

Marches Archaeology

**Land to the rear of
9-10 King Street
Ludlow
Shropshire**

Report on an archaeological evaluation

February 2004

Marches Archaeology Series 321

This report is produced by

Marches Archaeology

**Marches House
6 High Street
Clun
Shropshire
SY7 8JB**

Tel:- 01588 640976

Fax:- 01588 640796

e-mail:- marches@archaeology.kc3.co.uk

For:-

**Wheatley and Lines Architects
Brickfield
Bickley
Tenbury Wells
Worcestershire
WR15 8LU**

Marches Archaeology is the trading name of Marches Archaeology Limited (Registered in England and Wales: 4095678). The directors are Nic Appleton-Fox and Richard Stone, who have worked in close association since 1991. All principal members of staff are members of the Institute of Field Archaeologists and abide by its code of practice and other regulations. *Marches Archaeology* provides a full range of archaeological services to a client base of architects, local authorities, national bodies and private individuals. Our standard services include; excavation, watching briefs, building survey, building analysis, planning advice, landscape survey, photographic recording and historical research. Specialist consultants are available to provide environmental, geophysical and finds advice and analysis.

**Land to the rear of
9-10 King Street
Ludlow
Shropshire**

A report on an evaluation

NGR: SO 5120 7471

**Report by
Jane Kenney**

Contents

List of illustrations	ii
List of plates	ii
Fig. 1	
Summary	1
1 Introduction	1
2 Aims and objectives	1
3 Methodology	2
4 Site description	3
5 Archaeological and historical background	3
6 The evaluation	6
7 Discussion	12
8 Conclusions	14
9 Recommendations	14
10 References	15
11 Archive	16
Appendix I: List of contexts	17
Appendix II: List of finds	21
Appendix III: Spot dating and catalogue of pottery by Stephanie Rátkai	23
Appendix IV: The mammal, bird and fish bones by Ian L Baxter	25
Appendix V: Note on decorated floor tiles by Sara Lunt	28
Appendix VI: Phased site matrix	29
Other figures	

February 2004

Marches Archaeology Series 321

List of illustrations

- Fig. 1: Location of site and SMR sites mentioned in text
- Fig. 2: Location of trenches within development site
- Fig. 3: Evaluation trenches overlaid on 20th century maps
- Fig. 4: Evaluation trenches overlaid on 1:500 OS map published 1885
- Fig. 5: Curley's 1862 map
- Fig. 6: Wood's 1835 map
- Fig. 7: Plan of trench 1
- Fig. 8: South-east facing section of trench 1
- Fig. 9: North-west facing section of trench 1
- Fig. 10: Plan of trench 2
- Fig. 11: South facing section of trench 2
- Fig. 12: Proposed location of foundation piles
- Fig. 13: Location of proposed additional evaluation trenches

List of plates

- Plate 1: View of trench 1 looking south-west
- Plate 2: East facing elevation of wall 107
- Plate 3: View of trench 2 looking west
- Plate 4: Painted medieval window glass from context [217]
- Plate 5: Decorated floor tiles

**Land to the rear of
9-10 King Street
Ludlow
Shropshire**

A report on an evaluation

Summary

Two evaluation trenches were dug to assess the proposed development site within the medieval core of Ludlow. In trench 1 a sequence of building phases was revealed dating from the 15th century through to the 20th century. The earliest wall found may have formed an earlier wall to the churchyard. In trench 2 a house dating to the 14th century was found with a plastered internal floor and flagged exterior courtyard. It is possible that medieval burials survive in the western end of the site, but none were located in the present evaluation.

1 Introduction

A proposal was submitted to erect 5 dwellings on land to the rear of 9-10 King Street, Ludlow. The site is situated at NGR: SO 5120 7471 (Fig. 1).

As the site lies within the historic core of Ludlow the Local Planning Authority's Archaeology Advisor advised that further information was required before the archaeological implications of the application could be adequately assessed and recommended that an archaeological field evaluation be carried out to provide this information. Wheatley Lines, on behalf of the client, commissioned Marches Archaeology to provide the archaeological services detailed in the "Brief for an archaeological field evaluation" produced by the Local Planning Authority's Archaeology Advisor.

The work was carried out between 19th and 23rd January 2004, inclusive and the final report was issued on 12th February 2004.

2 Aims and objectives

The Brief stated that the archaeological project would consist of an archaeological field evaluation, preceded by a desk based assessment and followed by a report on the results. It was agreed with the Local Planning Authority's Archaeology Advisor that two trenches measuring 10m by 2m should be dug. These were to be located to give as representative a sample as possible of the development area.

An archaeological evaluation aims to “gain information about the archaeological resource within a given area or site (including presence or absence, character, extent, date, integrity, state of preservation and quality) in order to make an assessment of its merit in the appropriate context, leading to one or more of the following: the formulation of a strategy to ensure the recording, preservation or management of the resource; the formulation of a strategy to mitigate a threat to the archaeological resource; the formulation of a proposal for further archaeological investigation within a programme of research” (Institute of Field Archaeologists Standard and Guidance for Archaeological Field Evaluations).

The objectives of this evaluation as defined in the Brief are:

To locate any archaeological features and deposits within the study area.

To assess the survival, quality, conditions and relative significance of such features and deposits.

To identify and recommend options for the management of the archaeological resource, including any further archaeological provisions where necessary.

3 Methodology

Documentary research

Shropshire Sites and Monuments Record was consulted to identify sites and historic buildings in the immediate area. Shropshire Record Office was consulted for historic maps and secondary sources. The maps consulted included the OS County Series maps, the tithe map and other 19th century maps. There were no tithe apportionments of the old town, so the tithe schedule was not consulted. Aerial photographs were not viewed as, within this built-up area, these would not have provided any information that could not be seen more clearly on the maps. No borehole or other engineering data was available. All sources consulted are listed in the references, whether mentioned in the text or not.

Fieldwork

Two trenches measuring 10m by 2m were dug within the roughly L-shaped garden that covers most of the development site (Fig. 2). One was positioned at the north end of the site, the other towards the southern end. It was not possible to dig a trench in the western end of the site as this was mostly taken up by a ramp providing access for the mini excavator down into the site.

The upper deposits were removed by mini excavator to a depth where significant structures or deposits were visible. These features were then cleaned and investigated by hand. A sample area of trench 1 was dug down to the natural subsoil by the mini excavator to test the full depth of the deposits. All artefactual material recovered from hand excavation and from significant machine-dug contexts was retained.

The recording system included written, drawn and photographic data. Context numbers were allocated and context record sheets completed. Plans and sections at the scale of 1:20 were made of all the trenches. The trenches were located in relation to the site boundaries using a total station theodolite. Readings were taken to the church and the Reader’s House and the major features were also surveyed in so that the alignment of all these could be compared very accurately. The photographic record was made using black and white negative and colour transparency film.

Office work

On completion of fieldwork a site archive was prepared. The written, drawn and photographic data was catalogued and cross-referenced and a summary produced (see appendix I for a summary of contexts). The artefactual data was processed, catalogued and cross-referenced and summaries produced. The pottery was sent to Stephanie Rátkai and the animal bone to Ian Baxter for specialist analysis (see appendix II for a summary of finds, appendix III for the pottery report and appendix IV for the bone report). As the decorated tiles were not in a primary context it was not considered worthwhile undertaking full specialist analysis on them, but photographs of the tiles were sent to Sara Lunt, who provided initial comments on them (see appendix V). A site matrix was produced and is presented in appendix VI.

4 Site description

The medieval core of Ludlow is situated on the crest of a spur overlooking a bend in the River Teme to the west and south, with higher land to the north and south-east. Numerous rock types outcrop in the area round Ludlow, making it famous for geological studies. The town itself lies on Silurian rock of the Downton series including red marls. Just to the south-west are marine Silurian rocks including mudstones and limestones. A rough calcareous siltstone from these beds was the main building material in the town, although Old Red Sandstone from outcrops to the east of the town was also used for better quality construction (Lloyd 1999, 11-12, 56). North of the River Teme the soils are argillic brown earths of the Bromyard association, with brown earths of the Munslow association to the south of the river (Dalwood 1996, 2).

The proposed development site lies to the rear of properties with a street frontage position along King Street and the Bull Ring (Fig. 1). The western boundary of the site abuts the churchyard of St. Laurence's parish church. In fact the site is separated from the eastern end of the church by only a high wall and narrow pathway. The site is roughly L-shaped and is currently occupied by an over-grown garden (Fig. 2). A low level pathway runs round the base of the buildings along the south-eastern boundary of the site and the garden is raised up to 0.8m above this level. Part way up the garden there is a terrace c. 0.5m high and the northern end of the garden is therefore raised above the level of the southern part (Fig. 2). There is one tree near the northern boundary, but otherwise no other features restricting the placement of the trenches.

5 Archaeological and historical background (Fig. 1)

There are no explicit records dating the earliest origins of the town of Ludlow, but it was presumably related to the castle built on the end of the ridge sometime between 1086 and 1094 by Roger de Lacy (Conzen 1988, 262; Lloyd and Klein 1984, 12). Ludlow is not mentioned in the Domesday Book and the manor of Stanton Lacy, in which it was located, is itemised with no mention of the existence of a town (Lloyd and Klein 1984, 12). The earliest mention of the place name is in 1138, when it was called 'Lodelowe' or 'Ludelaw', and the settlement referred to was probably occupied by craftsmen serving the castle. A small agricultural settlement called Dinham seems also to have been in existence in this period to the south of the castle (Conzen 1988, 263).

Two ancient routes crossed just north of the future site of Ludlow, one being the prehistoric Clun-Clee ridgeway, the other the north-south prehistoric and Roman route which crossed the River Teme at Ludford and then headed to Hereford (Lloyd and Klein 1984, 13). The proximity of the roads to a natural defensive position made it a good site for a castle, but also a good place for a market.

Between 1130 and 1170 the castle was enlarged and an east gate created, the planned town was laid out in front of this east gate (Hindle 1981, 28). The existing neat grid system of streets led earlier historians to assume that the town was laid out as a single entity (Hindle 1981, 11), but research by Conzen (1968) and later researchers has demonstrated that it is a composite plan, which did not achieve its grid pattern layout until the 13th century. The town had a market charter in 1234, and full borough status by 1461, but it was regarded as a town before 1300, so there must have been an earlier borough charter that no longer survives (Hindle 1981, 28).

The heart of the town and the first area to be laid out was the market place (PRN 6188). It was probably an elongated rectangle running from the castle east to the Bull Ring, where it met the ancient north-south route leading over the ford at Ludford to Hereford. Burgage plots would have run off from the market place at right angles. The church (PRN 11080) was located at the north-eastern end of the market place, surrounded by a churchyard that probably abutted the north side of the market place (PRN 6186) (Conzen 1988).

The town probably took this linear form by 1138, but by 1186 it formed a T-shape with development down Corve Street and Old Street (Lloyd 1999, 24). In the early 13th century the rectangular street system with standardised, medium length burgage plots was added (Conzen 1988, 266). The town walls (PRN 1177) were superimposed over the expanded town in the later 13th century (Lloyd 1999, 24), probably completed by 1300 (Hindle 1981, 28).

Stalls set in rows along the market place began to be replaced by permanent shops causing parts of the market to be infilled by blocks of shops, later also adapted for residential use. The earliest of these are attested on the Butter Cross site by c. 1270, but this process continued throughout the late medieval and early post-medieval period (Lloyd 1999, 60; Conzen 1988, 269). The properties between the church and King Street (PRN 6302) are not laid out as burgages and it is likely that the original churchyard adjoined the market place, and that the present properties are the result of the same encroachment processes that caused the infilling of parts of the market place. The date of this encroachment is unknown, but the earliest surviving houses in this area are 18th century. Evidence for the original extent of the churchyard was produced in the late 19th century when human bones were discovered under No. 8 King Street (PRN 3772). Conzen (1988, fig 17.1 A) indicates that the northern boundary of the present site represents the northern boundary of the encroachment of shops on the earlier churchyard. The burgage plots to the north of the site (PRN 6244), including that on which the Reader's House stands, are classed by Conzen as part of the late 12th expansion of the town around the Bull Ring and down Old Street and Corve Street.

As the market was infilled it divided into two, the eastern end becoming the Bull Ring (PRN 1793), used for bull baiting as well as a cattle market (Lloyd 1999, 75). In the middle of this was the Tolsey (PRN 11052) or toll house, built in the late 15th century. A block of buildings also colonising the Bull Ring are dated to the 18th century, but could have earlier origins (PRN 6306). Many buildings in the area have a 17th century or earlier core, but have been much altered in the 18th and 19th centuries.

St Laurence's Church (PRN 11080, grade I listed building)

The date of the foundation of the church is not known but it was enlarged in 1199, and was probably founded in 1170s after the market place had been laid out (Hindle 1981, 27). There are two documents related to the enlargement works, one dated 1199 and the other 1200. They tell slightly contradictory stories, both including the discovery of the remains of three burials, named in a lead scroll supposedly discovered on the site as the father, mother and uncle of St Brendan (Wright 1870, 14). The 1199 version states that the church was extended over the site of a large tumulus, which therefore had to be levelled. This revealed the three graves under the barrow and their remains were reburied inside the church. The 1200 version claims that the church was not extended but that the bell tower and the body of the church were rebuilt from their foundations. In the foundations the graves of the Irish saints were found (Faraday 1991, 53).

The tumulus (PRN 1263) was described as being very large and situated on the most elevated part of the hill. The burials were described as being in 'mausolea of stone', which Wright (1870, 14) interprets as a rather exaggerated description of stone cists. Wright assumed that the barrow was Roman, but it is more likely to have been a Bronze Age round barrow. It is probable that the barrow did exist and was located on the site of the present church, although it is odd that the 1200 manuscript did not mention it. The three burials presumably came from the barrow, though again this is not certain. A Bronze Age date cannot be automatically assumed for the burials as later secondary burials are often inserted into early barrows. It is possible that the barrow was part of a cemetery with satellite barrows or flat graves. Prominent barrows also often attract other later activity, so it is possible that there are other funerary or other early remains in the area. An iron spearhead (PRN 1762) found in the churchyard may be an indication of such activity. At Four Crosses, Powys an iron javelin and a spearhead were deposited in the Bronze Age barrow ditch in the 6th or 7th centuries AD (Owen 1986).

Most of the existing church building dates from the 15th century, although 13th and 14th century fragments survive. The impressive bell tower was constructed in the mid 15th century, probably finished in the late 1460s (Faraday 1991, 54). As St Laurence's was the only parish church in Ludlow it attracted all the donations from the towns-people and could develop into a large and impressive building. It was extensively restored in the 19th century (Pevsner 1958, 177).

A small evaluation trench (PRN 5091) was dug on the north-east side of the church in 1997. This only revealed Victorian and later layers and features. This work established that the natural yellow-brown silty clay lay at c. 0.95m below the present surface of the churchyard (Hoverd 1997), but it gave no indication of how the natural land surface sloped away towards the present site.

The Reader's House

The Reader's House (PRN 11081, grade I listed building) is famous as one of the picturesque houses of Ludlow visited by tourists. It is built of stone but has a timber porch added in 1616 and c.1600 the eastern wall, the front of the house, was replaced in timber, presumably due to instability. The masonry walls are older, mostly 13th or 14th century (Pevsner 1958, 185; Morriss and Hoverd 1993, 83). A building is recorded on this site in 1319 (Lloyd and Klein 1984, 124), but it is possible that it was originally constructed not long after the rebuilding of the church in 1199, as a title deed dating to 1220 was found hidden in the wall. There is evidence to suggest that this building was the one referred to as the 'church sale' (i.e. church hall) in 1343, and later became called Church House. In the 16th century it was known as

School House as it had been used for the Palmers' Guild grammar school between 1431 and 1490 (PRN 1777) and then by a private tutor. In 1608 the house was occupied and repaired by Thomas Kaye, the town preacher, and in 1712 it was purchased by the town council for used by the reader (like the preacher a post designed to help the minister manage his large parish) (Hussey 1946, Weyman 1913).

Neighbouring properties

Records for the properties on the west side of the Bull Ring date back to the 13th and 14th centuries. Numbers 9 and 10 Bull Ring were a house and shop leased to a smith in c.1330. No. 11 was owned by Wenlock Priory in c.1270 (Lloyd and Klein 1984, 124). The Bull Hotel (PRN 11031, grade II listed) has a 16th century or earlier core. Several other of the buildings in this part of the Bull Ring and King Street are largely post Georgian, even if they have earlier foundations, but many of them are listed buildings (Conzen 1988). The two houses to the north of the Reader's House, 1 and 2 Church Walk, (PRN 11082, grade II listed) date from the 18th century, but have been refronted in the 20th century.

Recent site history

The 19th and 20th century maps show that the current site has undergone frequent change (Figs. 3-6). Although the whole area is garden today as recently as 1982 the southern part of the site was built-up, and these buildings had been there in much the same form since 1862. At this date there were also buildings over most of the middle of the site, but these had been demolished by 1926. The 1903 and 1926 maps also show buildings in the north-eastern corner of the site, but these do not appear on maps before or after these dates. In 1885 there was a summer house against the northern wall of the garden. The 1862 map shows what may be the same summer house but inaccuracies in the map appear to place it outside the present site area. The 1835 map contains the largest inaccuracies and so is hardest to compare to later maps. The dog-leg in the churchyard boundary seems to have come into existence only after this date, which can be confirmed by the change from stone to brick at this point in the wall itself. The square building shown in the south of the site seems to represent the precursor of the buildings later shown in this area. Simply overlaying the site boundary on the 1835 map suggests that there is a building in the northern half of the site but this structure is almost certainly meant to be the Reader's House and the present site has fallen within a zone of particularly poor mapping accuracy.

6 The evaluation

The later deposits will not be discussed in detail unless of particular interest. All contexts are described in the list of contexts in Appendix I.

Trench 1 (Figs 7-9, plates 1 and 2)

Trench 1 was positioned in the southern part of the site to investigate both within and without the area of the 19th century buildings as seen on the maps.

The natural subsoil was found in the south-western end of trench 1 at a level of c. 105.80m OD (0.91m below the present ground surface). This was a greenish yellow clayey silt [117] with pieces of siltstone, the stone was horizontally bedded and become denser with depth until it was undegraded bedrock. A little to the north and at the slightly higher level of 105.95m to 106.03m OD was a similar but rather more disturbed deposit [151]. This was initially suspected to be redeposited, but is likely to be just the more weathered and disturbed surface of the natural degraded bedrock.

At the south-western end of the trench, immediately above the natural, was a 0.12m thick layer of mid brown clayey silt [116] with no inclusions except occasional small stones. Although this produced no finds it is interpreted as a buried medieval soil horizon. Over [116] was a very friable red-brown sandy silt with no inclusions [114] forming an even, homogeneous surface over this end of the trench. The deposit seemed to have been altered by heat, though its very even colour suggested that the burning was not an *in situ*. This deposit had the appearance of a floor surface but it was quite fragile.

Towards the middle of the trench was a spread of charcoal lying at c. 105.98m OD (1.04m below ground surface). Investigation of a small part of this revealed a rectangular cut [111], with near vertical sides and flat base, filled by a dark grey gritty silt [110] with a high proportion of charcoal. The fill extended beyond the edges of cut, and on the northern side of the area the edge of the feature was not well defined. The neat shape of the pit and the charcoal rich fill suggest an industrial function for this feature. This was an area of complex archaeology and would need more work to clarify the relationships, but a charcoal rich deposit, possibly a continuation of [110], extended under a series of other layers. If this relationship could be demonstrated it shows that feature [111] is stratigraphically fairly early, but no finds were recovered to confirm its date.

Overlying what may have been part of [110] was a layer of heavily degraded stone [148], including red sandstone as well as siltstone. Over this was a fine silty sand [147], in parts strong brown, but elsewhere pale off-white as if leached. Most of the stones within this deposit were also degraded. The leaching and rotting of the stones in these layers hints at some activity, possibly involving acids or quantities of water which caused changes in the deposits not typical of the normal soil forming processes on the site. This is suggestive of some industrial activity.

Running nearly north-south, diagonally across the trench was a very substantial wall [107] at least 1.7m wide. This was built of local siltstone bonded with red clay, with some pink mortar present in upper courses. A sherd of 15th-16th century pottery was recovered from the clay bonding from within the wall. The wall survived to height of 0.9m (106.53m OD, 0.47m below ground level) and had a well made eastern face. The wall had been cut through by the trench [140] for a ceramic drainage pipe and the wall south of the trench appeared quite different to that to the north of it. Excavation proved that the face of wall [107] continued under the pipe and into the north-west facing section of trench 1, but the wall appeared to be only 0.5m wide at this point.

When a small portion of layer [147] was removed near the north-eastern side of the trench an area of siltstone slabs [115], laid horizontally and bonded with red clay, was exposed. This resembled the construction of wall [107] and was on the same line as the wall at its full width. Although it would take considerable further excavation to prove this, it appeared that a section of wall [107] had been reduced to a much lower level and layers [147] and [148] had built up over it. Resting on a thin levelling layer [118] was the probable explanation for this mutilation of the broad wall. A slab floor had been laid on mortar over layer [118]. This was associated with a wall perpendicular to [107], but surviving to a length of only 0.5m. Plaster covered the new inner face of [107] and was moulded to curve into the floor and the perpendicular wall. The wall was bonded with white mortar, and so was clearly a different phase of construction to [107]. The perpendicular wall and flagged floor formed an alcove

within [107], and this whole feature has been recorded as [109]. Later the alcove [109] was blocked up with stones and pieces of hand-made bricks in a red clay matrix [144].

To the north of wall [107] at c.105.65m OD (c. 1.4m below the present ground surface) was a cobbled surface [106] composed of slabs and cobbles laid in rough patterns. Some cobbles had been robbed out creating a shallow, irregular trench [167]. [106] was constructed to be used with wall [107], but rather unusually the cobbles extended under the wall, which meant that the wall was built without buried foundations. This construction technique may be explained by the considerable width of the wall, which therefore did not require foundations. The cobbles were laid on a pinkish gravel with a red-brown clayey silt matrix [128], although this was only seen in the easternmost corner of the trench.

A deposit of dark brown gritty silt [105] had built up over the cobbles. This layer, which probably represents the abandonment of the use of the cobbled yard, contained small stones, charcoal flecks, numerous bones and late 15th to mid 16th century pottery. A deposit [121] containing pottery of the same period also built-up against the wall, although it only survived in a small patch against the north-west facing section of the trench.

A stone wall [112] ran nearly east-west, diagonally across the trench, with a right angled corner just visible at its eastern end. The wall was 0.51m wide and survived to a height of 0.7m (up to 106.80m OD, only 0.2m below the ground surface), although it was removed down to foundation level within the trench during the excavation to allow lower deposits to be investigated. [112] was built of roughly coursed siltstones with no real bonding material, although a fine brown sand between the stones could be a degraded mortar. It did not appear to have been built within a deep foundation trench, although a shallow trench [152] and other levelling activity [164] had been dug to allow the base stones of the wall to be laid horizontally.

A considerable amount of dumping activity then took place. A thick made-up ground deposit [145] was dumped over the partially demolished remains of wall [107] and west to build up against the north side of wall [112]. This layer contained mid 17th to early 18th century pottery and a lens [122] composed almost entirely of broken glass bottles which may be as early as the 17th century. Wall [112] continued in use and seemed to act as a revetment for material dumped to the north of it. Wall [112] and the deposits built up against it appear, therefore, to date from the 17th century.

Beneath [145] and [146] a narrow straight sided cut [120] filled with brown sandy silt, red clay, mortar and stones set on edge [119] ran across the middle of the trench, cutting through the fill of [111] and continued under wall [112]. The fill contained a sherd of bottle glass and the feature may be a slot to support a narrow partition wall. Slot [120] was perpendicular to the wall and appeared to be related to it or a previous boundary on the same alignment. At the same level was the top of a circular pit [150] filled with dark brown, charcoal rich sandy silt [149], containing a piece of brick. This pit was dug very close to wall [112] and presumably pre-dated it, but probably not by very long.

A structure [113] built of red, machine-made bricks and stone was built abutting the south-western side of wall [112] and running roughly perpendicularly from it. This structure had the remains of a tile and cobbled floor on its south side, and was contemporary with the use of wall [112].

Over the southern part of wall [107] a stone pad or wall base [108] composed of stacked stone slabs was built. This produced late 18th century pottery. An area of cobbling [138] was also laid over the demolished remains of [107], but this produced no dating material.

A series of dumping events occurred over the north-eastern end of the trench. The earliest of these [104] was composed of red clay containing stones. This deposit contained a fork that cannot be earlier than 19th century, so all the deposits in the north end of the trench above [105] appear to be late.

A pit [126] was cut through the deposits in the northern end of the trench, and a steep sided rectangular pit [158] was dug in the southern end of the trench. The latter was entirely infilled with redeposited natural and then recut [156] and backfilled with charcoal and cinders. Over this pit was constructed a brick floor [160] made of red machine-made bricks. This abutted wall [112], which was clearly still in use despite several layers having built up against its southern side before the floor was built. Brick structures were also built over the northern end of the trench including walls and brick floors ([129] and [130]). Between these a rubbly loam [101] was built up or dumped and the whole area of the trench was finally covered by the current active topsoil [135].

Trench 2 (Figs 10 and 11, plate 3)

Trench 2 was laid out to investigate the northern part of the site fairly close to the Reader's House. The sequence of activity found in the trench was much simpler than in trench 1.

The natural decayed siltstone subsoil [222]/[225] was found at a level of between 105.67 and 105.90m OD (1.86-2.14m below ground level). Over this were red-brown clayey layers [217] and [224] forming the make-up for surfaces [218] and [214] respectively. Surface [218] was a 12mm thick layer of fine white mortar surviving in patches, and must have been an interior floor, possibly the base for tiled floor. [214] was a hard wearing external surface composed of flags of local mudstone. The irregular slabs were laid out fairly randomly, and the rough hewn surface of the stones made the floor uneven. To the east of 214, at the same level was an area of differently constructed stone flooring [223]. This was defined on its western side by a clear line formed by a row of slabs, but most of the surface was made of long cobbles set on edge. These cobbles were generally orientated roughly north-west to south-east. Both stone surfaces are assumed to be contemporary and were probably laid on the same make-up layer, although this was only tested for [214]. Both surfaces showed signs of wear from heavy use.

Separating the external and internal surfaces was the base of a stone wall [216], running north-south across the trench. The wall was 0.4m wide and constructed of roughly coursed local stone, with no bonding material. It is probable that this was the base for a timber-framed wall. The horizontal relationship between floors [218], [214] and [223] and wall [216] demonstrate that these were all part of a single building phase, dated by a pot sherd sealed beneath [214] to the 13th or 14th century. Painted medieval window glass was recovered from layer [217]. This layer was stratigraphically below the floor [218] but much of the floor had been eroded away by later disturbance and where the glass came from was not securely sealed. A sherd of later pottery and a sherd of vessel glass also came from this context. These finds are almost certainly contamination from later activity, but the window glass may have been originally sealed under floor [218].

Deposit [215] was a red-brown clay containing mortar flecks. It was restricted to an area over the stones of wall [216] and spread some way over the interior of the structure. This layer

produced mid 16th century pottery, and presumably represents the demolition of the wall. An abandonment layer [213] of firm, dark red-brown silty clay built up over the flagged floors once they went out of use. Most of the finds from this layer were late 15th to mid 16th century, presumably dating the abandonment of the courtyard area. One sherd of 17th century tin glazed ware was also recovered but this may have been intrusive. [213] and the two deposits above ([212] and [211]) were restricted to this courtyard area, removed over the interior of the building by cut [210]. Layer [212] over [213] was a fairly loose, mid brown clayey silt with c. 70% stone and brick. [211] was a mid brown clayey silt containing brick, stone, mortar and charcoal. [212] produced, presumably residual, 14th-15th century glazed roof tiles, and [211] produced a large amount of pottery the latest dating to the late 17th century.

Cut [210], a shallow, broad pit, may have caused the disturbance of floor [218]. It is filled by [209], a rubbly deposit that did not produce any finds useful for dating, only some residual 14th-15th century roof tiles.

An undated shallow pit [221] was dug into [209], and a small, steep side pit [205], containing late 17th century pottery in its fill [204], was dug into [211] in the south-eastern corner of the trench. A layer of loose dark brown clayey silt [208] with rubble and gravel and much charcoal built up or was dumped over the entire area of the trench to a depth of 0.8m. This layer produced late 17th to mid 18th century artefacts. Two pits [203] and [207] were dug into [208] and were sealed by a loose rubble layer [219] covering the trench. This in turn was covered by the modern topsoil [201].

The finds

Appendix II gives a list of all finds and appendices III, IV and V have the specialist reports on the pottery, bone and floor tiles.

Trench 1

The thick, clay bonded wall [107] produced 2 sherds of 15th-16th century Malvernian type ware. These were securely embedded in the wall and can be taken as providing a date for its construction. The late 15th to 16th century pottery from [121] suggests that it was deposited soon after the wall was built. The very small sherd of Cistercian or blackware found in layer [118] is the only dating evidence for the alteration of the wall to create alcove [109], which seems on this evidence to have occurred during the 16th or 17th century.

Layer [105] overlying the cobbles [106] produced 16th to 17th century pottery, roof tile fragments, animal bone and 2 pieces of copper alloy sheet, possibly part of a strap (SF1). This is consistent with an abandonment or rubbish deposit.

Glass bottles from [122] and pottery from [145] suggests that the made-up ground [145] was deposited in the 17th or early 18th century, and as wall [112] seems to revet this deposit it was probably built at around the same time. The 14th century floor tile discovered within wall [112] was clearly residual.

Layer [104] in the northern end of trench 1 produced an eating fork that could be no earlier than 19th century and all the layers stratigraphically above this are 19th or later in date. The wall base or stone pad [108] contained late 18th century sherds.

Trench 2

The flagged surfaces and by extension the building were dated to 13th to 14th century by a single sherd recovered from below the flags of [214].

The discovery of mid 16th century pottery in layer [215], which sealed the demolished remains of wall [216] shows that this had been demolished by the 16th century. Material from this deposit had contaminated the red clay [217] where it was not sealed by the plaster [218], explaining why a blackware sherd and piece of vessel glass came from this context. Fragments of medieval painted glass (SF3) (plate 4) were also recovered from this context. It is probable that these were originally sealed beneath the house floor and may have originated from the church. However, 14th century tiles, including some with a fleur-de-lis pattern were found in 1861 at the site of the Austin friary, Lower Galdeford Lane, so there are other sources of similar floor tiles in Ludlow (Cocking 1868, 54).

The deposits related to the abandonment of the flagged surfaces date to the late 15th or 16th century. These also produced stone and glazed ceramic roof tile fragments. Layer [213] contained animal bone, suggestive of a rubbish deposit and a silver short cross penny from the 13th century, which was residual in this context.

Layer [211] produced pottery of various dates from as early as the 15th century, but the latest material was from the 17th century and this is probably when the layer was deposited, although it may have built up gradually ever since the 15th or 16th century. 15 pieces of floor tiles were recovered from this deposit, many were decorated and 2 were complete (plate 5). These tiles date to the 14th century (see appendix V), but their battered condition suggests that they have been dumped from elsewhere. Such tiles are unlikely to have been commissioned for use in a domestic residence (Lunt, appendix V) so they probably originally came from the church. It is not known whether they had been reused in a house, such as that found in trench 2, although it is possible.

The general soil deposit [208] produced a sherd of late 17th to mid 18th century pottery, as well as a wine bottle base, and the fill [202] of a pit cutting [208] produced pottery of a similar date. A pit from beneath this layer [205] produced layer 17th century pottery, so this pit digging activity and build-up of soil seems to have occurred during the same period.

Animal bones by Ian Baxter (see appendix IV for full report)

All the main domestic food species, cattle, sheep/goat and pig, are represented in the deposits. Cattle bones and teeth are more frequent than those of the other species and mostly consist of skeletally mature animals. At this time cattle were still primarily raised as draught animals. An exception is a perinatal metatarsal shaft found in context [213]. No ovicaprid remains attributable to goat were seen, but over 30% could be positively identified as belonging to sheep. All the pig remains are from dentally and skeletally immature animals, primarily subadults. The relative proportion of sheep to pig is 3:2. Vertebra and rib fragments from both large and medium sized ungulates were frequent in the assemblage, which primarily consists of butchery waste. Domestic birds are relatively infrequent. The geese are small for domestic birds and the possibility that they are wild species cannot be excluded. Although too large to be Brent geese, they are within the size range of several *Anser* species and also the barnacle goose (*Branta leucopsis*). The duck coracoid from [211] could belong to either a domestic duck or a wild mallard. Overall, the *Anatidae* (geese and ducks) are more common than chickens with a ratio of 5:3. Several cranial fragments of a large fish (or fishes) were found in context [211]. These are most probably Gadid (cod family) and represent coastal imports. The proximal metacarpal of a fallow deer (*Dama dama*) was found in context [213].

The only other species present in the assemblage is domestic cat, represented by a juvenile tibia fragment found in context [211].

7 Discussion

Trench 1

The pottery dates and stratigraphy define a sequence of building and deposition activity. Early deposits at the south-western end of the trench are not dated, but it is probable that [116] represents the medieval soil in this area. It is possible that this was the ground surface when the area was in use as a graveyard. The 19th century buildings certainly extended over this area but they seem to have caused very little disturbance to the early deposits. Beyond the area of the trench other earlier buildings might be found that may have terraced away the medieval deposits, but the present evidence suggests that this is the most likely part of the site for medieval burials to have survived.

A thick stone wall [107] was built in the 15th or 16th century with a cobbled surface [106] to its east. Undated industrial activity ([110], [111]) was carried out to the west of this wall. Stratigraphically the industrial activity pre-dates the alterations [109] to wall [107], but may post-date the origins of the wall itself. Wall [107] runs parallel to the churchyard wall along an alignment followed by the walls of later buildings although none of the buildings on the available maps can account for this massive wall. As the western face of the wall was not found its full width is not known but it seems to be at least 1.7m wide. It is possible that the patch of stone in red clay [115] seen in the side of pit [150] is the continuation of this wall where it was partially demolished to insert alcove [109]. This relationship has not been proved by the current work and [115] could be part of an earlier wall or just a dump of stones, however on present evidence [107] is interpreted as a very substantial wall originally running across the full width of the trench.

On the 20th century and 1885 maps this wall continues a property boundary perpendicular to the alignment of the church (Figs 3 and 4). This boundary can just be discerned in the 1862 map, but the 1835 map is too distorted to show it (Figs 5 and 6). It is therefore difficult to ascertain the antiquity of this boundary but its alignment in relation to the church suggests it predates many of the changes in this area. It could be suggested that this boundary reflects the original eastern side of the churchyard and was the wall [107] an earlier churchyard wall.

The cobbled surface [106] apparently went out of use in the late 15th to mid 16th century. This suggests a short period of use for this well made surface as its construction is also dated to the 15th or 16th centuries, although if it was created in the early 15th century and abandoned in the mid 16th it could have been in use for about 100 years. The wall [107] was still in use when the cobbles had been abandoned, as some time in the 16th or 17th century an alcove with a flagged floor [109] was inserted into the width of the wall. The exact chronological relationship between these two events is hard to establish. If the abandonment layer [105] was deposited in the mid 16th century, and the small sherd from layer [118] actually dates from the early 16th century [109] could have been built when the cobbles were still in use. However, this is pushing the pottery dates to the limits of their ranges and the evidence is more comfortably accounted for if it is assumed that wall [107] continued in use after the cobbles were abandoned.

The alcove [109] was blocked and the wall [107] partially demolished before being covered by dumped deposits in the mid 17th to early 18th century. At the same time that the made-up

ground deposits were dumped, or slightly before, the wall [112] was built and it revetted these deposits. This wall seems to have been in continuous use into the 20th century as it corresponds well to the north side and north-western corner of one of the buildings shown on the 19th and 20th century maps. This is best seen when the evaluation trenches are overlaid on the 1885 1:500 map, where wall [112] almost, but not quite, coincides with the building corner (Fig. 4). This may be the building shown on the 1835 map displaced to the south (Fig. 6) and it is depicted on the maps up to 1982 (Fig. 3). The brick structure [113] seems to be an internal feature related to the same building. Although slot [120] seemed to extend under [112] the fact that it is perfectly perpendicular to the wall suggests that the two are related. This slot corresponds remarkably well to the division between two outhouses shown on the 20th century maps, but the deposition of [145] over [120] demonstrates that it could not have been in use in the 20th century. However, [120] was supported the partition wall of very similar but earlier outhouses. Pit or posthole [150] may also relate to this phase of outbuildings.

Wall [112] was clearly in use for a long time and the brick floor [160] was added quite late in its history after considerable build-up of deposits inside the building and the cutting of the pits [156] and [158]. Other brick structures ([129] and [130]) were constructed over the north-eastern end of the trench in the 19th century.

Trench 2

In trench 2 a building, probably timber-framed, was constructed in the 14th century. It had a flagged courtyard and plastered internal floor. The eastern wall of this building was not quite on the same alignment as the front of the Reader's House, but it is close enough to show that the two buildings were intended to be in line. The change in orientation reflects the curve in the Bull Ring (Fig. 4), and it seems probable that the north side of the building ran under the northern boundary of the present site. The Reader's House was probably already in existence when the trench 2 house was built, but later alterations to the Reader's House seem to have been made in relation to the other building. The two ground floor windows in the southern wall of the Reader's House are situated very high up, so that they are close to the ceiling of the room. This would be explained if they were designed to look out above the roof of an adjacent building (pers. comm. John Wheatley). The evidence from trench 2 suggests that the house was demolished by the mid 16th century and was not still standing when the alterations were carried out on the Reader's House in around 1600. However, the south wall of the Reader's House could have been altered before the east side was rebuilt and further study of both the Reader's House and the present site might reconcile these problems.

The area over the flagged courtyard was used to dump rubbish and probably deposits removed from terracing further down the hill slope. The thick, dark layer [208] suggests that richer soil was deposited to create a garden in the 18th century, and this part of the site seems to have been a garden ever since. The brick footings for the building shown on the 19th century maps against the eastern wall of the garden were noticed during the fieldwork immediately east of trench 2. This was probably a potting shed or similar structure within the garden.

The animal bones

The bone assemblage gives a hint of the life style of the early post medieval inhabitants of Ludlow. Most of the bones came from deposits [105] and [213] dating to the 15th or 16th centuries and [211] from the 17th century. The evidence suggests that sheep and pig were the most common meat animals, but ducks, geese and chickens were also eaten. The fragments of

cod skull demonstrate long distance trade in fish in the 17th century, and the presence of a fallow deer bone shows that wild mammals were hunted in the 15th/16th century.

8 Conclusions

The evaluation demonstrated that the proposed development site has had a long and complex history with several periods of building covering most of the site. The presence of an early soil horizon at the western end of the site hints that pre-14th century deposits, in particular medieval burials, may be most likely to survive here. The northern end of the site was built up in the 14th century. The building was demolished by the 16th century and after a period of dumping the area became a garden in the 18th century. The southern part of the site seems to have been built up since the 15th century, although the earliest wall may represent a former churchyard boundary rather than the wall of a building. Outhouses and other buildings were constructed in the 17th, 18th and 19th centuries, at least one wall being used consistently throughout these different building phases.

The site has produced a variety of finds from all the building phases contributing to the understanding of the economy and life style of the people living in the area.

Preserved beneath the development site are archaeological deposits and features that could potentially add considerably to the understanding of the development of Ludlow, probably from its earliest times. Situated between the church and the market place it is central to the town and any discoveries here will clarify the history of the town as a whole. As a classic example of a planned medieval town Ludlow has a national importance and the importance of the archaeological deposits on the site should not be underestimated.

9 Recommendations

The evaluation has demonstrated the survival of medieval and post-medieval buildings and activities over much of the site. The value of these in elucidating the development of the centre of the medieval town is considerable. There also remains the possibility that medieval burials from the original extent of the graveyard exist in the south-western part of the site.

The current proposals for the development include the use of bored pile foundations up to 150mm in diameter. The ground beams for the cavity walls would be set in shallow trenches 450mm deep. The beam trenches are unlikely to disturb any significant archaeology, but the piles would be bored down into bedrock through any archaeological deposits. As the piles would be small the impact of each pile would be minimal, but 75 piles are shown on the preliminary layout plan (Fig.12) and the combined effect must be considered. The total area affected would add up to less than 6 square metres, distributed fairly evenly over the site. The damage would be localised and would not cause a loss of stratigraphic or horizontal relationships, but if a grave was hit the disturbance would be significant. Stone structures such as walls and floors might also be disrupted and confused in localised areas. It is recommended that if this proposal is accepted the damage to the archaeology be offset by further targeted excavation to answer some of the many questions raised by the evaluation.

This targeted excavation would concentrate on establishing the nature of the thick red clay bonded wall [107], investigating the possible survival of graves in the south-western part of the site and finding the southern wall of the building in trench 2. It is not proposed to search

for the northern wall of the building as it most likely lies beneath the current northern boundary. Additionally it may be of interest to investigate the possible industrial activity west of wall [107]. These trenches should cover an area not exceeding a further 40 square metres and a suggested layout of trenches is presented in Fig. 13. Although some excavation of features in the area of industrial activity may be required most of this proposed work could be at an evaluation level aiming only to follow walls and potentially to locate burials.

An alternative approach to the development would be to build on a concrete raft. The highest surviving part of wall [216] in trench 2 was at 106.12m OD, 1.7m below the present ground level, giving a considerable depth for the construction of a raft without disturbing significant archaeological contexts. In trench 1 the top of wall [107] was at 106.53m OD, only 0.47m below ground level, but if it could be avoided other significant deposits were over 1m below ground level. If this approach were feasible it would be preferred as having little or no impact on the archaeology.

However, other groundworks must also be considered. It should be possible to keep service trenches within the zone of more recent made-up ground deposits, but if a soak-away or deeper service trenches are necessary the impact on the archaeology could be significant. In such cases it is recommended that the relevant trench or soak-away be excavated archaeologically and recorded appropriately. For such work a trench width of no less than the depth is recommended.

Even if a raft foundation is adopted and the service trenches are all to be shallow it is recommended that an archaeologist be present to observe all groundworks deeper than 0.5m below present ground level to ensure any further features revealed are recorded.

The Historic Environment Officer should be informed in advance of any changes to the agreed plans that might occur during development and that could threaten the archaeology.

10 References

- Beresford, M, 1967, *New Towns of the Middle Ages*
- Clifton-Taylor, A, 1978, *Six English Towns*
- Cocking, G, 1868, On the remains of the Austin Friary at Ludlow. *The Journal of the British Archaeological Association*, **51-56**
- Conzen, MRG, 1968, The use of town plans in the study of urban history. In *The Study of Urban History*, Dyos, HJ (ed.), 113-130
- Conzen, MRG, 1988, Morphogenesis, morphological regions and secular agency in the historic townscape, as exemplified by Ludlow. In *Denecke and Shaw* (eds), 253-72
- Dalwood, H, 1996, Archaeological assessment of Ludlow, Shropshire. *The Central Marches Historic Towns Survey*.
- Denecke, D, and Shaw, G (eds), 1998, *Urban Historical Geography: recent progress in Britain and Germany*, Cambridge
- Faraday, M, 1991, *Ludlow 1085-1660: a social, economic and political history*. Chichester
- Hindle, BP, 1981, The study of medieval town plans with special reference to South Shropshire. *Discussion Papers in Geography* No. **14**. University of Salford, Department of Geography
- Hoverd, T, 1997, St. Laurence's Church, Ludlow: an archaeological evaluation. *Hereford Archaeology Series* **331**

Hussey, C, 1946, Reader's House, Ludlow, Shropshire. In *Country Life*, 763-765
 Lloyd, D, 1995, *Ludlow*. Stroud
 Lloyd, D, 1999, *The Concise History of Ludlow*. Merlin Unwin Books, Ludlow.
 Lloyd, D and Klein, P, 1984, *Ludlow: a historic town in words and pictures*. Chichester
 Morriss, RK and Hoverd, K, 1993, *The Buildings of Ludlow*. Stroud
 Owen, G, 1986, Site 2. In Warrilow, W, Owen, G and Britnell, W, Eight ring-ditches at Four
 Crosses, Llandysilio, Powys, 1981-85. *Proceedings of the Prehistoric Society* **52**, 57-
 62
 Pevsner, N, 1958, *The Buildings of England: Shropshire*
 Slater, T, 1988, English medieval town planning. In *Denecke and Shaw* (eds), 93-105
 Weyman, HT, 1913, *Ludlow in Bye-gone Days*. Ludlow
 Wright, T, 1870, *The History of Ludlow*

Maps

1835, Map of Ludlow, Wood
 1847, Tithe map of the parish of Saint Lawrence, Ludlow in the County of Salop (RO ref. PF
 176/1)
 1862, Map of Ludlow, Curley
 Ordnance Survey County Series 25 inch map sheet Salop LXXVIII.8, 1886, 1903, 1926
 Ordnance Survey 1:500 map, Salop LXXVIII.8.16, 1885
 Ordnance Survey 1:2500 map SO5074-5174, 1982

11 Archive

The site code is KSL04A. The archive consists of:

68	context sheets
4	trench sheets
1	drawing index sheet
8	field drawings on 4 sheets
2	level sheets
2	sheets of site notes
23	finds record sheets
1	small finds index
4	small finds recording sheets
2	photo record sheets
1	film of black and white photographic negatives
1	film of colour photographic transparencies

Finds (see appendix II).

The archive is currently held by Marches Archaeology awaiting transfer to Shropshire Museum Service.

Appendix I

List of contexts

Context	Trench	Description	Interpretation
101	T1	Dark grey gritty loam with stones, brick fragments, rubble and coal fragments.	19 th C soil build-up
102	T1	Dark grey-brown silty loam with numerous coal, mortar and brick fragments.	Soilly made-up ground
103	T1	Dark green-brown silt with cassy appearance. Contains oyster shells, bone, flecks of charcoal, brick and mortar fragments, but few stones.	Cassy layer
104	T1	Red-brown silty clay with c40% stones. Also produced a large stone roof tile, a fork and some pottery.	Possible demolition layer from wall 107.
105	T1	Dark brown gritty silt with c.10% small stones, charcoal flecks and numerous bones.	Abandonment layer over cobbles 106
106	T1	Surface composed of slabs and cobbles laid in rough patterns. Some cobbles have been robbed out down the middle of the trench.	Cobbled surface
107	T1	Wall built of local siltstone bonded with red clay. Some pink mortar present in upper courses. Survives to height of 0.9m and is up to 1.7m wide, but becomes much narrower east of the pipe trench.	Medieval stone wall
108	T1	3 courses of stone slabs covering small area E of the pipe trench	Stone pad or wall base
109	T1	Short wall perpendicular to 107, plaster over inner face of 107 and associated slab flooring laid on mortar.	Alcove? Added into wall 107
110	T1	Dark grey gritty silt with high proportion of charcoal. Extended some way beyond edges of cut 111.	Fill of 111
111	T1	Rectangular cut with near vertical sides and flat base. Exposed corner is sharp but rounded. Only small area investigated, full plan of the feature was not exposed.	Rectangular pit, possibly with industrial function.
112	T1	Stone wall 0.51m wide and surviving to height of 0.7m. Built of roughly coursed siltstones with no real bonding material, though a fine brown sand between the stones could be a degraded mortar.	Stone wall
113	T1	Structure built of red, machine-made bricks and stone. Remains of tile and cobbled floor to S.	Brick structure
114	T1	Very friable red-brown sandy silt with no inclusions. Seems to be burnt but possibly not in situ.	Possible floor surface.
115	T1	Slabs of siltstone laid horizontally but irregularly and bonded with red clay.	Could be remains of early wall but not enough visible.
116	T1	Mid brown clayey silt with no inclusions except occasional small stones.	Possible medieval soil horizon.
117	T1	Greenish yellow clayey silt with pieces of siltstone. Very clean. No inclusions. Stone becomes denser with depth until it is undegraded bedrock	Natural
118	T1	Dark brown silty loam. Contains mortar and charcoal flecks. Only 50mm thick.	Thin deposit below floor of 109
119	T1	Very mixed fill based on brown sandy silt but with dumps of red clay and mortar. Contains numerous stones, some set on edge.	Fill of 120
120	T1	Narrow straight sided cut, with near vertical sides and flat base.	Slot, possible partition trench?
121	T1	Firm dark brown silty clay with c70% stones. Produced early post-med pot.	E post-med made-up ground

Context	Trench	Description	Interpretation
122	T1	Lens composed largely of broken bottles with some dark gritty silt matrix.	Lens within 145
123	T1	Small rough stone built drain with dark brown gritty silt fill	Recent land drain
124	T1	Steep sided cut	Cut for drain 123
125	T1	Brown clayey silt, very loose, with c30% small stones. Also contains charcoal and mortar flecks. Lens of greenish cassy silt within base of fill.	Fill of 126
126	T1	Poorly defined but apparently steep sided cut	19 th century pit
127	T1	Gritty brown silty clay with c20% stones, charcoal flecks and brick pieces.	Rubbly made-up ground
128	T1	Pinkish gravel with red-brown clayey silt matrix.	Make-up for cobbles 106
129	T1	Base of wall composed of 19 th century machine made bricks with white friable mortar.	Brick wall
130	T1	Brick floor composed of machine-made bricks and associated brick wall bonded with friable lime mortar.	Brick s structure
131	T1	Brown clayey silt with rubble and mortar.	Dump of rubble
132	T1	Loose dark brown loam with charcoal but few stones.	Fill of 133
133	T1	Steep sided pit, poorly defined due to stepping back of trench sides.	19 th century pit
134	T1	Confused rubble deposit	Rubble deposit
135	T1	Dark grey loam, few inclusions.	Active topsoil
136	T1	Dark brown gritty loam with charcoal, tile and brick fragments, and stone.	General layer
137	T1	Red-brown clayey silt with mortar fragments and up to 30% stone and brick.	Rubble over 138.
138	T1	Small patch of cobbling surviving over wall 107, some of which was removed in the excavation. Composed of small sub-angular siltstone cobbles set on edge.	Cobbled surface
139	T1	Dark grey loam with rubble. Contains 7" ceramic drain pipe	Fill of 140
140	T1	Steep sided cut for drainage pipe	Pipe trench
141	T1	Dark grey silty loam with small stones.	Fill of 142
142	T1	Steep sided, flat based cut.	Foundation trench for 108
143	T1	Horizontally stacked stone with matrix of slightly silty, malleable red clay. Very compact and densely packed.	Could be a wall butting against 107, but not enough room to tell.
144	T1	Stones and bricks in red clay matrix. Fairly carefully laid to block or infill alcove 109. The bricks are broken pieces of hand-made bricks.	Blocking in 109
145	T1	Brown clayey silt. Very mixed with lenses of dark silt and red clay. Contains mortar and charcoal flecks and pieces of brick. Also includes a lens of broken bottles [122]. Extends over demolished remains of 107 and 109.	General made-up ground layer. Possibly revetted by wall 112.
146	T1	Dark brown gritty silt with small stones, charcoal, patches of red clay and pieces of mortar.	Rubbly soil layer.
147	T1	Silty sand, very fine, up to 90mm thick. In parts strong brown, but elsewhere very pale, off-white as if leached. Most of the stones are degraded.	Leached deposit, related to industrial activity?
148	T1	Layer of heavily degraded stone, including red sandstone as well as siltstone. Almost no matrix except where there are dumps of degraded pink mortar. A charcoal rich layer which may be part of 110 extends under 148.	Heavily degraded stone layer.
149	T1	Dark brown sandy silt with lumps of charcoal and patches of brown mortar. Contains some stones and a piece of broken brick.	Fill of 150

Context	Trench	Description	Interpretation
150	T1	Circular pit with fairly steep sides and rounded base. Sides not always very clearly defined. Seems to respect wall 112, and does not extend under it.	Circular pit or post-hole
151	T1	Greenish yellow silt with c80% siltstone fragments. Quite loose, stone shattered and lying at random angles.	Initially appeared redeposited, but probably disturbed and weathered natural.
152	T1	Steep sided cut just wider than wall 112, only seen at its SE end. Does not extend up full height of wall, only c0.15m deep into 114 and 151.	Foundation cut for wall 112. Probably just levelling earlier deposits rather than deep trench.
153	T1	Steep sided flat bottomed cut	Foundation cut for 113
154	T1	Very loose rubble with some dark gritty loam and voids.	Loose infilling over floor related to 113
155	T1	Blue black charcoal and cinders	Fill of 156
156	T1	Vertical sided cut, rectangular in plan. 158 completely infilled before 156 was cut	Recut of 158
157	T1	Yellow clay and brown silt with brick pieces.	Fill of 158
158	T1	Vertical sided cut.	19 th century pit
159	T1	Dark grey-brown loam under brick floor	Soil build-up
160	T1	Brick floor composed of red machine-made bricks. Extends over pit 156 and butts against wall 112 which must still have been in use.	Brick floor
161	T1	Mortar and rubble in dark grey loam with patches of brown sand.	Layer equivalent to 159 south of pit 158..
162	T1	Yellowish silt and stones. Looks similar to 151, though perhaps softer. Cannot prove they are part of same layer.	Redeposited natural.
163	T1	Loose dark grey loam with mortar and rubble and plastic bags.	Recent dumping over brick floor.
164	T1	Fairly gently sloping cut seen in section just north of 112. Seems to run down to base of 112, but in plan, where it is not confused by the mini-digger it seems to run roughly perpendicular to the trench side and not parallel to 112.	Possibly part of the levelling activity prior to building 112.
165	T1	Deposit similar to 145 but not as thick. Seen only south of wall 112.	Layer
166	T1	Dark brown gritty silt similar to 146. Contains lenses of plaster or mortar.	Layer
167	T1	Irregular, shallow trench where cobbles 106 have been robbed out. Filled by 105.	Robbing of cobbles.
201	T2	Dark brown clayey silt with some small stones.	Top soil
202	T2	Mid brown sandy clay with brick, mortar and gravel. Very loose and rubbly.	Fill of 203
203	T2	Steep sided cut with flat base.	Late post-medieval pit
204	T2	Very dark brown clayey silt with charcoal, mortar, brick and stone.	Fill of 205
205	T2	Steep sided cut with rounded base	Late post-medieval pit
206	T2	Dark brown loose clayey silt with brick, tile, mortar and gravel.	Fill of 207
207	T2	Steep sided cut with flat base.	Late post-medieval pit
208	T2	Loose dark brown clayey silt with rubble and gravel and much charcoal.	Deep rubbly soil layer
209	T2	Reddish brown clayey silt with much white mortar and plaster, also brick, stone and charcoal.	Deposit over floor 218, and filling cut 210

Context	Trench	Description	Interpretation
210	T2	Fairly gently sloping cut above wall 216. Fairly light disturbance to floor 218 suggests cut did not extend over this. The cut seems to be restricted only the area over the wall and may be related to the removal of wall timbers.	Possible robber cut made when wall timbers were removed.
211	T2	Fairly firm mid brown clayey silt with brick, stone, mortar and charcoal.	General made-up ground layer
212	T2	Fairly loose, mid brown clayey silt with c70% stone and brick, also mortar fragments. Extends over top of wall 216, but this may be due to disturbance when wall timbers were removed and 212 could have been deposited while 216 was still upstanding.	Rubble layer, possible demolition layer. Made-up ground
213	T2	Firm, dark red-brown silty clay with charcoal and some gravel and mortar.	Abandonment layer directly above surfaces 214 and 223
214	T2	Floor flagged with local mudstone. Irregular slabs laid out fairly randomly. Stones have rough hewn surface so floor is uneven. Signs of wear on the stones.	External flagged surface.
215	T2	Firm red-brown clay with mortar flecks. Spread over demolished wall 216 and up to 0.4m to the west of the wall.	Layer deposited after wall 216 was demolished. Essentially lowest part of 209.
216	T2	Base of wall running north-south across the trench. Wall is 0.4m wide. Constructed of roughly coursed local stone. No bonding material.	Probable base of timber framed building wall.
217	T2	Patches of red-brown clay in western half of the trench. Contains some charcoal.	Clay levelling layer below plaster floor 218
218	T2	12mm thick layer of white plaster surviving in patches. Very friable and includes some small gravel.	Interior plaster floor, may have been base for tiled floor.
219	T2	Very loose layer of building rubble consisting mainly of brick, tile and mortar in mid brown clayey silt matrix.	Demolition layer
220	T2	Loose grey clayey silt with some mortar, rubble and charcoal.	Fill of 221
221	T2	Shallow cut with gently sloping east side and flat base.	Shallow pit.
222	T2	Greenish yellow firm clayey silt with siltstone fragments. Compact, stones fairly horizontal, very clean.	Natural. Degraded surface of bedrock
223	T2	East end of the flagged floor separated from 214 by clear line. Composed of siltstone, mostly long pieces set on edge, but also some slabs. Slabs define western edge. Stones set on edge generally orientated roughly north-west to south-east.	External flagged floor of different pattern to 214 but probably roughly contemporary.
224	T2	Firm red-brown clayey silt with some stones and some bones.	Clay bed for flags 214. Probably extends under 223, but not proved.
225	T2	Greenish yellow firm clayey silt with siltstone fragments. Surface stones fairly jumbled but becomes more ordered with depth.	Natural. Degraded surface of bedrock

Appendix II

List of finds

Context	Date	Pot	Other
U/S		1 sherd	2 glazed floor tile fragments
102	2 nd half 17 th century	1 sherd	Clay pipe bowl with WV stamp 1 oyster shell
104	19 th century		Eating fork 2 glazed roof tile sherds large stone roof tile
105	Late 15 th -mid 16 th	2 sherds 5 sherds from a cup 1 sherd from a cup	11 roof tile fragments, most glazed 3 glazed floor tile fragments Copper alloy object, strap? (SF1) 1 nail 390g of animal bone
107	15 th -16 th century	2 sherds	
108	c. 1760-1770	5 sherds	1 oyster shell
112			1 decorated floor tile (residual)
118	16-17 th century	1 very small sherd	
119	18 th century?		1 sherd bottle glass
121	Late 15 th -16 th century	3 sherds	1 glazed roof tile
122	17 th century		2 'onion' glass bottle sherds 2 vessel glass sherds 3 window glass sherds
145	mid 17 th -early 18 th century	2 conjoining sherds	Clay pipe bowl with WV stamp
201	Mid-late 19 th century	6 sherds	
202	Later 17 th -early 18 th century	3 sherds	1 vessel glass (?) 1 window glass (medieval, residual) 1 pipe stem
204	Later 17 th century (poss. early 18 th)	5 sherds	1 sherd bottle glass clay pipe bowl and piece of stem (late 17 th -early 18 th)
208	Later 17 th -mid 18 th century	1 sherd	1 wine bottle base
209	14 th -15 th century		2 glazed floor tiles (residual)
211	2 nd half 17 th century	29 sherds	15 floor tiles, most decorated and glazed, 2 complete 1 hand-made brick (16 th -17 th) 29 roof tiles, mainly glazed 3 iron objects 2 oyster shells 1.75kg animal bone 1 horn core
212	Late 15 th -mid 16 th century	1 sherd	2 glazed roof tiles 1 stone roof tile

Context	Date	Pot	Other
213	Late 15 th -mid 16 th century	21 sherds	3 glazed floor tile fragments 25 roof tiles, some glazed 1 vessel glass handle residual short cross penny (SF2) 2 nails 1 oyster shell 1.45kg animal bone
215	?mid 16 th century	2 sherds	1 glazed floor tile fragment 1 glazed roof tile fragment 1 sherd window glass 1 iron object 154g animal bone
217		1 sherd tin glaze (mid 16 th - 17 th , contamination?)	1 sherd vessel glass (17 th -18 th ? contamination?) Painted medieval window glass (SF3) 1 piece moulded plaster
224	?mid 13 th -14 th century	1 sherd with handle	

Appendix III

Spot Dating and Catalogue of pottery from 9-10 King Street, Ludlow

By Stephanie Rátkai

- 102 second half 17th c
1 x tin-glazed earthenware
- 105 late 15th-mid 16th c
5 x Cistercian ware (1 cup) late 15th-mid 16th c
1 x Cistercian ware (1 cup) late 15th-mid 16th c
2 x Malvernian type ware (1 or 2 jugs) (mid 14th)15th-16th c
- 107 15th-16th c
2 x Malvernian type ware (1 bowl) (mid 14th)15th-16th c
- 108 c 1760-1770
2 x coarseware 17th-18th c
1 x blackware (cup/mug) 17th c
1 x creamware feather edge plate *
1 x creamware *
*(relatively dark colour of the creamware denotes third quarter of 18th c)
- 118 16th-17th c
1 x cistercian/blackware (cup/mug)
- 121 late 15th-16th c
2 x late oxidised ware (bowl) 15th-16th c
1 x Cistercian ware late 15th-mid 16th c
- 145 mid 17th-early 18th c
2 x light-on-dark trailed slipware (flange rim bowl)
- 201 mid-late 19th c
1 x tin-glazed earthenware (?pedestal cup) 17th c
1 x pearlware (large platter) early 19th c?
1 x stoneware bottle mid 19th c or later
1 x garden furniture (plant pot tray) 18th-19th c
1 x coarseware (jar base), under glaze slip ?19th c
1 x blackware (jug/jar base) ?17th c
- 202 later 17th-early 18th c
1 x blackware (?mug base)
1 x blackware (possibly part of same vessel above)
1 x blackware (cup/mug handle)
- 204 later 17th c (possibly early 18th c)
2 x blackware (?chamber pot)
1 x blackware pedestal base (?candlestick)

- 1 x blackware (?mug)
- 1 x blackware very badly burnt, with cratered interior glaze

208 later 17th-mid 18th c

- 1 x mottled ware (mug/handled bowl)

211 ?second half of 17th c

- 3 x blackware (mug)
- 6 x blackware (5 or 6 vessels represented, probably all drinking vessels)
- 7 x Cistercian ware (5 cups represented)
- 1 x ?slip-coated ware (late 17th-18th c) (?porringer base)
- 7 x Malvernian type ware ((mid 14th c) 15th-16th c)
- 3 x late oxidised ware (3 vessels)
- 1 x late oxidised ware (possibly Malvernian type)

212 late 15th-mid 16th c

- 1 x ?Cistercian ware (cup decorated with white slip dots) The glaze is rather odd being a dull brownish olive, with little differentiation between the glaze colour over the slip dots and on the body

213 17th c (if tin glazed earthenware not intrusive) or late 15th-mid 16th c

- 1 x Cistercian ware (cup decorated with white 'wheel-stamped' applied clay pads)
- 1 x Cistercian ware (cup base)
- 1 x Cistercian ware (cup)
- 1 x Cistercian/blackware (cup)
- 1 x tin-glazed earthenware (?bowl) burnt, possibly intrusive
- 1 x Tudor Green
- 8 x Malvernian type ware
- 7 x late oxidised ware

215 ?mid 16th c

- 1 x blackware (mug)
- 1 x late oxidised ware (chafing dish base)

217 mid 16th-17th c

- 1 x blackware (mug)

224 ?mid 13th-14th c

- 1 x medieval jug sherd. Highly micaceous fabric with siltstone inclusions. External green glaze with darker copper speckles – the use of copper may denote a date after c 1250

Appendix IV

The mammal, bird and fish bones

Ian L. Baxter BA MIFA (03.04.2004)

Introduction

A total of 54 “countable” (see below) bone fragments were recovered from the site (Table 1). The animal bones were recovered from abandonment layers and ground make-up deposited in the early post-medieval period (c. 16th century), following demolition of medieval houses encroaching on the churchyard in the middle of the town and to the east of the church.

Methods

This is a tiny hand-collected assemblage and a collection bias against bones of the smaller species is to be expected.

The mammal bones were recorded following a modified version of the method described in Davis (1992) and used by Albarella and Davis (1994). In brief, all teeth (lower and upper) and a restricted suite of parts of the postcranial skeleton was recorded and used in counts. These are: horncores with a complete transverse section, skull (zygomaticus), atlas, axis, scapula (glenoid articulation), distal humerus, distal radius, proximal ulna, radial carpal, carpal 2+3, distal metacarpal, pelvis (ischial part of acetabulum), distal femur, distal tibia, calcaneum (sustenaculum), astragalus (lateral side), centrotarsale, distal metatarsal, proximal parts of the 1st, 2nd and 3rd phalanges. At least 50% of a given part had to be present for it to be counted.

The presence of large (cattle/horse size) and medium (sheep/pig size) vertebrae and ribs was recorded for each context, although these were not counted. “Non-countable” elements of particular interest were recorded but not included in the counts.

For birds the following were always recorded when present: scapula (articular end), proximal coracoid, distal humerus, proximal ulna, proximal carpometacarpus, distal femur, distal tibiotarsus, distal tarsometatarsus.

The separation of sheep and goat was attempted on the following elements: horncores, dP₃, dP₄, distal humerus, distal metapodials (both fused and unfused), distal tibia, astragalus, and calcaneum using the criteria described in Boessneck (1969), Kratochvil (1969), Payne (1969 and 1985) and Schmid (1972).

Tooth and mandible wear stages were recorded for the main domestic species following the method of Grant (1982).

Discussion

All the main domestic food species, cattle, sheep/goat and pig, are represented in the deposits. Cattle bones and teeth are more frequent than those of the other species and mostly consist of

skeletally mature animals. At this time cattle were still primarily raised as draught animals. An exception is a perinatal metatarsal shaft found in context (213). No ovicaprid remains attributable to goat were seen, but over 30% could be positively identified as belonging to sheep. All the pig remains are from dentally and skeletally immature animals, primarily subadults. The relative proportion of sheep to pig is 3:2. Vertebra and rib fragments from both large and medium sized ungulates were frequent in the assemblage, which primarily consists of butchery waste. Domestic birds are relatively infrequent. The geese are small for domestic birds and the possibility that they are wild species cannot be excluded. Although too large to be Brent geese, they are within the size range of several *Anser* species and also the barnacle goose (*Branta leucopsis*). The duck coracoid from (211) could belong to either a domestic duck or a wild mallard. Overall, the *Anatidae* (geese and ducks) are more common than chickens with a ratio of 5:3. Several cranial fragments of a large fish (or fishes) were found in context (211). These are most probably Gadid (cod family) and represent coastal imports. The proximal metacarpal of a fallow deer (*Dama dama*) was found in context (213). The only other species present in the assemblage is domestic cat, represented by a juvenile tibia fragment found in context (211).

References

- Albarella, U. and Davis, S.J.M. 1994. **The Saxon and Medieval animal bones excavated 1985-1989 from West Cotton, Northamptonshire.** London: English Heritage AML Report 17/94.
- Davis, S.J.M. 1992. **A rapid method for recording information about mammal bones from archaeological sites.** London: English Heritage AML Report 19/92.
- Boessneck, J. 1969. Osteological Differences between Sheep (*Ovis aries Linne*) and Goat (*Capra hircus Linne*). In: Brothwell, D.R. and Higgs, E. (eds.) **Science in Archaeology**, pp. 331-359. London: Thames and Hudson.
- Grant, A. 1982. The Use of Tooth Wear as a Guide to the Age of Domestic Ungulates. In: Wilson, R., Grigson, C. and Payne, S. (eds.) **Ageing and Sexing Animal Bones from Archaeological Sites**, pp. 91-108. BAR British Series 109. Oxford.
- Kratochvil, Z. 1969. Species criteria on the distal section of the tibia in *Ovis ammon* F. *aries* L. and *Capra aegagrus* F. *hircus* L. **Acta Veterinaria (Brno)** 38: 483-490.
- Payne, S. 1969. A metrical distinction between sheep and goat metacarpals. In: Ucko, P. and Dimbleby, G. (eds.) **The domestication and exploitation of plants and animals**, pp. 295-305. London: Duckworth.
- Payne, S. 1985. Morphological distinctions between the mandibular teeth of young sheep, *Ovis*, and goats, *Capra*. **Journal of Archaeological Science** 12: 139-147.
- Schmid, E. 1972. **Atlas of Animal Bones for Prehistorians, Archaeologists and Quaternary Geologists.** Amsterdam, London & New York: Elsevier.

Table 1. King Street, Ludlow (KSL 04A). Number of identified hand-collected fragments (NISP).

Taxon	Period		Total
	Early C16th	Post-medieval	
	Trench 1	Trench 2	
Cattle (<i>Bos f. domestic</i>)	1	24	25
Sheep/Goat (<i>Ovis/Capra f. domestic</i>)	1	15	16
Sheep (<i>Ovis f. domestic</i>)	(-)	(5)	(5)
Fallow Deer (<i>Dama dama</i>)	-	+	+
Pig (<i>Sus scrofa</i>)	1	4	5
cf. Cat (<i>Felis catus</i>)	-	+	+
Goose (<i>Anser/Branta</i>)	-	1	1
Domestic Fowl (<i>Gallus f. domestic</i>)	-	2	2
Duck (<i>Anas platyrhynchos</i>)	-	1	1
Fish (cf. Gadidae)	-	4	4
Total	3	51	54

“Sheep/Goat” also includes the specimens identified to species. Numbers in parentheses are not included in the total of the period. “+” means that the taxon is present but no specimens could be “counted” (see text).

Appendix V

Note on decorated floor tiles from 9-10 King Street, Ludlow

By Sara Lunt

The following is a summary of information conveyed by Sara Lunt by telephone and e-mail having inspected photographs of the tiles:

The tiles are fairly late for this type of floor tile, i.e. they are 14th century, possibly mid-late 14th. This date is based on the shallowness of the slip inlay and the sizes, especially thickness of the tiles themselves. The nearest assemblage of tiles for comparison comes from an excavation by BUFAU on Corve Street. The tiles from this site were smaller, thicker and earlier than those on the present site.

The tiles are standard 14th century floor tiles with familiar types of designs, although none of the patterns are exactly like other known examples. The style may reflect influence from traditions further south. They are in a shocking condition, partly because of the poor technology (shallow slip/keying) and partly because they are in a secondary or even tertiary context.

It was unusual for floor tiles to be commissioned for domestic properties in this period and it is probable that they originally came from the church, although they could have been reused in a house.

Catalogue of tiles

See plate 1 for examples of the tiles.

15 pieces come from a single context [211] essentially an abandonment/demolition layer above an exterior flagged floor related to a house of presumed late medieval date. Pottery dates this layer to the second half of the 17th century. Most of the tiles are fragmentary but two are largely complete. One is a square tile with a fleur-de-lise pattern (211-1), the other is triangular with a yellow glaze (211-2). Below is a list of measurements on the most complete pieces.

211-1: Square tile 120.5 x 120.3mm, 20.6mm thick

211-2: Triangular tile 110.5 x 110.3 x 150.6mm, 20.5mm thick

211-3: Broken square tile 120.0mm wide, 20.3mm thick

211-4: 2 broken pieces of square tiles, 20.5mm thick

211-5: Broken square tile, 120.2mm wide, 20.5mm thick

211-6: Broken square tile and broken triangular tile, both 20.5mm thick

One tile was built into a much later wall [112], but may have originated from the same source as the others.

112: Broken square tile, 20.3mm thick

Appendix VI
Phased site matrix

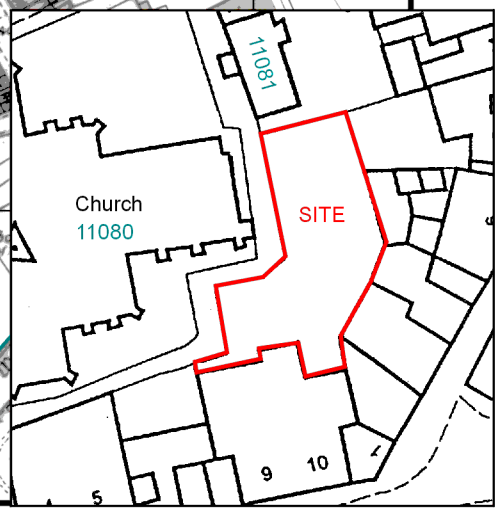
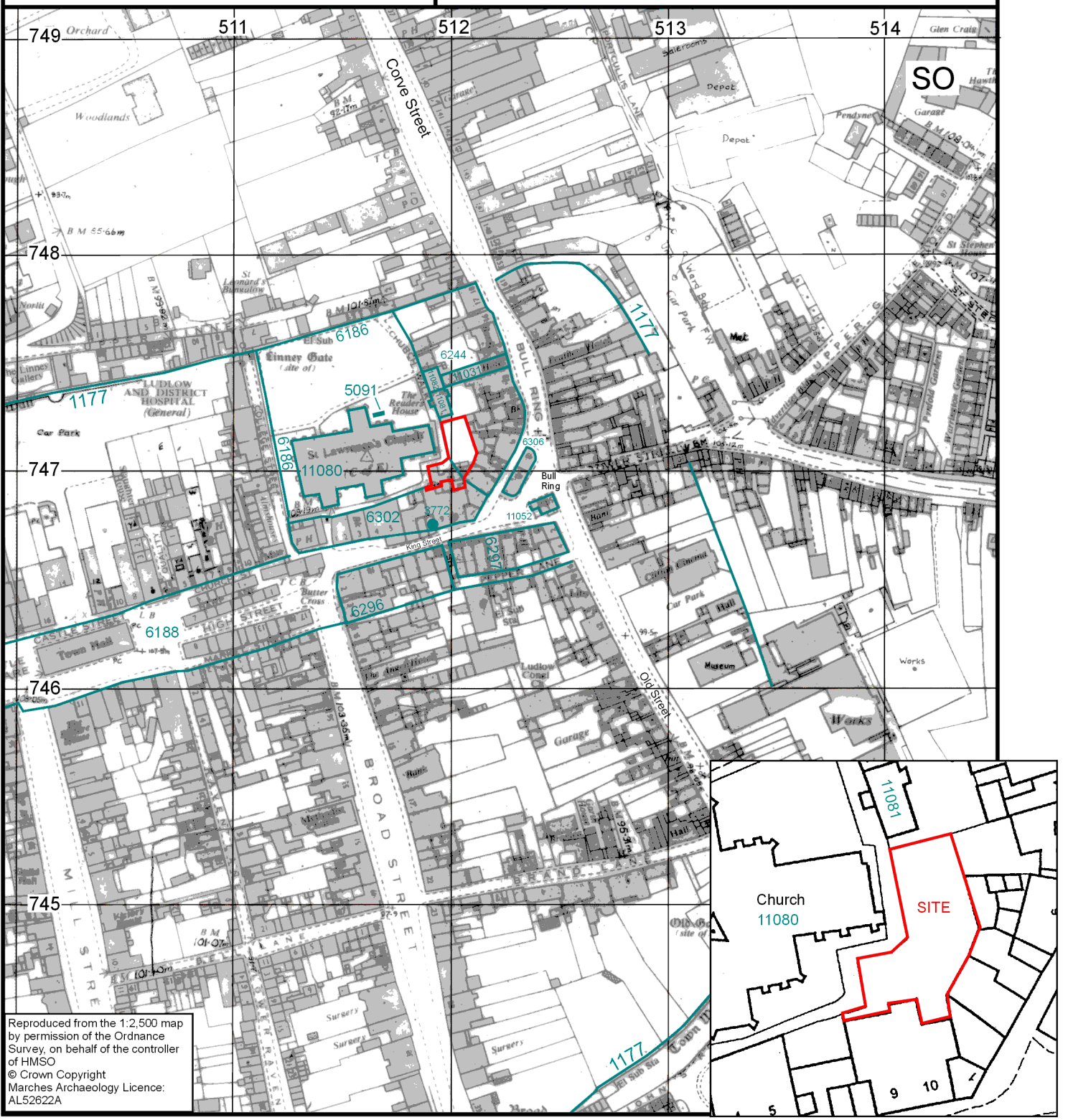
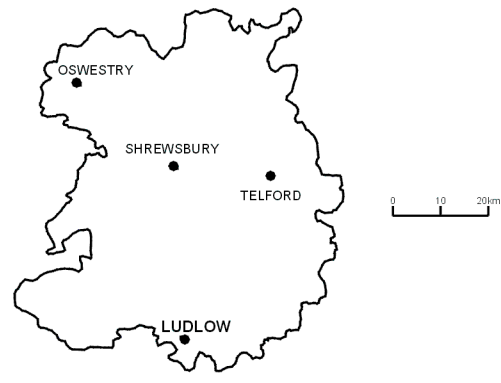


Fig. 1: Location of site and SMR sites mentioned in text (site in red, SMR sites in blue, inset shows detail of site at 1:1000)

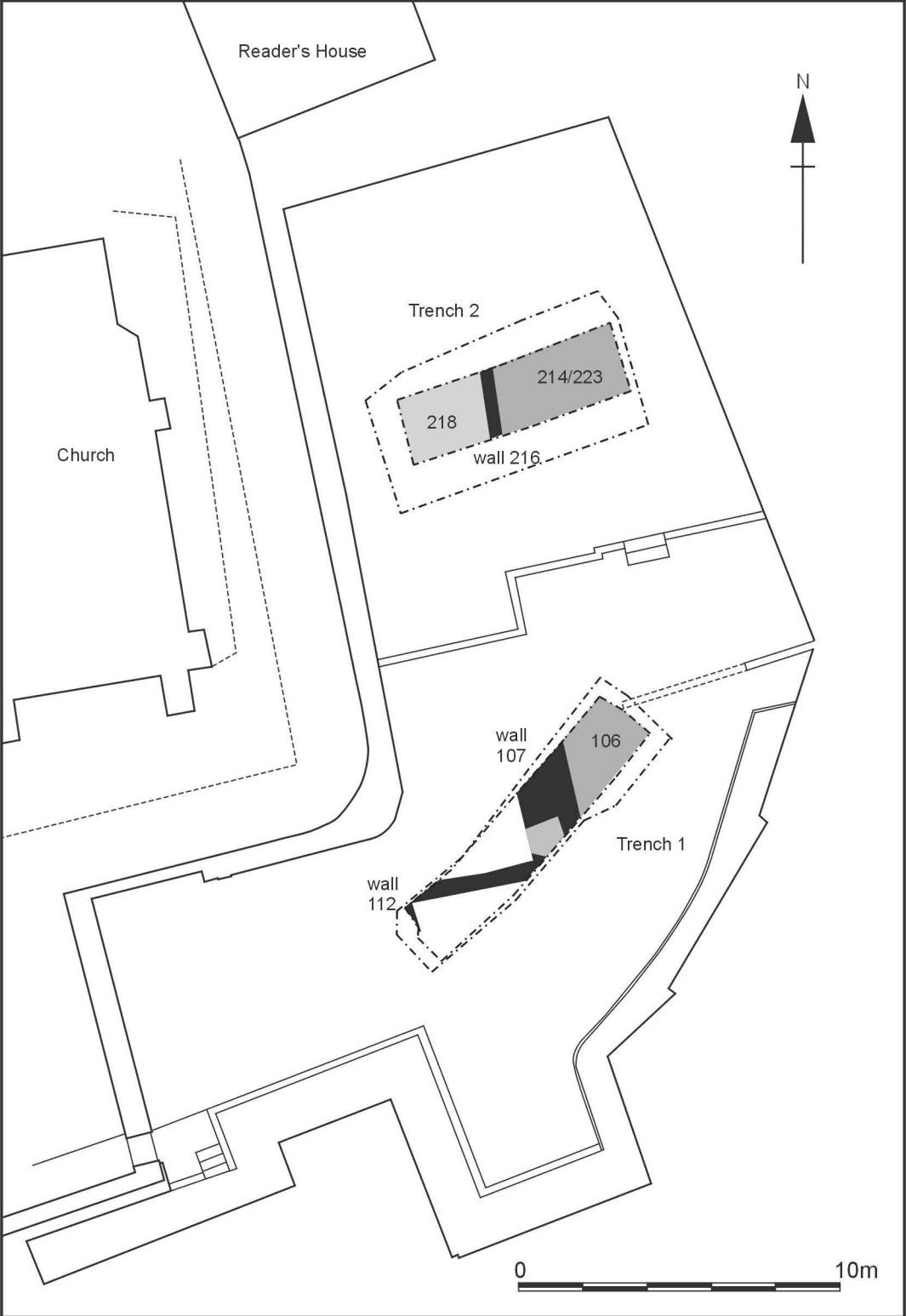
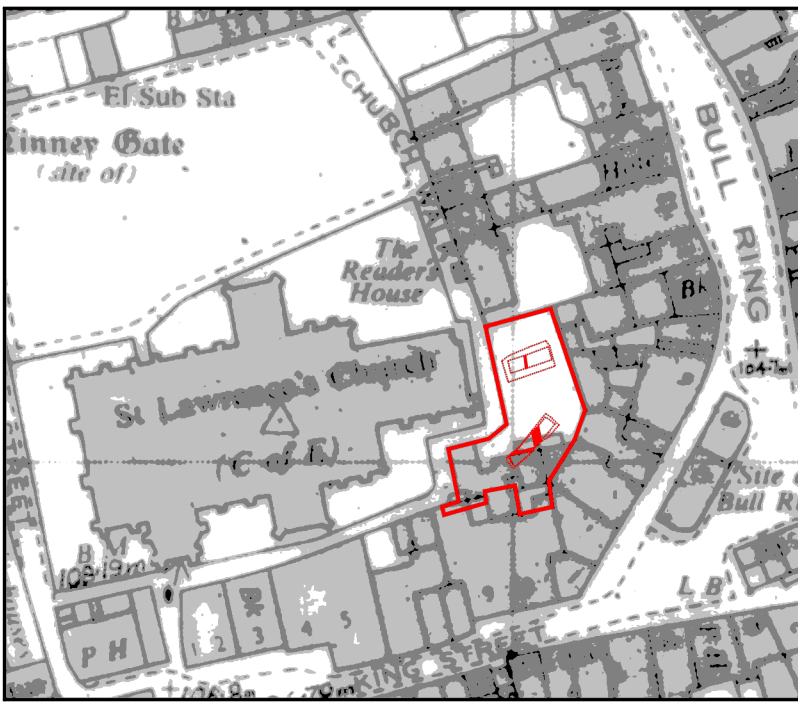
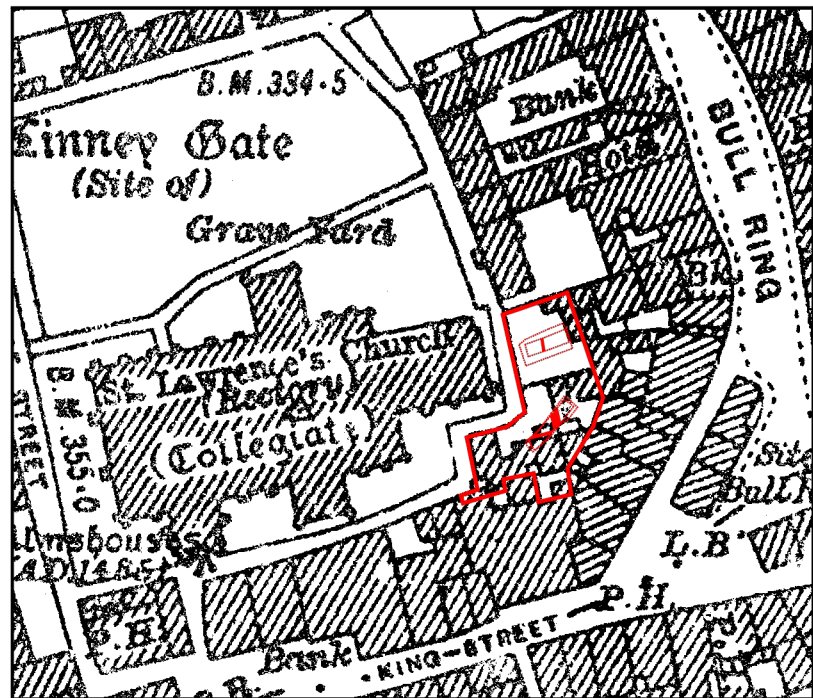


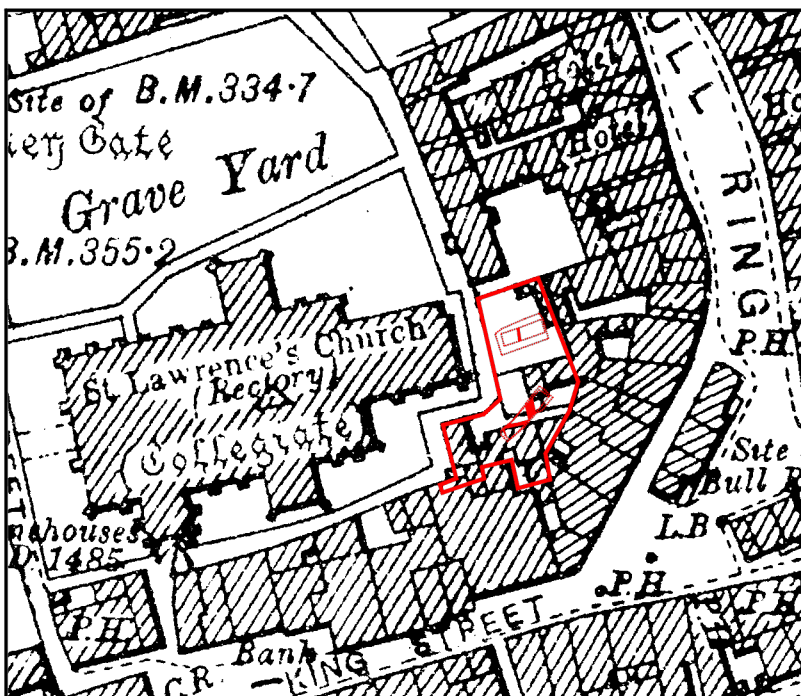
Fig. 2: Location of trenches within development site



1:2500 map, 1982



Revised edition 25" map, 1926



2nd edition 25" map, 1903

Fig. 3: Evaluation trenches overlaid on 20th century maps

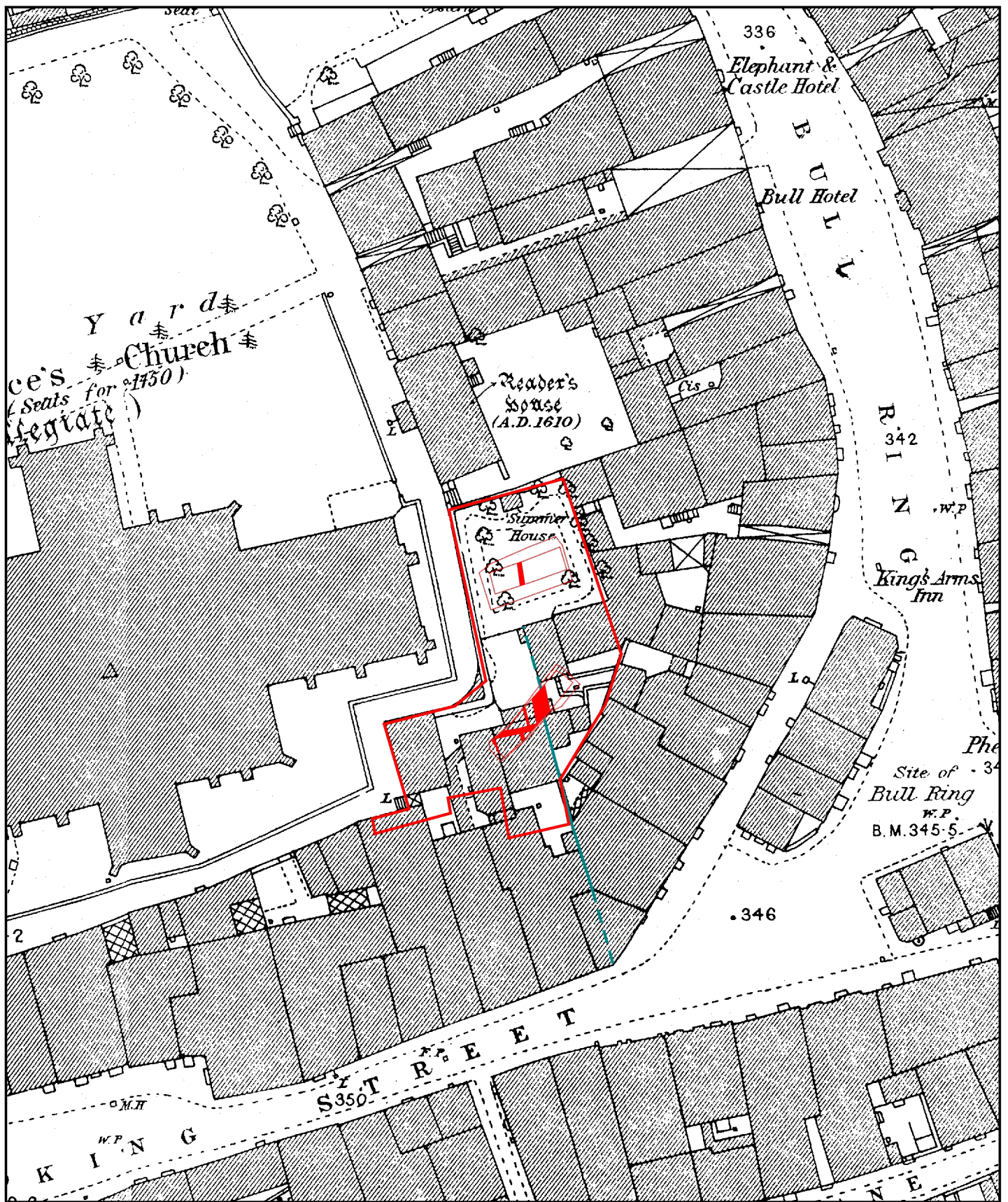


Fig. 4: Evaluation trenches overlaid on 1:500 OS map published 1885 (blue line indicates property boundary discussed in text)

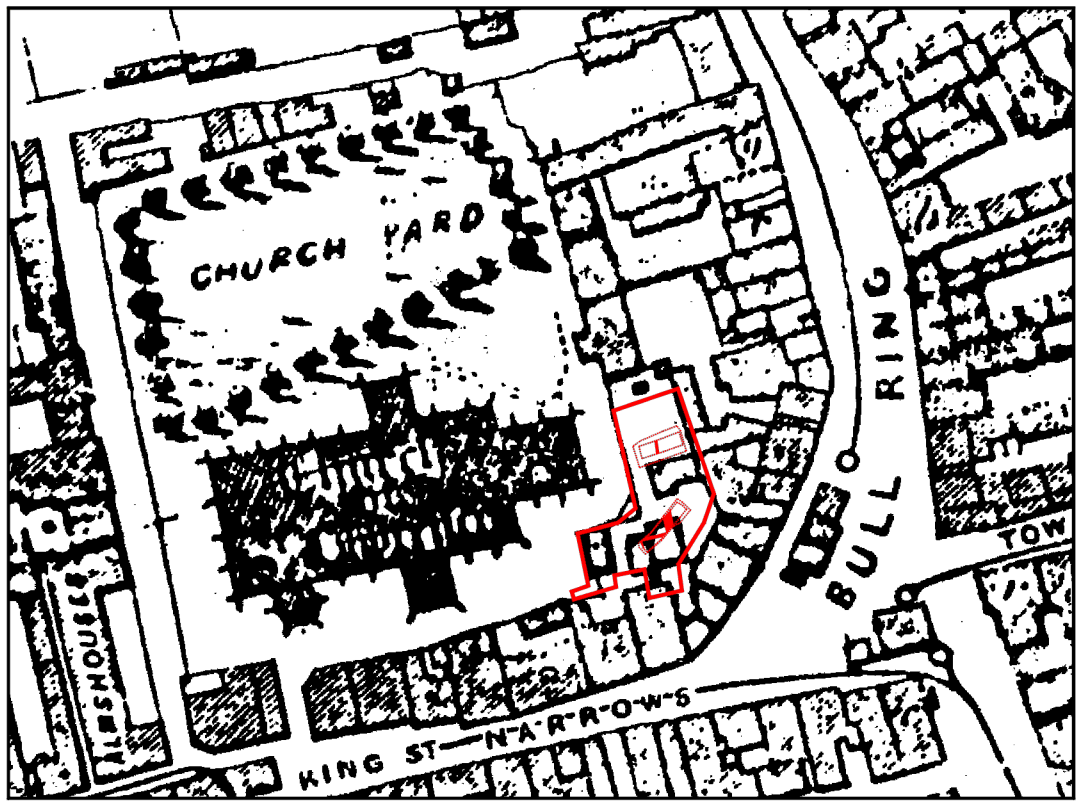


Fig. 5: Curley's 1862 map

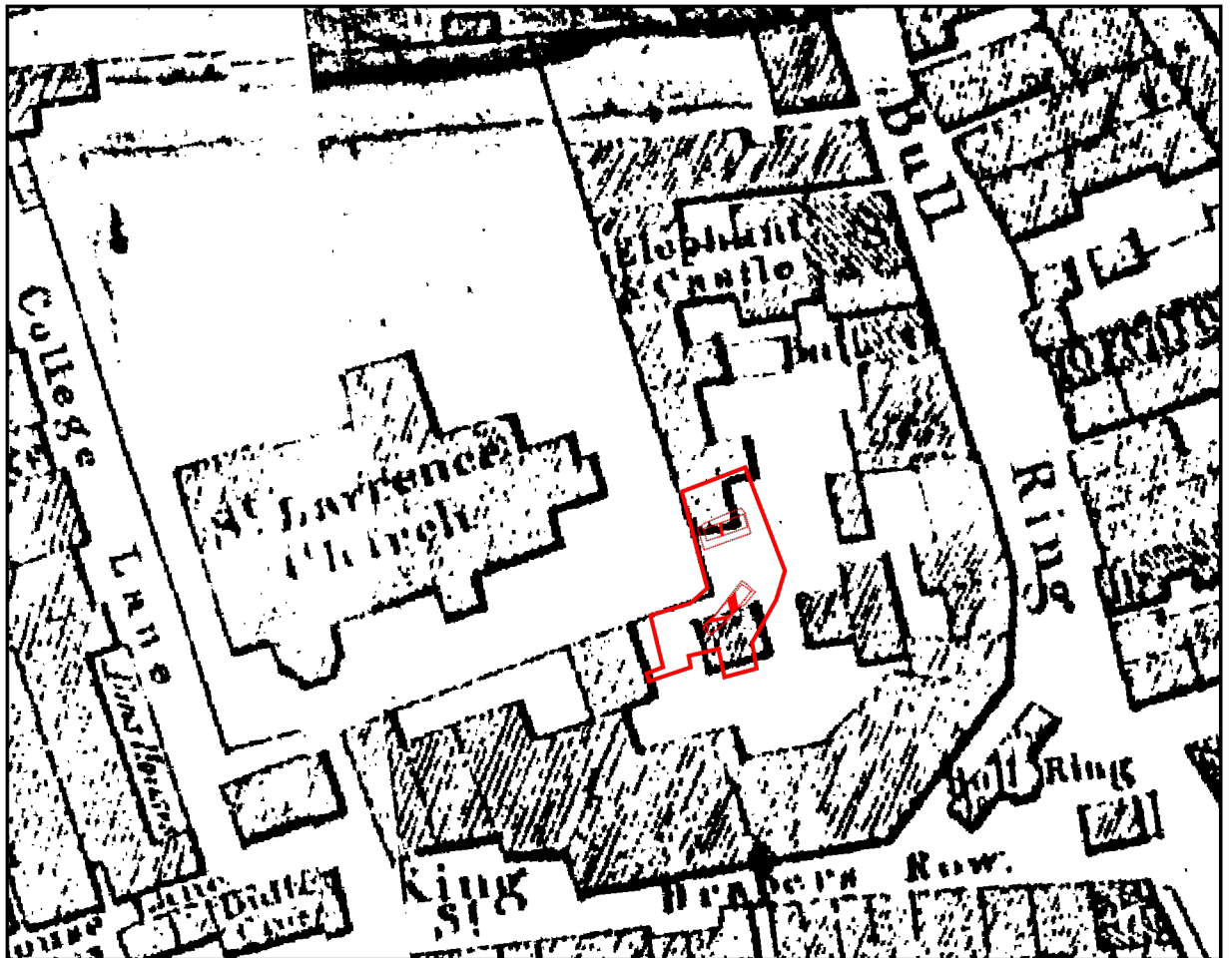


Fig. 6: Wood's 1835 map

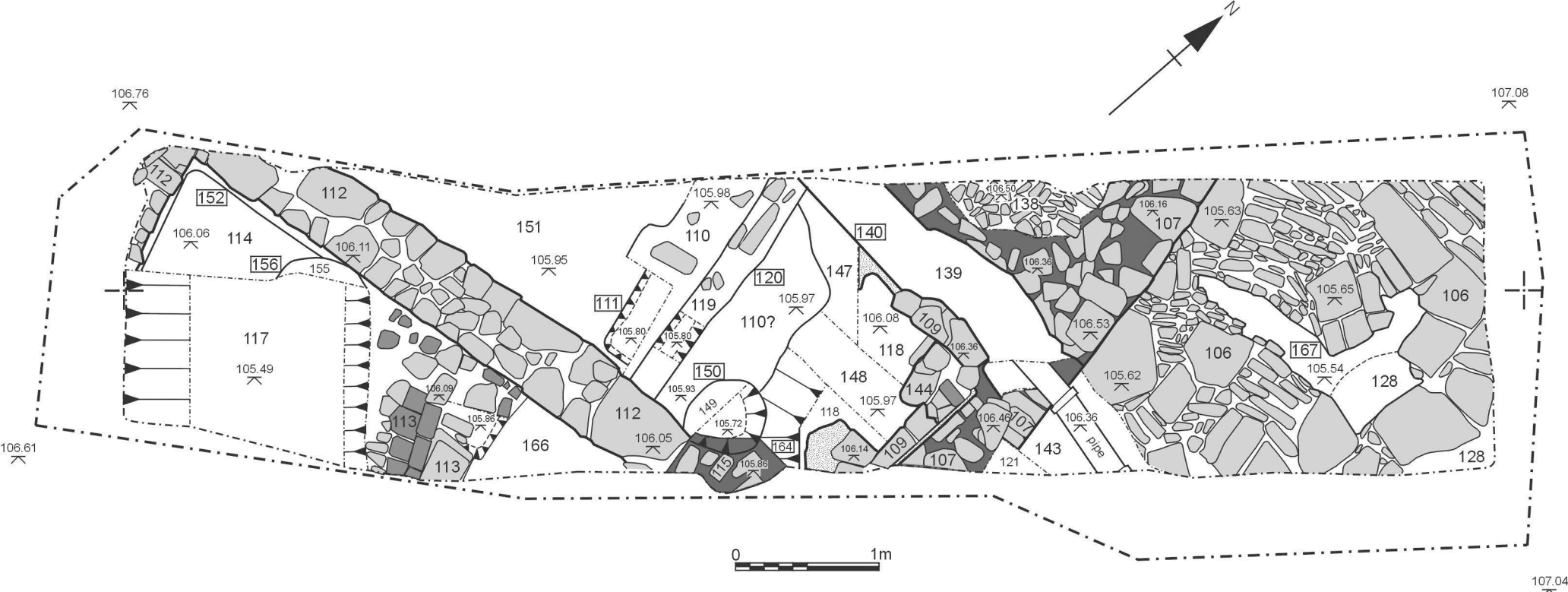
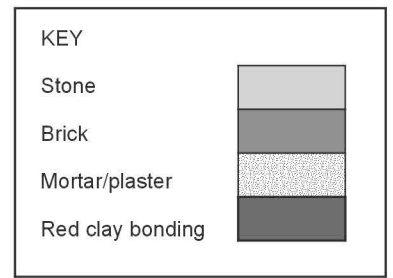


Fig. 7: Plan of trench 1



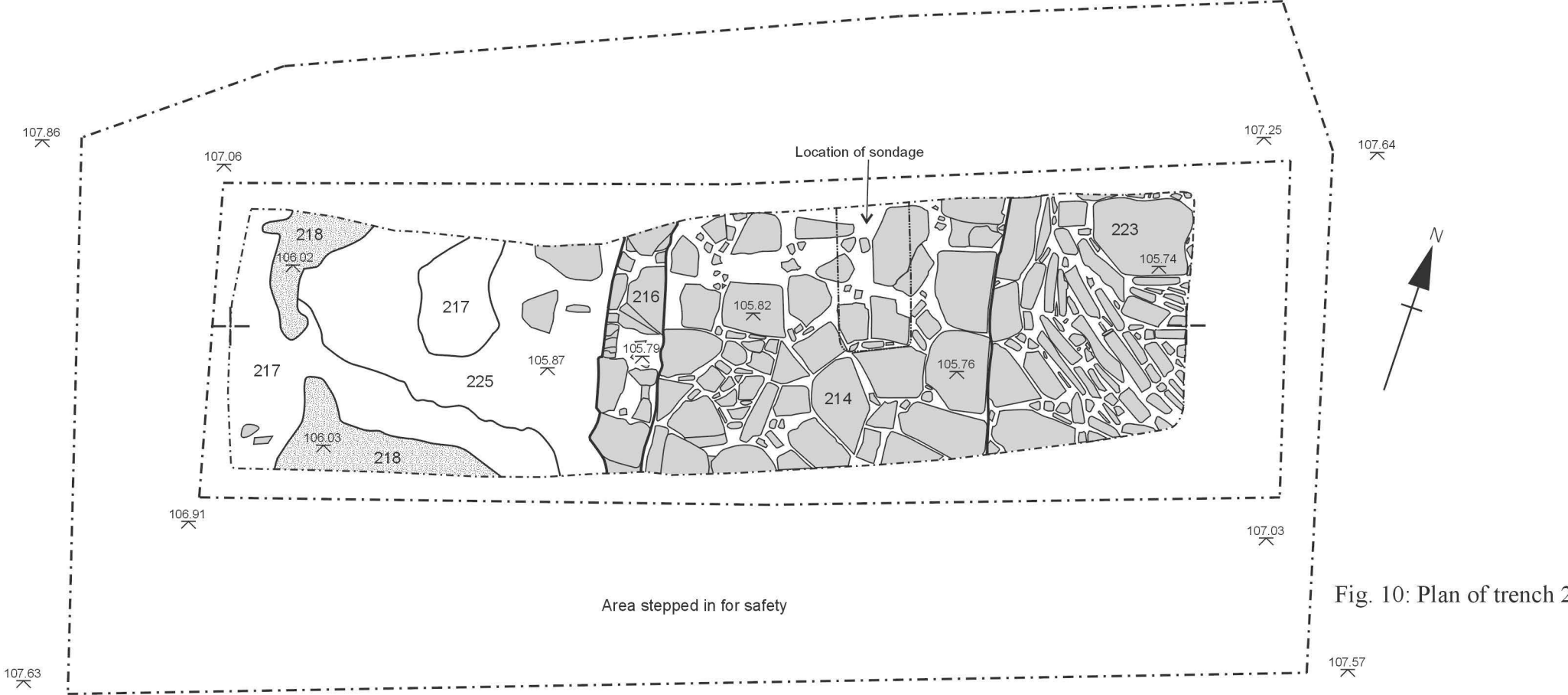


Fig. 10: Plan of trench 2

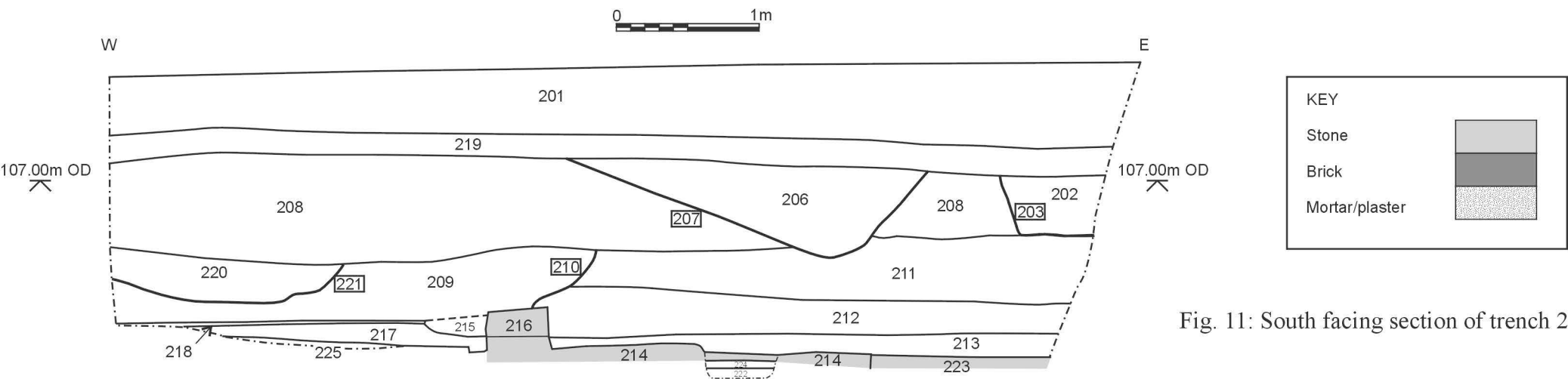


Fig. 11: South facing section of trench 2

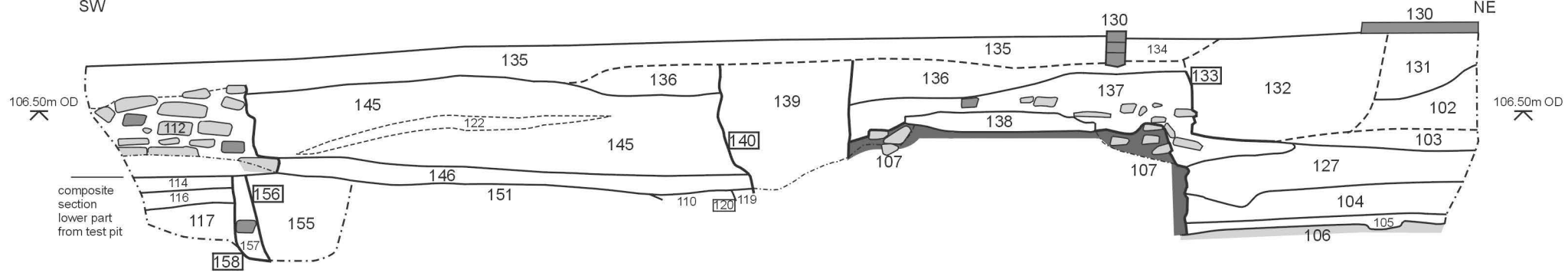


Fig. 8: South-east facing section of trench 1

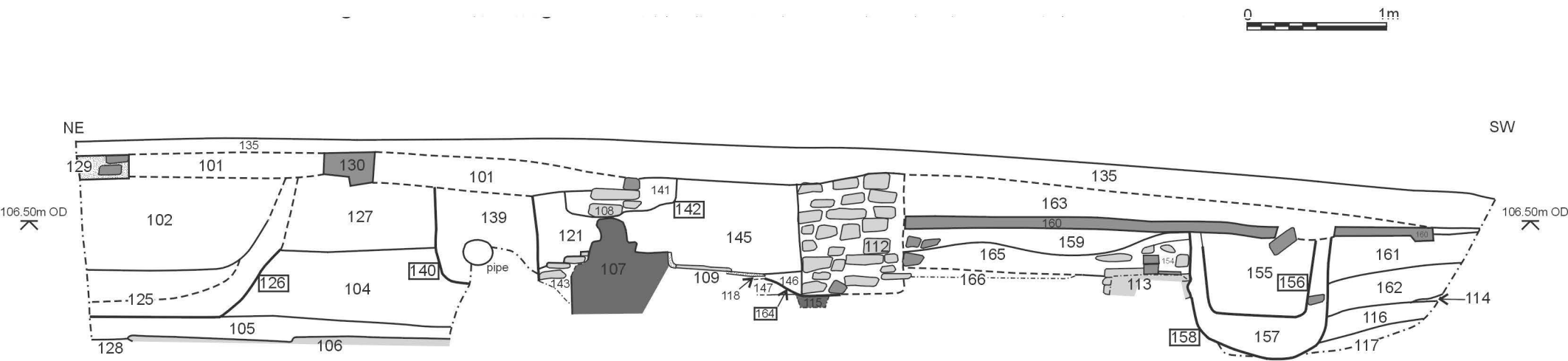


Fig. 9: North-west facing section of trench 1

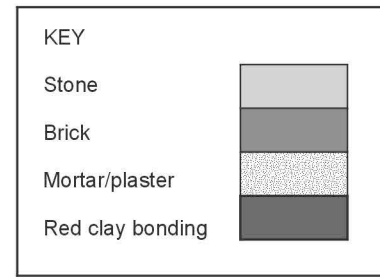




Fig. 12: Proposed location of foundation piles
(plan supplied by Wheatley and Lines Architects)

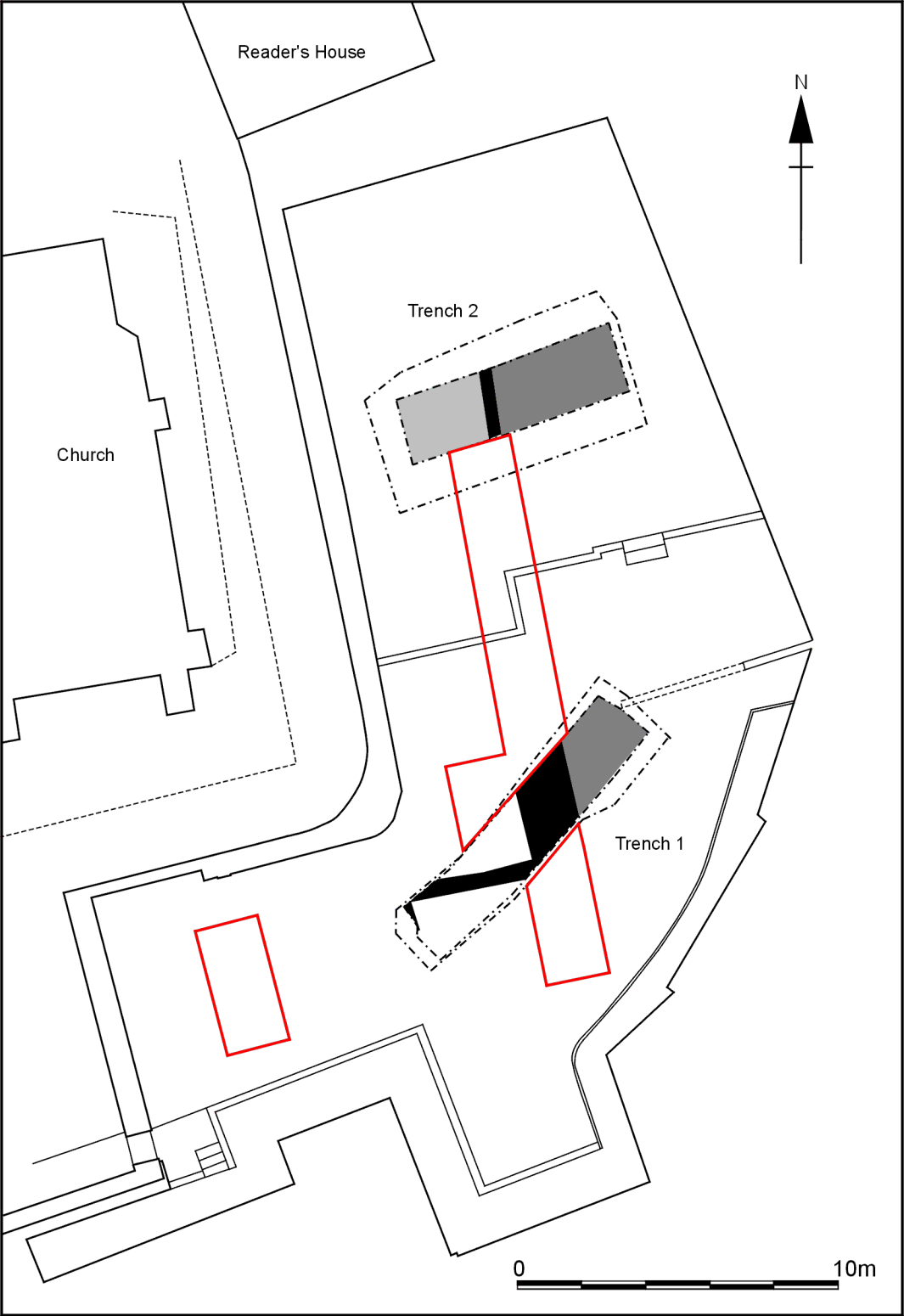


Fig. 13: Location of proposed additional evaluation trenches (shown in red)



Plate 1: View of trench 1 looking south-west

Plate 2: East facing elevation of wall 107



Plate 3: View of trench 2 looking west

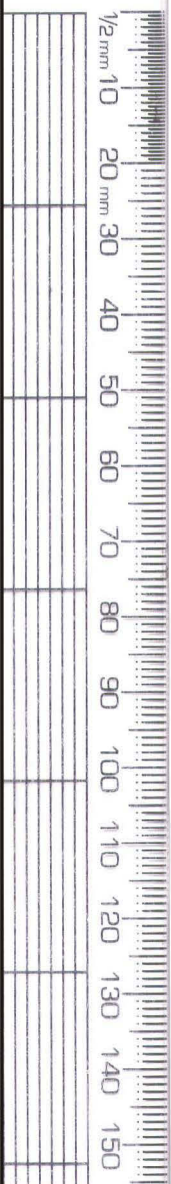


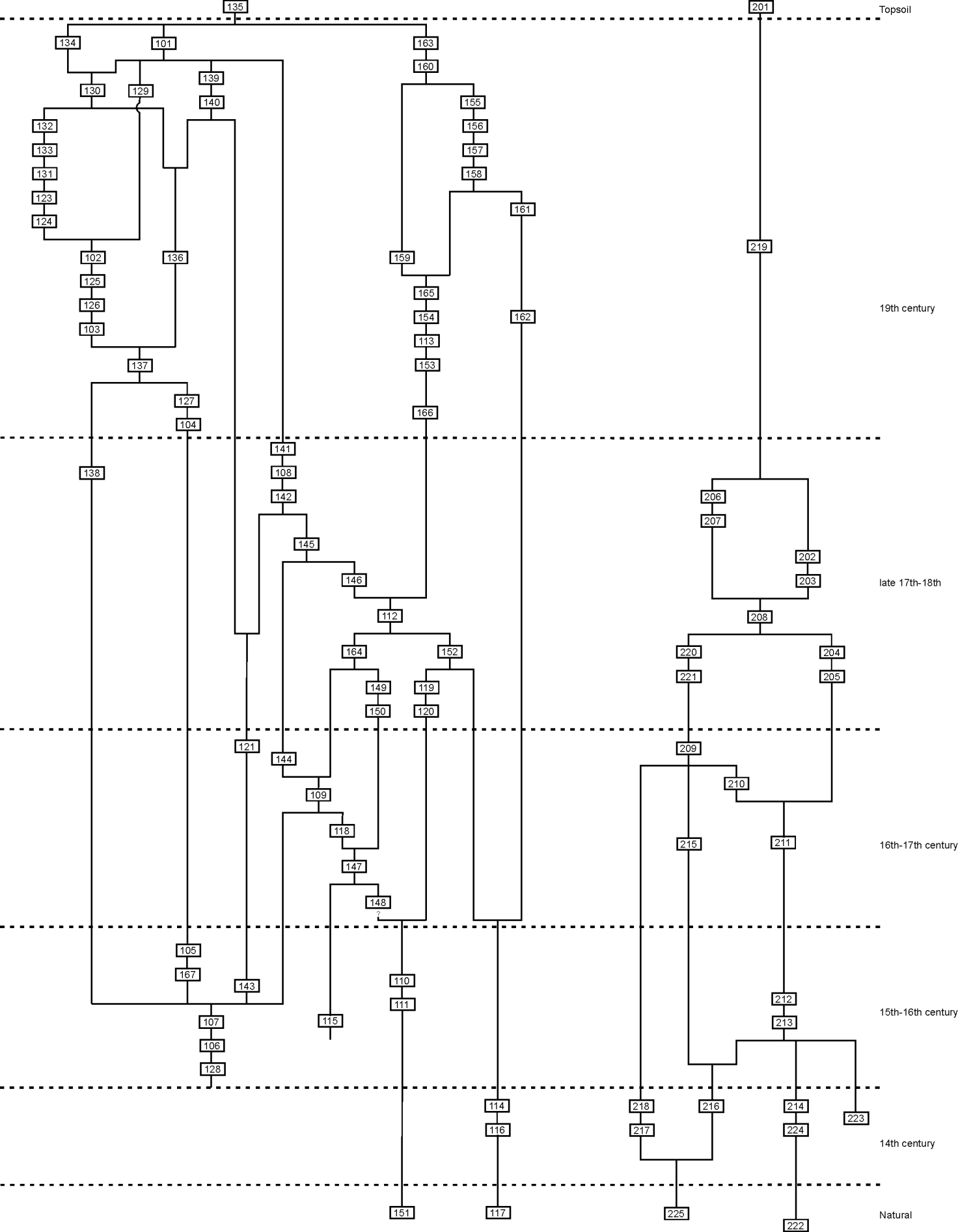
Plate 4: Painted medieval window glass from context [217], scale 1:1



Decorated floor tiles from [211]



Residual decorated floor tile
from within wall [112]



Phased site matrix