| agg./speciosa | + | - | - | - | - | gypsywort |
| Lycopus europaeus | | | | | | |
| Callitriche sp. | + | - | - | - | - | water-starwort |
| | - | - | + | - | - | elder |
| Sambucus nigra | | | | | | |
| | + | - | - | - | - | thistle |
| Carduus/Cirsium | | | | | | |
| | + | - | - | - | - | nodding bur-marigold |
| Bidens cernua | | | | | | |
| Asteraceae | + | - | - | - | - | daisy family |
| Juncus sp. | + | - | - | - | - | rush |
| Carex spp. | + | - | - | - | - | sedges |
| Glyceria sp. | + | + | - | - | - | sweet-grass |
| Poaceae | + | - | - | + | - | grasses |
| Comments | Seed abundance high | Seed abundance moderate, preservation much poorer than lower fill | Mostly buttercups, seed abundance low | Seed abundance low | Seed abundance low, mostly nettle seeds | |

Conclusions

The charred plant remains suggest cereal related activities were taking place in the area. The relative abundance of cereal remains suggests that such activities might have been important, at least in the area of the evaluation. A systematic programme of sampling for charred plant remains during the full excavation could produce evidence for crop processing stages and agricultural methods.

The waterlogged material suggests a mix of plants which grow in wet places and those which grow in well-drained but disturbed habitats. Wet ground plants such as sweet grass, rush, and nodding bur-marigold could have grown in the moats if they were wet, while fat hen, dock and nettles would have grown in areas disturbed by people and animals, and perhaps especially in areas where the soil had been enriched by organic waste. Further environmental information about local conditions around the castle could be derived from sampling other waterlogged contexts. Waterlogged contexts where household or industrial waste was dumped would be of particular interest as these might preserve evidence of specific activities.

APPENDIX VI

Table 11

| Strat | Description of strat unit | Comment on strat unit | Date/Date range |
|-------|---------------------------|---|-----------------|
| 4000 | Tarmac | Hardstanding of carpark. | |
| 4002 | Fill of F404 | Concentration of ironstone rubble, frequent burnt fragments. | MED 11TH-12TH C |
| 4003 | Occupation layer | Greyish brown sandy silty clay with pockets of bright grey-blue clay. | MED 11TH-12TH C |
| 4004 | Phase III of F403 | Rubble set within a grey-brown sandy clay silt (4022). | MED 11TH-12TH C |
| 4005 | Fill of F400 | Blue-green clay. | |
| 4006 | Layer | Grey-brown silty clay with occasional charcoal flecks. | |
| 4007 | Occ. layer/fill? | Brown silty clay. | |
| 4008 | Occ. layer/fill? | Grey-brown slightly sandy silty clay. | MED 11TH-12TH C |
| 4009 | Fill of F407 | Brown silty clay. | |
| 4012 | Fill of F410 | Orange-brown sandy clay, redeposited natural. | MED 11TH-12TH C |
| 4013 | Fill of F401 | Grey-brown silty clay containing lenses of charcoal. | MED 11TH-12TH C |
| 4014 | Fill of F402 | Grey-brown silty clay fill containing concentrations of charcoal. | |
| 4015 | Layer | Grey-brown silty clay. | |
| 4016 | Fill of F410 | Heavily iron stained red-brown sandy clay material. | |
| 4017 | Fill of F410 | Brown sandy silty clay. | MED 11TH-12TH C |
| 4019 | Earliest deposit | Clean layer of Red-brown sandy silty clay directly overlying the natural. | |
| 4020 | Fill of F407 | Red-brown silty clay. | |
| 4021 | Phase II of F403 | Layer of ironstone rubble set within a brown clay (4029) | |
| 4022 | Phase III of F403 | Brown sandy clay silt associated with rubble 4004. | |
| 4024 | Fill of F409 | Grey silty clay. | |
| 4025 | Fill of F408 | Dark purplish-grey silty clay band of material. | MED 11TH-12TH C |
| 4027 | Fill of F405 | Light brown clay with some iron staining. | |
| 4028 | Fill of F408 | Small area of rubble within dark green clay (4033). | |
| 4029 | Phase II of F403 | Brown clay surrounding rubble 4021. | |
| 4030 | Fill of F407 | Compacted slightly sandy grey clay, heavily iron stained. | |
| 4031 | Fill of F407 | Soft organic grey clay silt. | |
| 4032 | Fill of F407 | Very dark grey organic-rich silty clay. | |
| 4033 | Fill of F408 | Green brown silty clay surrounding rubble 4028. | |
| 4034 | Fill of F409 | Grey brown silty clay, charcoal rich. | |
| 4035 | Fill of F408 | Green-brown silty clay. | |
| 4036 | Fill of F407 | Light brown clay, some iron staining. | |
| 4037 | Fill of F410 | Vein of blue-grey clay running along and defining N. edge of F410. | |
| 4039 | Fill of F410 | Linear band of mixed, compacted, yellow sand and blue clay with areas of iron staining. | |
| 4040 | Fill of F410 | Heavily charcoal flecked very mixed clay deposit containing quantity of red sand. | |
| 4043 | Fill of F410 | Light brown sandy silty clay. | |
| 4044 | Fill of F410 | Gravelly reddish-brown, heavily iron stained sandy silty clay. | |
| 4045 | Fill of F410 | Band of pale yellow-brown, redeposited natural sand. | |
| 4047 | Fill of F410 | Mixed deposit, heavily iron-panned at top, sandy silty clay. | |
| 4048 | Fill of F410 | Triangular-shaped deposit of reddish brown, heavily iron-panned, sandy silty silt. | |
| 4049 | Fill of F410 | Sandy silty grey clay, redeposited orange sand and pockets of blue-grey clay. | |
| 4050 | NATURAL | Fine, light orange-brown sand ranging to a gravelly sandy clay banded with clay. | |
| 4051 | Fill of F410 | Compacted orange sand and gravel. | |
| 4052 | Fill of F410 | Reddish brown sandy silty clay, heavily iron stained. | MED 11TH-12TH C |
| 4053 | Phase IV of F403 | Band of ironstone rubble, separated from earlier dumps by a band of silty clay (4058). | MED 11TH-12TH C |
| 4054 | Fill of F405 | Clean brown sand at base of F405, directly underlying timber. | |
| 4055 | Timber in F405 | Timber laid above sand. | |
| 4056 | Fill of F407 | Light brown clay, some iron staining. | |
| 4059 | Layer of F403 | Compacted grey-brown sandy silt clay underlying rubble 4053. | MED 11TH-12TH C |
| 4060 | Fill of F410 | Dirty dark grey sandy clay silt with iron staining. | |
| 4061 | Fill of F410 | Light brown sandy clay, very gravelly. Redeposited natural. | |
| 4062 | Fill of F410 | Banded slump of orange sand, grey clay and charcoal. | MED 11TH-12TH C |
| 4063 | Fill of F413 | Grey slightly sandy silty clay between lenses of slumping natural sand and gravel. | MED 11TH-12TH C |
| 4064 | Fill of F414 | Grey silty clay containing peagrit and an occasional ironstone fragment. | |
| 4065 | Fill of F410 | Light brown sandy clay band. | |
| 4066 | Fill of F410 | Light brown sand. | |
| 4067 | Fill of F410 | Light brown sandy clay with veins of peagrit. | |
| 4069 | Fill of F410 | Green-brown sandy clay. | |
| 4070 | Fill of F410 | Same as 4069 with ironstone fragments. | |
| 4072 | Fill of F415 | Light grey-brown sandy clay silt with some charcoal flecking. | |
| 4073 | Fill of F415 | Red grey-brown sandy clay silt containing peagrit, heavily iron stained. | |
| 4074 | Fill of F415 | Grey, slightly sandy, silty clay, ironstone fragments and some charcoal flecking. | |
| 4076 | Fill of F410 | Slightly sandy grey clay with lenses of natural sand. | |
| 4079 | Fill of F413 | Deep mixed deposit of greyish brown sandy silty clay and ironstone rubble. | MED 11TH-12TH C |
| 4080 | Redeposited natural | Redeposited natural sand and gravel. | |
| 4081 | Layer | Band of brown, slightly sandy, silty clay with charcoal and snail flecks. | |
| 4082 | Fill of F413 | Redeposited natural sand and gravel. | |
| 4083 | Fill of F413 | Redeposited natural sand and gravel. | |
| 4084 | Fill of F416 | Dump of redeposited natural. | |

Table 12

| Strat | Description of strat unit | Comment on strat unit | Date/Date range |
|-------|---------------------------|--|------------------|
| 5000 | Tarmac | Carpark surface over whole site. | |
| 5001 | Modern levelling layer | Levelling layer over cellars and demolition deposits - carpark overburden. | |
| 5002 | Fill of F500 | Dark brown silty sandy clay, some charcoal flecking. | |
| 5004 | Fill of F500 | Dark brown sandy soil with charcoal smears. | MED 11TH-12TH C |
| 5006 | Fill of F501 | Pale orange-brown clay lining and defining F501. | 17TH C |
| 5007 | Fill of F500 | Dark reddish brown clay deposit containing shell and charcoal. | 17TH C |
| 5008 | Fill of F501 | Dark sandy clay with charcoal flecking. | |
| 5009 | Fill of F500 | Red-brown clay sand, some charcoal flecking and small pebbles. Compact but friable. | |
| 5010 | Fill of F500 | Greenish brown slightly silty clay. | 17TH - 18TH C |
| 5011 | Fill of F500 | Greenish brown slightly sandy clay with occasional ironstone frags and charcoal. | 17TH C |
| 5012 | Fill of F500 | Grey-brown clay containing a high percentage of ironstone rubble - some burnt. | |
| 5013 | Fill of F500 | Brown clay deposit containing charcoal flecks and ironstone fragments. | 17TH C |
| 5014 | Fill of F502 | Charcoal rich deposit containing pockets of yellow and red clay. | |
| 5015 | Disturbed deposit | Very disturbed deposit, possibly relating to the digging of the cellars. | 17TH C |
| 5016 | Levelling layer | Brown sandy silty clay, containing lenses of blue-grey clay. | 14TH-15TH C |
| 5017 | Cellars | Cellar walls standing to a height of 1.45m survive below levelling deposits. | VICTORIAN 19TH C |
| 5018 | Yard surfaces | Yard surfaces. Variety of materials: concrete, brick, tile, and engineering brick. | VICTORIAN 19TH C |
| 5019 | Fill of F500 | Orange-brown pebbly clay deposit. | |
| 5020 | Fill of F500 | Mottled dark brown-grey clay deposit with purple tinge. Some ironstone fragments. | 14TH-15TH C |
| 5021 | Fill of F500 | Dark blue-grey deposit, very plastic. | 15TH-16TH C |
| 5022 | NATURAL | Orange brown varying from clay sand to gravel sand. | |
| 5023 | Demolition layer | Layer of light orange-brown sandy silt containing large pieces of ironstone. | |
| 5024 | Demolition layer | Dark brown sandy silt containing some ironstone, pebbles, and charcoal. | |
| 5025 | Demolition layer | Dark brown sandy silt heavily charcoal flecked containing ironstone. | |
| 5026 | Demolition layer | Orange-brown silty sand, contains small amount of gravel and some charcoal flecking. | |
| 5027 | Modern demolition deposit | Rubble fill of cellars - demolition deposit. | |

Table 13

| Strat | Description of strat unit | Comment on strat unit | Date/Date range |
|-------|-----------------------------------|--|------------------|
| 6000 | Carpark surface/levelling deposit | Tarmac = 0.10m. Hardcore levelling (stone chippings) = 0.25m. | |
| 6001 | Levelling layer | Light brown sandy clay silt containing ironstone frags. Heavily charcoal flecked. | |
| 6004 | Levelling layer | Dark grey-brown sandy clay silt deposit. Charcoal rich with degraded red ironstone flecks. | VICTORIAN 19TH C |
| 6005 | Levelling layer | Light brown sandy clay silt. Contains ironstone rubble frags. | 17TH C |
| 6006 | Levelling Layer | Grey-brown sandy silty clay. Some ironstone frags, charcoal flecks. | 17TH-18TH C |
| 6007 | Levelling layer | Light orange brown sandy clay, charcoal flecked. Redeposited natural | |
| 6008 | Fill of F600 | Blue-grey clay. | |
| 6009 | Fill of F600 | Narrow band of brown silty clay. Clean matrix. | |
| 6010 | Fill of F600 | Dark grey sandy clay, organic, waterlogged. | 18TH C |
| 6011 | Fill of F600 | Slightly sandy silty clay with lots of ironstone rubble, white mortar and charcoal flecks. | 12TH-13TH C |
| 6012 | Fill of F600 | Grey silty clay containing ironstone rubble. Water table encountered. | |
| 6013 | Fill of F600 | Compact red-brown clay containing ironstone rubble. | |
| 6015 | Fill of F600 | Broad layer of dark red-brown clay soil with charcoal flecks, fragments of ironstone and mortar. | |
| 6016 | Fill of F600 | Dark red-brown clay with occasional large ironstone fragments. | |
| 6017 | Fill of F600 | Clay with charcoal smears. | |
| 6018 | Fill of F600 | Waterlogged clay deposit. | |

APPENDIX VII

Geotechnical Test-Pit and Borehole Summary

The information given below is a summary of the test-pit and borehole data recorded in Cuttler (1996). Only the geotechnical data which is felt to be applicable to the results of the evaluation of Zone 1 is included. The summaries are divided into three sections according to the three sub-zones of Zone 1. A brief description of the location of each test-pit and borehole is given, followed by a summary of any important deposits, and where relevant this is followed by a short discussion of the results. A brief overall discussion is given at the end of each sub-section. Due to the fact that more is now known about the archaeological potential of Zone 1 from the results of the evaluation, especially in relation to the orientation of the inner and outer moats, the points raised in the discussion may differ to some extent from those in the full geotechnical report.

Zone 1/A

BH8 - Located approximately 10m to the east of Trench 4, and approximately 10m to the north of Fasham's 1972 excavations.

BH8 encountered deposits containing brick (BH8/2 and BH8/3) to a depth of 1.60m, and further deposits containing charcoal (BH8/4 - BH8/6) up to 3.0m below ground level. At 3.0m a brown sandy clay (BH8/7), which may have been the natural ground surface, was recorded.

The results from this borehole suggest that, below relatively recent layers, deposits survive in this area which may be associated with activity within the Inner Bailey.

TP14 - Located adjacent to the eastern end of Trench 5.

A deposit (TP14/2) containing abundant ironstone, as well as mortar inclusions, was recorded to a depth of 1m. This material overlay a 0.30m deep compacted silt (TP14/3) with mortar and charcoal. A possible natural sandy clay containing pea grit was recorded 1.3m below ground level.

The results from this test-pit are best understood with reference to the description and interpretation of the stratigraphy encountered at the eastern end of Trench 5. Deposits (TP14/2 and TP14/3) may correspond with the possible gravel dumps (Phase 3) encountered during Fasham's excavations (1972, 79).

TP15 - Located approximately 7m to the north of Trench 4.

Deposits (TP15/2 and TP15/3) containing a substantial amount of ironstone, including occasional dressed fragments, were recorded to a depth of 2.4m. From this depth to the base of the test-pit at 3m, a dark grey organic clay (TP15/4), containing charcoal, was encountered. The position of this test-pit corresponds closely with the northern side of one of the buildings recorded as Castle Cottages on the First Edition Ordnance Survey map of 1882 (fig. 8). These structures are documented as incorporating the remains of the latest phase of building on the castle site. The deposits containing ironstone could belong to a robbed-out wall foundation of one of the later castle buildings. The dark grey clay underlying these may be the fill of an earlier ditch. The results from TP15 suggest that the good survival of deposits recorded in Trench 4 may continue to the north.

BH27 - Located approximately 5m inside the eastern lip of the western arm of the inner moat, as it is positioned according to the results of the ground probing radar survey.

Deposits containing brick and ironstone (BH27/2 and BH27/3) were logged to a depth of 2.9m, overlying a deposit with ironstone and charcoal (BH27/4), and a subsequent organic deposit with crushed red and orange sandstone (BH27/5). At a depth of 3.6m deposits containing organic material (BH27/6 and BH27/7) were encountered. A stiff grey natural clay (BH27/8) was recorded 4.6m below ground level.

The results from BH27 suggest relatively recent processes underlain by deposits containing possible structural debris which may be associated with activity within the Inner Bailey. It is uncertain whether the layers with organic material are archaeological or natural.

Brief Discussion

The deposits recorded in BH8 and BH27 indicate that there are areas within Zone 1/I where relatively recent deposits exist to quite a depth below the car park surface. These may be the result of intrusive human activity, which would have disturbed earlier deposits, or could consist of materials used to build up the ground level for the laying of the car park. The results from BH8 and BH27 suggest that below relatively recent layers deposits survive in this area which may be associated with activity within the Inner Bailey. Test-pits 14 and 15 have produced positive results, establishing, along with the results from Trench 4, that there are areas within the Inner Bailey that have suffered little from recent disturbance.

Zone 1/II

BH1 and TP1- Both located within the outer ditch according to the results of the ground probing radar survey.

Deposits associated with the mid-Victorian terrace were recorded to a depth of approximately 2m (BH1/2 - BH1/5 and TP1/2). These were underlain by possible ditch fills to a depth of 3.3m in BH1 (BH1/6 and BH1/7), and extending below the limit of excavation (3.5m) in TP1 (TP1/3 and TP1/4).

The greater depth of fill recorded in TP1 corresponds with its position in the centre of the moat according to the radar survey.

TP2 - Located approximately 40m to the north of BH1, and possibly situated within the western edge of the outer moat.

Possible moat deposits (TP2/2 - TP2/7) were recorded from 0.8m to the base of the test-pit (3.1m). TP2/5 and TP2/6, recorded towards the base of the pit, contained organic material.

BH2 - Located on the western lip of the western arm of the inner moat, approximately 10m to the south-west of Trench 6.

Deposits containing bricks or mortar (BH2/2 - BH2/5) were recorded to a depth of 2m below ground level. The deposits encountered below this (BH2/6 and BH2/7) are unlikely to be ditch fills, suggesting that BH2 lies just outside the inner moat.

BH3 - Located approximately 55m to the north of TP1, and possibly situated on the line of the outer moat.

Possible ditch fills (BII3/2 - BII3/7) were recorded from a depth of 0.6m to 3.9m below the car park surface. The latter of these deposits was very organic.

BH6 - Located on the possible line of the inner moat.

Possible ditch fills (BII6/3 - BII6/7) encountered below 0.7m deep car park make up. Of note is a black, very wet, organic silt (BII6/7) recorded between 2.8m and 3.1m below ground level.

TP11 - Located on the possible line of the northern arm of the outer ditch, outside the car park, and adjacent to the canal.

Modern deposits (TP11/1 - TP11/4) were encountered above a red-brick culvert (TP11/5), which was recorded at a depth of 2.3m. TP11 was abandoned at this depth due to the discovery of the culvert.

BIII8 - Located approximately 30m to the north-east of Trench 4, within the Outer Bailey.

Between a depth of 0.8m and 1.5m a layer containing crushed rock was encountered. None of the deposits below this depth were recorded as containing archaeological inclusions.

TP18 and BIII9 - Both located in the extreme south-eastern part of the car park, within the outer bailey.

In TP18 services were revealed at a depth of 1.35m.

In BH19 fills containing brick (BH19/2 - BH19/10) were recorded in BH19 to a depth of 5.5m. At this depth a natural firm grey clay with shell flecks (BH19/11) was encountered.

The presence of brick at such a depth suggests relatively modern backfilling of a very deep feature. This feature may be a very large ditch, possibly the outer castle moat, but is more likely to be the former canal spur illustrated on the First Edition Ordnance Survey map of 1882 (fig. 8). It is also possible that the position of both of these features coincides and that the canal spur was dug on the line of the old moat.

TP19 - Located immediately outside the eastern limit of the car park.

Modern material recorded to a depth of 2.4m. Below this depth and continuing to the base of the test-pit (3m) was a dark brown organic clay (TP19/6).

This latter deposit may be associated with the former canal spur illustrated on the First Edition Ordnance Survey map of 1882 (fig. 8).

TP34 - Located approximately 15m to the north of Trench 6, within the Outer Bailey.

A layer of stone and gravel (TP34/2) was encountered from a depth of 0.8m to 1.1m. Below this an orange-brown sandy clay (TP34/3) was recorded which extended to the base of the test-pit (3.0m).

TP35 - Located outside the car park, and possibly situated on the line of the eastern arm of the outer moat.

Modern deposits were encountered in this test-pit to a depth of 0.9m. Possible moat deposits (*TP35/3* - *TP35/5*) were recorded below these, which continued to the base of the test-pit (3m).

Brief Discussion

The results from approximately half of the test-pits and boreholes excavated in Zone 1/II indicated that the depth of modern deposits throughout the zone is generally about 0.8m. This could suggest the relatively recent deposition of a spread of material in order to raise the overall ground level. Modern deposits were encountered to a greater depth in *BH2* and *BH11*, and in the boreholes and test-pits in the area of the former Victorian terrace (*BH1* and *TP1*), and the former canal spur (*BH19* and *TP19*). The possible moat deposits recorded in *TP1* and *BH1* support the ground probing radar survey's positioning of the western arm of the outer ditch in the area immediately to the north of Castle Street, whilst the fills encountered in *TP2* and *BH3* confirm to some extent the line of this feature to the north. The possible ditch fills recorded in *BH6* accord with the mapping of the inner moat by the ground probing radar survey. Very little could be understood from the geotechnical work carried out within the Outer Bailey.

Zone 1/III

BH4 and *BH5* - Both located to the north of the possible line of the outer moat.

No evidence for archaeological activity was found in either of these test-pits. Some of the deposits recorded were alluvial clays, which might indicate a waterlogged landscape in this area, suggesting that the area may have been unsuitable for settlement.