



ABBAY MILL HOUSE & FORBURY VAULTS
Abbey Square
Reading

Royal County of Berkshire

An archaeological evaluation report

May 2004



MUSEUM OF LONDON

Archaeology Service

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Summary (non-technical)

This report presents the results of an archaeological evaluation carried out by the Museum of London Archaeology Service on the site Abbey Mill House and Forbury Vaults, Reading. The report was commissioned from MoLAS by Edward Jones of PMB Holdings on behalf of the client Mildmay Partnership.

The site was located on the southern slope of a small hill. It had been subject to limited archaeological investigation in the 1960s (Slade 1972), the results of which indicated the presence of a medieval mill, which served the abbey.

Following the recommendations of an archaeological impact assessment report (Harwood 2001) and the requirement of the archaeological brief (Babtie August 2002), a number of evaluation pits/trenches were excavated on the site, both prior to and following the demolition of the standing buildings.

The results of the field evaluation have helped to refine the initial assessment of the archaeological potential of the site. The present buildings on the site had been constructed using terrace construction techniques. The northern half of the site was cut straight onto the underlying chalk, and no overlying stratigraphy survived. Archaeological survival was limited to three features cutting into the chalk; two were identified as pits, the third as a possible quarry pit. It is possible that the quarry pit was the same feature noted during earlier excavations in the 1960s. This pit contained large quantities of floral and faunal remains, and was dated by four sherds of pottery, to the medieval period.

The southern half of the site, as it dipped towards Holy Brook, revealed evidence for the survival of natural sand and gravel overlying the chalk. A subsoil and evidence for alluvial silting was also noted above the natural deposits. This indicated that the area was prone to flooding in the past, and also showed that there is a potential for the survival of archaeological deposits adjacent to Holy Brook.

However, in the light of revised understanding of the archaeological potential of the site the report concludes that the impact of the proposed redevelopment is unlikely to affect significant archaeological survival in the area of the site.

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1 Introduction

1.1 Site background

The evaluation took place at Abbey Mill House and Forbury Vaults, Reading, hereafter called 'the site'. Abbey Mill House and Forbury Vaults in central Reading, are bounded to the north by Abbey Square, to the east by Abbey Street, to the west by the Abbey Baptist Church, and to the south by the Holy Brook (see Fig 1). The Ordnance Survey National Grid Reference is 471890 173450. The level of the basement slab was at 37.54m OD. Modern ground level immediately to the north of the site was at 41.67m OD, to the east was at 39.23m OD, and to the south was at 37.20m OD. The site code used during the excavation is BR-ABB02.

A desk-top *Archaeological impact assessment* was previously prepared, which covers the whole area of the site (Harwood 2001) The *assessment* document should be referred to for information on the natural geology, archaeological and historical background of the site, and the initial interpretation of its archaeological potential.

An archaeological field evaluation was subsequently carried out on a series of test-pits within the existing buildings in January 2003. This was followed by a second phase of evaluation in March 2003.

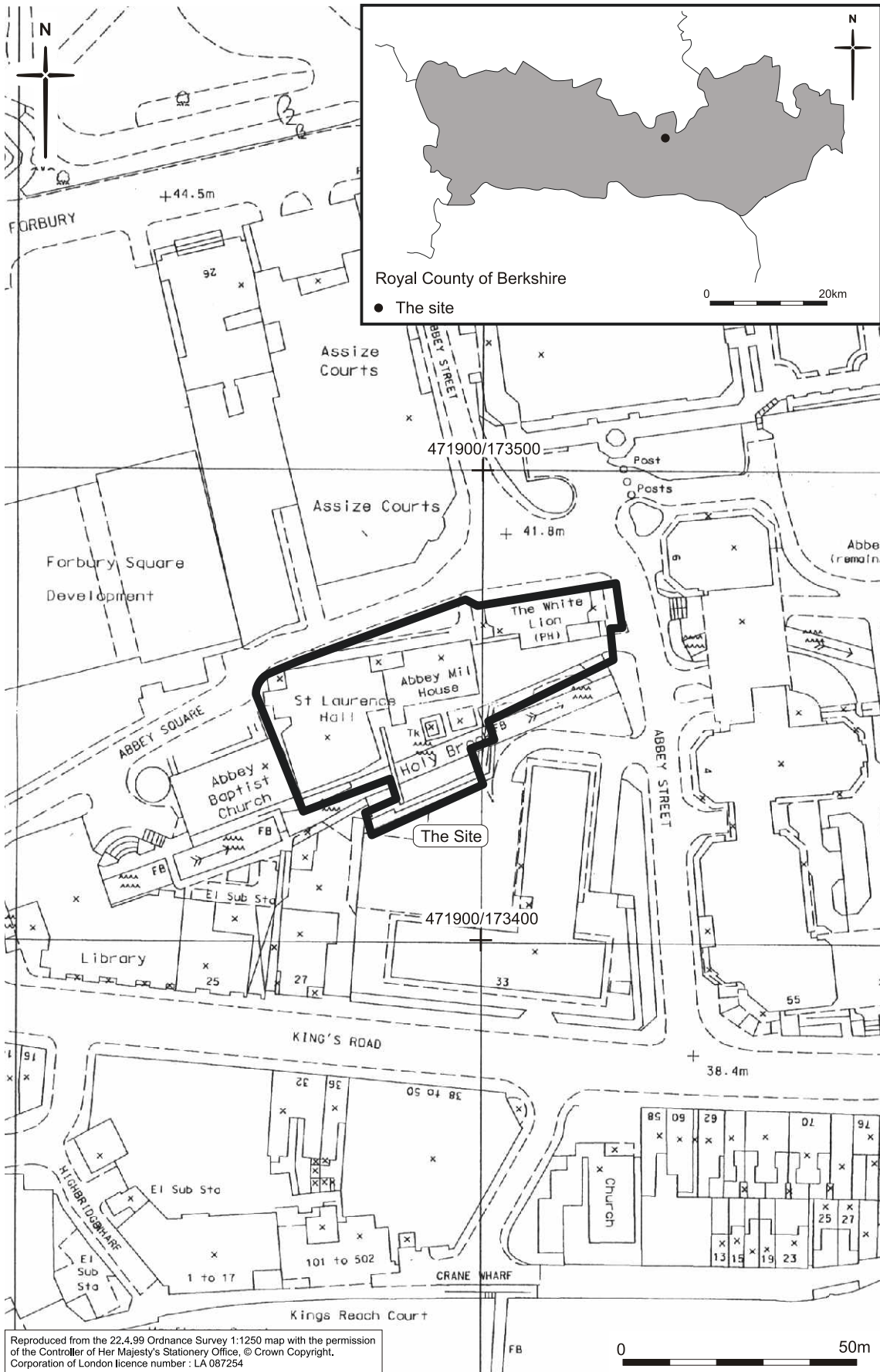


Fig 1 Site location

1.2 Planning and legislative framework

The legislative and planning framework in which the archaeological exercise took place was summarised in the *Archaeological impact assessment* which formed the project design for the evaluation (see Section 2, Harwood 2001).

The site contains a Scheduled Ancient Monument (NMR19019), the surviving medieval arch associated with the Abbey Mill. The medieval arch has been subject to a condition survey (Howe 2004).

1.3 Planning background

Planning consent has been given for the proposed development at Abbey Mill House and Forbury Vaults, Reading. A condition relating to archaeology was attached to the consent (condition 9).

Condition: No development shall take place within the site until the applicant, or their agents or successors in title, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation which has been submitted by the applicant and approved in writing by the local planning authority.

Reason: to ensure that such archaeological material and evidence of significance should be examined during this development and in the interests of protecting the archaeological heritage of the district in accordance with PPG16 (Archaeology and Planning).

1.4 Origin and scope of the report

This report was commissioned by Edward Jones of PMB Holdings on behalf of the Mildmay Partnership, and produced by the Museum of London Archaeology Service (MoLAS). The report has been prepared within the terms of the relevant Standard specified by the Institute of Field Archaeologists (IFA, 2001).

Field evaluation, and the *Evaluation report* which comments on the results of that exercise is intended to provide information about the archaeological resource in order to contribute to the:

- formulation of a strategy for the preservation or management of those remains; and/or
- formulation of an appropriate response or mitigation strategy to planning applications or other proposals which may adversely affect such archaeological remains, or enhance them; and/or
- formulation of a proposal for further archaeological investigations within a programme of research.

1.5 Aims and objectives

The following research aims and objectives were established in the *Method Statement* for the evaluation (Howe 2002, Section 2):

1. What is the nature and level of natural topography?
2. What are the earliest deposits identified?
3. What are the latest deposits identified?
4. Can the pre-monastic topography and environment of the area be reconstructed using the alluvial deposits of the Holy Brook?
5. Does any of the fabric of the medieval Abbey mill house survive? Can the plan be further refined, and can Slade's findings be linked to Ordnance Datum and OS grid?
6. Does any evidence survive of other waterfront activities or revetments on the site?
7. Do any post-medieval deposits survive?

2 Topographical and historical background

A detailed account of the topography, geology, archaeology, and historical background to the site has been prepared in the *Archaeological impact assessment* (Harwood 2001, Section 3). What follows is a brief summary of those findings.

2.1 Geology and topography

The site lies on a ridge of well-drained gravel (Reading Beds) over chalk, with a natural slope from north to south down to a natural stream channel, the Holy Brook (British Geological Survey Sheet 268, Drift).

A borehole survey on the site has indicated that alluvial clays survive on the southern part of the site adjacent to the Holy Brook at 35.80m OD in the west and rising to 36.54m OD to the east in the area of the ramp access. Elsewhere on the site the natural chalk is at 38.6m OD to the north of Abbey Mill House falling to 36.64m OD in the southeast of the site.

A topographical survey of the site shows the site as dropping from 41.76m OD north of St Laurence Hall and Abbey Mill House, to 37.20–38.65m OD to the south (LBH Wembley October 2001). At the east of the site the drop is from 40.89m OD north of the Forbury Vaults, to 37.40m OD to the south. The site has been terraced during construction of the present buildings.

2.2 Prehistoric

Prehistoric evidence in the immediate vicinity of the site, comprises of a few flint flakes, recovered from a trench next to the Abbey inner gatehouse (Vince et al 1982, 38). Sixteen possibly Neolithic flints were found in the area of the east end of the former Abbey church, also recovered was a single sherd of Early Bronze Age pottery and part of a globular later Bronze Age ceramic vessel (Slade 1976, 61, 64). Two fragments of Neolithic ground stone axes are noted to the north of the site (SMR 2017, and SMR 2035).

2.3 Roman

Roman material is limited to one sherd of pottery and three pieces of tile from the site of the Abbey Mill (SMR 2107, RD 11353). A mortarium sherd and a single sherd of Nene Valley ware were recovered from deposits near the Abbey church (Slade 1976, 61). 'The evidence does not indicate any concentrated settlement here' (Slade in Petyt 1993, 1). Disturbed burials from a site to the south of Kings Road (Harwood 2001, 12) have been radiocarbon (¹⁴C) dated to the Roman period.

2.4 Saxon

Place name evidence for a Saxon settlement at Reading seems very likely: the name Reading is considered to be a corruption of *Readingas*, or the followers of a certain *Reada*, 'the Red'. This name is considered to have been obsolete before AD 900.

Archaeological evidence for Early Saxon cemeteries has been discovered on several sites, most notably on the Dreadnought site near the mouth of the river Kennet (uncovered in 1891). A 'pagan' Saxon date is suspected for the body of a 40 to 60-year-old woman found near the Plummery Wall of the Abbey; and further burials have been found south of the Holy Brook (Sites 3 and 7, Harwood 2001, 12).

Twenty-two sherds of pottery and two metal objects were recovered near the Abbey church (Slade 1976, 61, 63-4). Further pottery recovered from the alluvial deposits on the north side of Holy Brook is considered to date to between the 10th and 12th centuries on the basis of its fabric (Hawkes 1991, 70).

Documentary sources indicate that a rampart was constructed between the Thames and the Kennet, by the Viking army that wintered in Reading in AD 870. This may have materially affected the site. Two plan sources have been found for the extent of the camp so created. Astill (1978, Fig 23) indicates that the rampart may have run down the later west side of the Abbey precinct. This would carry the bank and ditch to the west of the site. A more recent plan (Slade in Petyt 1993, 9) suggests that a north-south line running from the mouth of the Holy Brook to the Thames would encompass the smallest area necessary to serve an army of up to 5000 men and horses. This would run immediately to the east of the site.

2.5 Medieval

The site is within the area of the Abbey Mill and its ancillary buildings. The mill was sited on the Holy Brook, a natural tributary of the Kennet, which formed the southern boundary of the Abbey. The mill is to the east of the stable blocks, and to the west of the bridge. The mill and stables form part of the outer precinct, to the southwest of the main monastic complex.

The mill was a single, undershot, wheel within a two-storey flint and Caen stone mill house. Built between 1121 and 1164, the mill house straddled the Holy Brook. Two north-south walls of the medieval mill house survived to the early 1960s, with arches over the Holy Brook to allow east-west access. The eastern wall was demolished prior to construction of the present Abbey Mill House. The western wall survives and will be incorporated into the proposed scheme. The upstanding fabric of the Abbey Mill is original 12th/13th-century flint in mortar (Slade 1972, 77).

Adjacent to the mill was a dovecote (RD 15571), the exact location of the dovecote is not known, but it is most likely to be to the north of the site, as it was not observed during excavations of the stable block.

A survey of the demolition of Reading Abbey in 1549 gives an impression of more buildings than the conjectured stables, mill and dovecote. A slaughterhouse and a

'little' house are listed. In the 1860s building work to the north of the site revealed evidence of a medieval bake house (RD 15570).

Excavations on the site show that the mill house is of several phases, initially built integrally with the Abbey wall along the Holy Brook. The excavation report does not include OD heights, but instead indicates heights relative to street level. Given that the site appears to have been terraced by approximately 1m at this time, it is not possible to assign OD heights with any accuracy to the excavated remains.

2.6 Post-medieval

Following the Dissolution, the land of the Abbey, including that of the site, was handed back to Royal ownership. Lord Protector Somerset filled the interregnum between Henry VIII's death and Edward VI's coming of age. It was he who was instrumental in the first major phase of destruction of the Abbey.

A charter of Elizabeth I made in 1560 referred to permission "...also to take, pull down and carry away one house greatly ruined situate near the mill called the Abbey Mill..." (Charter 2nd Eliz I, Clause 52, quoted by Slade & Kemp (nd), II, n5).

The mill however appears to have continued working throughout this period.

In 1610, John Speed produced his map of Reading. There appear to be two versions in print. The first, published in Cram (1988, 33) shows a small structure between the Queen's Stable and the gatehouse, thought to be the mill. It would be likely that the mill continued in use throughout the post-medieval period. The surviving arches of the mill house have rebuilds and repairs in 2" brick, suggesting maintenance and use of the mill in the 17th century.

During the English Civil War Reading became a fortified town (1642). A map of this date shows the former Abbey mill along with the stable block, along the bank of the Holy Brook. Parts of the Abbey ruins were criss-crossed with defensive ditches and ramparts built by Parliamentary forces.

Speed's map in the 18th century shows little change in the area of the site. A note by Sir Henry Englefield (1779) comments on the substantial Tudor (re)builds of parts of the boundary, which survived until late in the 18th (probably meaning the Forbury wall). A survey of 1725 of the Belgrave estate shows the Abbey Mill, with buildings, possibly an inn and its courtyard, on the corner of Abbey Street and Abbey Square.

Gravel extraction is known to have taken place in various open areas around the former Abbey (Cram 1988, 33), and while there is no direct archaeological evidence of such activity on the site, it is possible that Pit 1 recorded on site by Slade is a gravel quarry. The Abbey Mill underwent extensive improvement and reconstruction during this time (Slade 1972, 67).

Development of the site took place in earnest in the 19th century. On the site, the mill buildings appear to have expanded, with open yards to the east and west. The

buildings on the corner of Abbey Square and Abbey Street have developed, and Ordnance Survey maps show this layout broadly lasting to the 1960s.

The Goad Fire Insurance Map of 1895 shows the mill as a 3 ½ to 4 ½ storey brick and timber building. Excavations on the site revealed large brick stanchion bases from this phase of the mill. The buildings are all likely to have been terraced into the slope to the north.

Ordnance Survey maps and the Goad Survey show a collection of two storey buildings, including two pubs in 1895, constructed of brick and timber, on the corner of Abbey Square and Abbey Street.

3 The evaluation

3.1 Methodology

All archaeological excavation and monitoring during the evaluation was carried out in accordance with the preceding *Method Statement* (Howe 2002), and the MoLAS *Archaeological Site Manual* (MoLAS 1994).

Eight test pits and three evaluation trenches were excavated on the site. The test pits were excavated prior to the demolition, and the trenches were opened following the demolition of the existing buildings. It was not possible to evaluate all trenches/test pits which had been proposed in the Method Statement due to health and safety requirements.

The slab/ground was broken out and cleared by contractors under MoLAS supervision. The test pits and trenches were excavated by machine by the demolition contractors, and monitored by a member of staff from MoLAS.

The locations of evaluation trenches were recorded by MoLAS by offsetting from adjacent standing walls and plotted on to a Basement Survey. This information was then plotted onto the OS grid.

A written and drawn record of all archaeological deposits encountered was made in accordance with the principles set out in the MoLAS site recording manual (MoLAS, 1994). Levels were calculated by a traverse from a bench mark on the arch at Abbey Walk, which had a value of 45.17m OD.

The site has produced: one test pit/trench location plan; 5 test pit plans and 3 trench plans at 1:20; 20 context records; five section drawings at 1:10; and 20 photographs.

A copy of the records can be found under the site code BR-ABB02 in the MoLAS archive. The site records will be deposited with the local archival repository, which in this case will be Reading Museum.

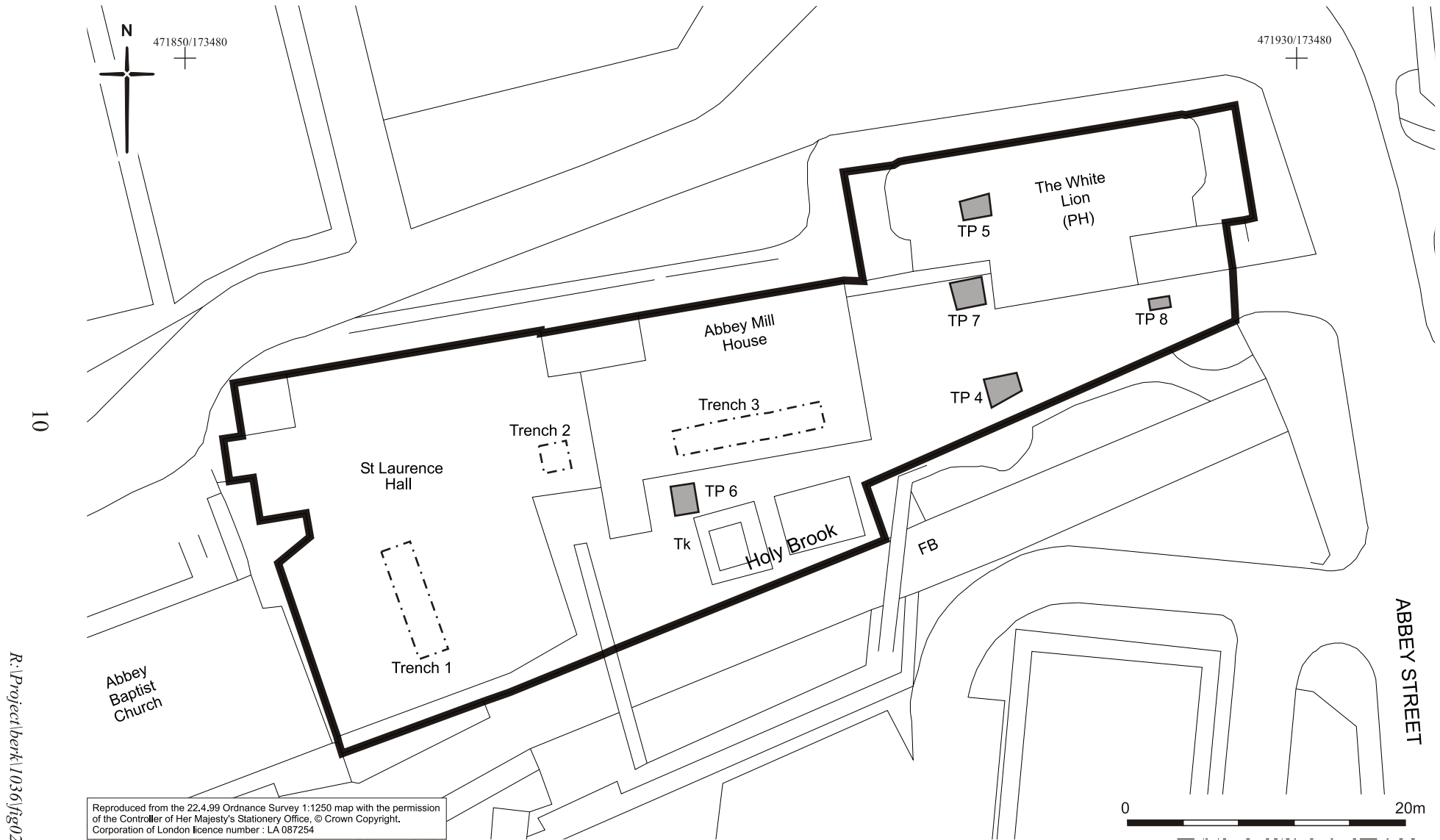


Fig 2 Trench and test pit locations

3.2 Results of the evaluation

3.2.1 For trench and test pit locations, see Fig 2 Test Pit 1

<i>Test Pit 1</i>	
Location	St Laurence Hall basement
Dimensions	1.20m x 1.0m
Modern ground level/top of slab	37.54m OD
Base of modern fill/slab	37.14m OD
Depth of archaeological deposits seen	-
Level of base of deposits observed	-
Natural observed	-

Located in the basement at the western end of St Laurence Hall, the proposed trench was reduced in size to a test pit that measured 1.20m by 1.0m, by 1.60m deep. The stratigraphy in this trench comprised of an orange brown fine silty clay, with frequent sand and gravel inclusions, up to 0.70m thick. This was truncated and overlain by a deposit of dry lean concrete, 0.50m thick. This was capped by reinforced concrete 0.40m thick.

The basement slab was recorded at a height of 37.54m OD.

3.2.2 Test Pit 2

<i>Test Pit 2</i>	
Location	St Laurence Hall basement
Dimensions	1.0m x 1.0m
Modern ground level/top of slab	37.54m OD
Base of modern fill/slab	36.14m OD
Depth of archaeological deposits seen	-
Level of base of deposits observed	-
Natural observed	-

Trench 2 was located in the basement at the eastern side of St Laurence Hall. This trench/test pit was abandoned at a depth of 0.40m when the concrete raft foundation had been cleared to reveal a further concrete beam below.

3.2.3 Test Pit 3

<i>Test Pit 3</i>	
Location	Abbey Mill House basement
Dimensions	1.0m x 0.70m
Modern ground level/top of slab	37.54m OD
Base of modern fill/slab	37.14m OD
Depth of archaeological deposits seen	-

Level of base of deposits observed	-
Natural observed	36.94m OD (Chalk)

Located in the basement at the eastern end of Abbey Mill House, the proposed trench was reduced in size to a small test pit measuring 1.0m by 0.70m, by 0.90m deep. The stratigraphy in this test pit revealed natural chalk at a depth of 36.94m OD. This was overlain by a layer of orange clay subsoil 0.20m thick, and was capped by 0.40m of reinforced concrete, at 37.54m OD. The natural deposits were truncated at the eastern end by a modern foundation cut.

3.2.4 Test Pit 4

<i>Test Pit 4</i>	
Location	Rear of the White Lion Public House
Dimensions	2.20m x 1.20m
Modern ground level/top of slab	37.43m OD
Base of modern fill/slab	37.13m OD
Depth of archaeological deposits seen	-
Level of base of deposits observed	-
Natural observed	36.70m OD (Chalk)

This test pit was located in the open area to the rear of the White Lion Public House. It measured 2.20m by 1.20m and was excavated to a depth of 1.82m. Natural chalk was revealed at the base of the test pit, at 36.70m OD, sloping to the south. This was overlain by five distinct layers. The earliest layer [18] was a mid orange brown sandy silt and gravel 0.17m thick. Above this was a layer of mid bluish grey sandy clay [17], 0.15m thick. Overlying this was a mid orange brown sandy silt [16], 0.50m thick. Above this was a layer of mid greyish brown sandy silt [15], 0.30m thick. Overlying this was a layer of mid greyish brown sandy silt and gravel [14], 0.40m thick. These layers appeared to be natural deposits. They were covered by 0.30m of building rubble and capped by a layer of asphalt. The surface of the test pit was at 37.43m.

3.2.5 Test Pit 5

<i>Test Pit 5</i>	
Location	White Lion Public House basement
Dimensions	2.0m x 2.0m
Modern ground level/top of slab	37.45m OD
Base of modern fill/slab	36.75m OD
Depth of archaeological deposits seen	0.80m
Level of base of deposits observed	36.95m OD
Natural observed	36.99m OD (Chalk)

This test pit was located in the basement of the White Lion Public House and measured 2.0m by 2.0m, by 1.50m deep. Natural chalk [13] was revealed in the base of the test pit at a depth of 36.99m OD. It was overlain by a homogenous layer of dark brown organic silt and clay [12], 0.80m thick. This deposit contained frequent wood, animal bone and charcoal fragments, from which a soil sample was recovered for

further analysis (see Appendix 2–4). Three potsherds recovered from this deposit comprised of South Hertfordshire greywares, dated to between *c* 1170 and 1350. A fourth potsherd has been provisionally identified as London-type ware dated to between *c* 1080 and 1350.

Overlying this homogenous deposit was a layer of reinforced concrete 0.40m thick, which formed the basement slab. This basement slab was recorded at a height of 37.45m OD.

3.2.6 Test Pit 6

<i>Test Pit 6</i>	
Location	Rear of Abbey Mill House
Dimensions	2.0m x 2.10m
Modern ground level/top of slab	37.35m OD
Base of modern fill/slab	36.75m OD
Depth of archaeological deposits seen	0.40m
Level of base of deposits observed	36.35 m OD
Natural observed	36.27m OD (Chalk)

Test Pit 6 was located in an open area to the rear of Abbey Mill House and measured 2.00m by 2.10m, by 1.20m deep. The base of the test pit was recorded at a depth of 36.10m OD. Natural chalk [11] was exposed at a depth of 36.27m OD. It was overlain by a layer of orange brown sandy clay [10] 0.10m thick. Above this was a layer of mid brown sandy silt and clay, with frequent gravel inclusions [9], up to 0.60m thick. These layers appeared to be natural deposits and sloped from north to south down towards Holy Brook. In the north east corner of the test pit, cutting into layer [9] was a small pit [8], which measured 0.30m by 0.32m, by 0.40m deep, the surface of which was recorded at 36.75m OD. It was filled with a moderately compact mid-dark brown fine silty clay [7], which contained frequent chalk and charcoal flecks, and occasional fragments of ceramic building material. (Due to the extensive water inundation in this test pit, this feature could not be safely examined further).

Crossing the south side of the test pit was a sewer pipe, aligned east west, which truncated the natural deposits below. Above this was another drain aligned north south. The latest deposits in this trench comprised of a layer of rubble 0.40m thick, which was covered by a layer of concrete 0.20m thick, which was capped by a layer of tiles, at 37.35m OD.

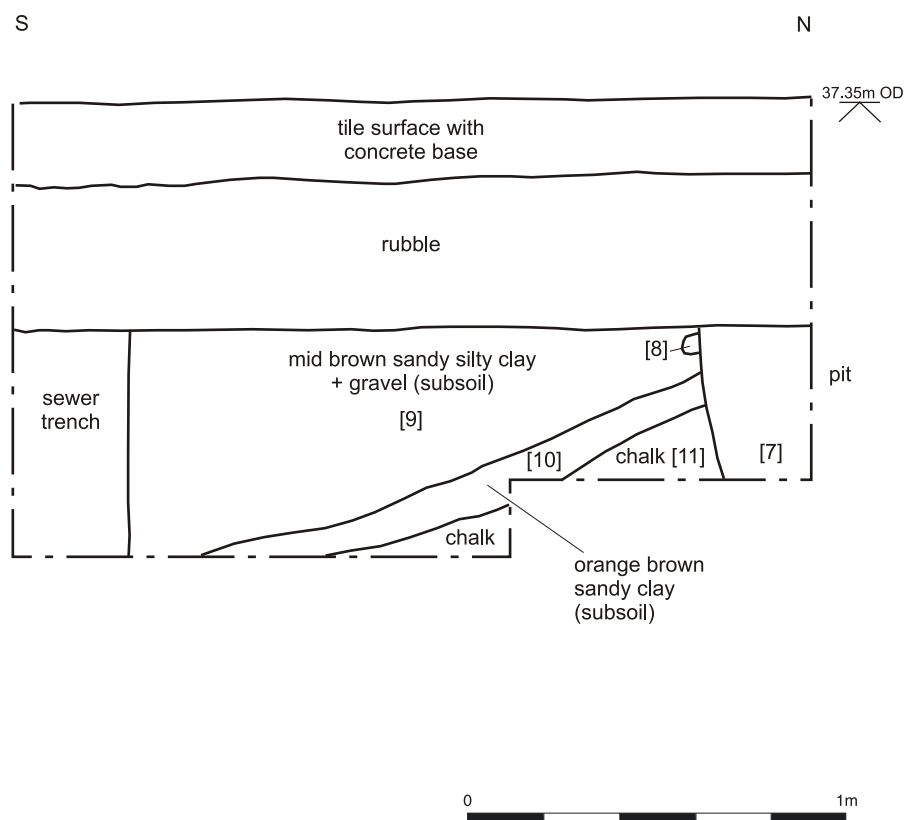
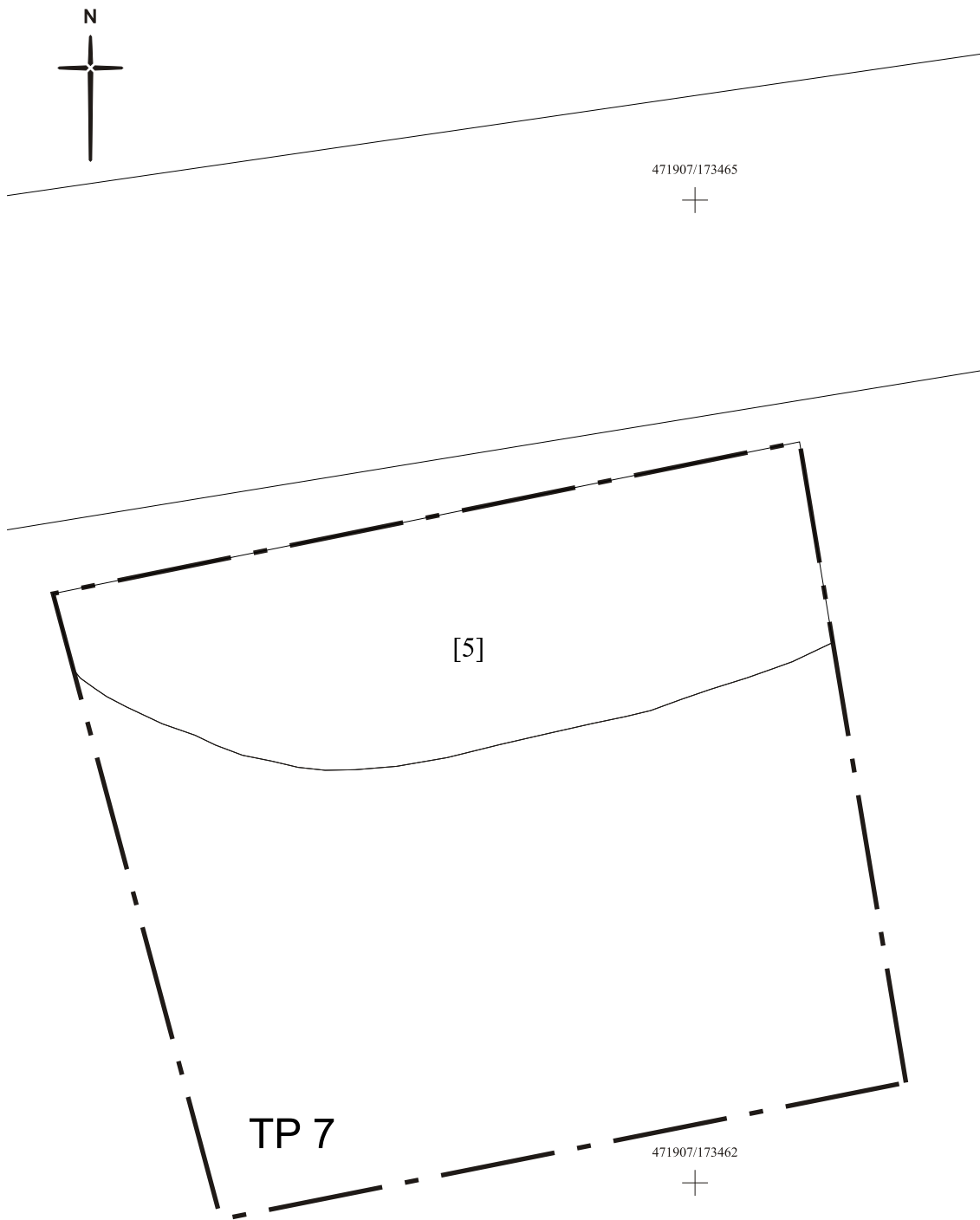


Fig 3 East facing section in test pit 6



Reproduced from the 22.4.99 Ordnance Survey 1:1250 map with the permission of the Controller of Her Majesty's Stationery Office, © Crown Copyright. Corporation of London licence number : LA 087254

0 1m

Fig 4 Plan of pit [5], in test pit 7

3.2.7 Test Pit 7

<i>Test Pit 7</i>	
Location	Rear of the White Lion Public House
Dimensions	2.0m x 2.20m
Modern ground level/top of slab	37.44m OD
Base of modern fill/slab	37.04m OD
Depth of archaeological deposits seen	0.67m
Level of base of deposits observed	36.40m OD
Natural observed	36.99m OD (Chalk)

This test pit was located in an open area to the rear of the White Lion Public House. It measured 2.00m by 2.20m, by 1.05m deep, with the base of the test pit at a depth of 37.42m OD. The earliest deposit recorded in this trench was the natural chalk [6], recorded at 36.99m OD. This was truncated by a large pit [5], at a depth of 37.00m OD. Only a small portion of the southern edge of this feature was visible. It sloped steeply down to the north, extending beyond the limits of excavation. Four fills were visible in section in this pit. The earliest comprised of an orange brown sandy clay [4], 0.05m thick. This was overlain by a deposit of dark brown organic silt [3], 0.20m thick. (This was thought to be the same deposit as [12] in test pit 5). Above this was a light blue grey silty clay [2], 0.23m thick. This was overlain by a deposit of mid brown sandy silt [1], 0.20m thick. Above this was a layer of rubble 0.35m thick, which was capped by a layer of asphalt 0.05m thick. The surface of the test pit was recorded at 37.44m OD.

3.2.8 Test Pit 8

<i>Test Pit 8</i>	
Location	Rear of the White Lion Public House
Dimensions	1.50m x 1.80m
Modern ground level/top of slab	38.43m OD
Base of modern fill/slab	37.53m OD
Depth of archaeological deposits seen	-
Level of base of deposits observed	-
Natural observed	36.54m OD (Chalk)

Test pit 8 was located on the ramp in an open area to the rear of the White Lion Public House. It measured 1.50m by 0.80m, by 1.50m deep. Natural chalk was recorded in the base of the test pit at 36.54m OD, sloping to the south. The chalk was overlain by a thin layer of subsoil, no more than 0.05m thick. This was truncated by a modern service, comprising of a plastic pipe aligned east west, running along the northern side of the test pit. The subsoil layer was overlain by a modern backfill 0.90m thick. This was covered by building rubble 0.48m thick and was capped by a layer of asphalt 0.12m thick. The ground surface was recorded at 38.43m OD.

3.2.9 Trench 1

<i>Trench 1</i>	
Location	St Laurence Hall (site of)
Dimensions	8.0m x 2.20m
Modern ground level/top of slab	37.54m OD
Base of modern fill/slab	37.14m OD
Depth of archaeological deposits seen	-
Level of base of deposits observed	-
Natural observed	36.54–36.94m OD (Chalk)

Trench 1 was located at the western end of the site in the basement area of the former St Laurence Hall. This trench was aligned north–south and was opened following the demolition of the building. It was situated in the same area as test pit 1 and measured 8m, by 2.20m, and was excavated to a depth of between 1.00m and 1.35m.

The earliest deposits in this trench comprised of firmly compact natural chalk. This was revealed at the northern end of the trench and sloped down to the south, towards Holy Brook. The uppermost level of the chalk was recorded at 36.94m OD, directly below the basement slab, falling away to the south to 36.54m OD, mid way along the trench. Overlying the chalk was a layer of natural orange sand and gravel, 0.20m thick. Again, this dipped to the south with the uppermost level of this deposit recorded at 36.54m OD dropping to 36.34m OD. Overlying the sand and gravel was a waterlogged subsoil deposit comprising of mid brown silty clay and gravel, which was exposed to a depth of 0.30m. The surface of this subsoil was recorded at 36.64m OD, and it formed the base of the trench at the southern end, 1.35m below the basement slab. Above the subsoil was a series of modern dump deposits 0.60m thick, which was capped by the basement slab, 0.40m thick. The surface of the basement slab was at 37.54m OD.

A modern cut truncated the natural deposits at the northern end of the trench, but no features of archaeological significance were noted.

3.2.10 Trench 2

<i>Trench 2</i>	
Location	St Laurence Hall (site of)
Dimensions	2.0m x 2.0m
Modern ground level/top of slab	37.54m OD
Base of modern fill/slab	37.14m OD
Depth of archaeological deposits seen	-
Level of base of deposits observed	-
Natural observed	36.94m OD (Chalk)

Trench 2 was located within the basement area of St Laurence Hall and was excavated following the demolition of the building. The trench measured 2m square and was located 5.20m to the north of the surviving medieval arch. The trench was excavated to a depth of 0.56m, with the base of the trench recorded at 36.98m OD.

Natural chalk was exposed to a depth of 0.16m throughout the base of the trench. The surface of the chalk was recorded at 36.94m OD. Directly above this was the basement slab, which was 0.40m thick. The surface of the basement slab was at a height of 37.54m OD.

All evidence for the footings of the medieval wall had been removed, and no other archaeologically significant features were noted.

3.2.11 Trench 3

<i>Trench 3</i>	
Location	Abbey Mill House (site of)
Dimensions	10.70m x 1.90m
Modern ground level/top of slab	37.54m OD
Base of modern fill/slab	37.14m OD
Depth of archaeological deposits seen	0.16m
Level of base of deposits observed	36.78m OD
Natural observed	36.92m OD (Chalk)

Trench 3 was located in the basement area of Abbey Mill House, and was aligned east–west. This trench was located in the same area as test pit 3, and was excavated after the demolition of the building. The trench measured 10.70m, by 1.90m, by 0.60–1.20m deep.

The earliest deposit in this trench was the natural chalk, recorded at a height of 36.92m OD. The chalk was evident throughout the northern side of the trench, dipping down to the south. It was overlain by a deposit of orange silty clay, 0.22m thick, which was evident along the southern side of the trench.

Truncating the natural deposits at the eastern end of the trench was a single feature, interpreted as a pit [20]. This pit was semi-circular in plan, the eastern half extending beyond the limit of excavation to the east. The exposed area of the pit measured 1.35m, by 0.80m, by 0.16m deep. It had gently sloping sides and a rounded base. The fill [19] comprised of a firmly compact coarse sandy clay and gravel, which contained a small fragment of animal bone. The base of the pit was stained dark brown.

The pit was sealed by the basement slab, which measured 0.40m thick, and was recorded at 37.54m OD.

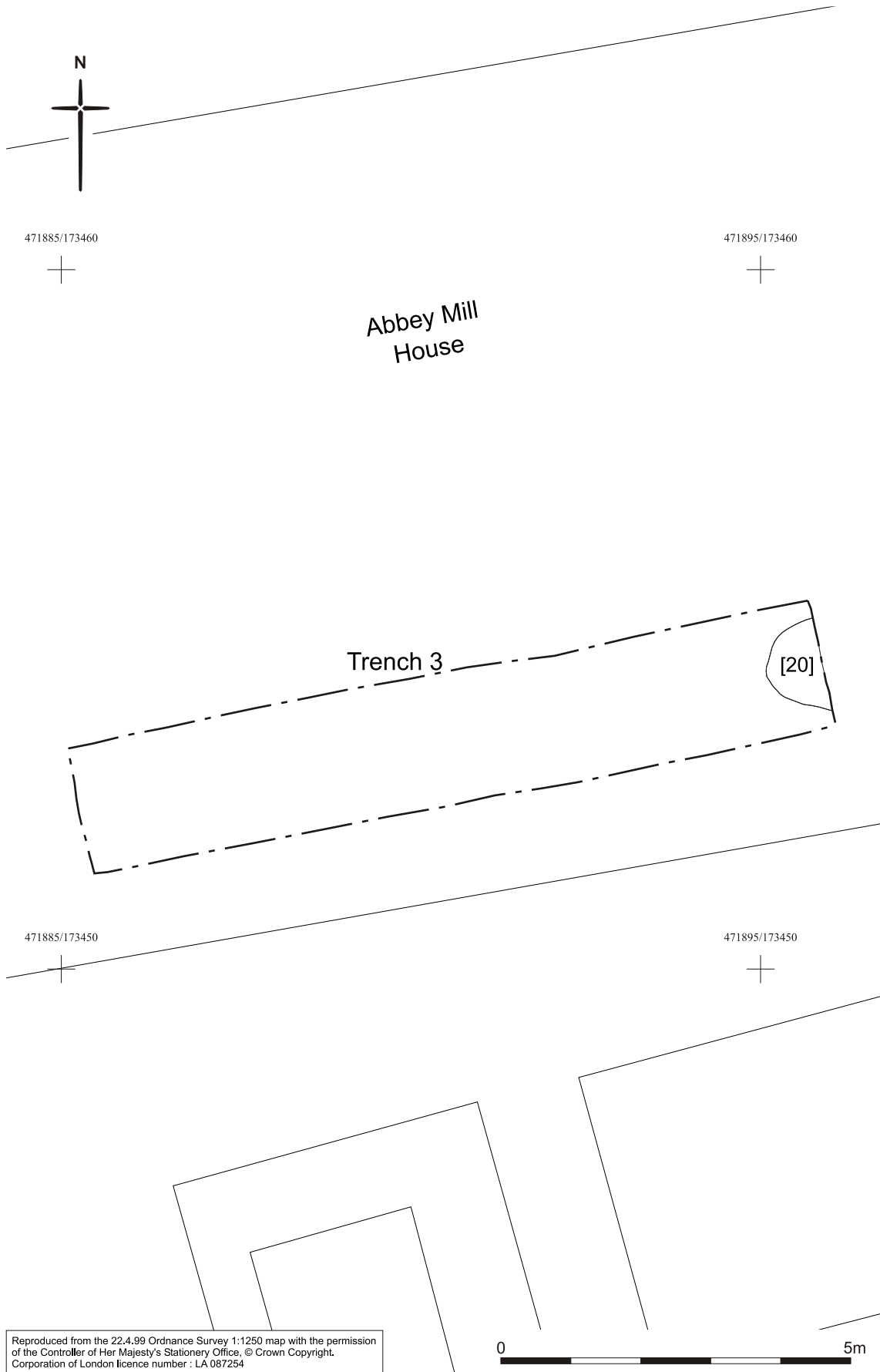


Fig 5 Plan of pit [2], in trench 3

3.3 Assessment of the evaluation

This archaeological investigation clearly showed that the site had been truncated, by modern terrace construction. The point on the site at which the natural chalk was truncated can be clearly seen running along an east–west line down the centre of trench 3. To the north of this line, no horizontal stratigraphy is expected to survive within the footprint of the site. It is possible that to the north beyond the footprint of the site, an area of archaeological survival may occur, but this would be in a very narrow strip, between the building and the road. Construction of the buildings and the adjacent road is likely to have removed any surviving archaeology.

To the south of the site, the natural chalk dipped significantly towards the Holy Brook. Natural sand and gravel, overlain by subsoil and alluvial deposits, indicated the survival of horizontal stratigraphy. This was noted in trench 1, test pit 4, and test pit 6.

A number of constraints to the evaluation design were experienced during the course of the archaeological investigation. Trenches 9, 10, 11, 13 and 14 could not be opened due to structural engineering requirements, to maintain the retaining wall to the north of the site. No excavation was possible within 4m of the retaining wall. To the south of the site trench 12 could not be excavated as it was located over buried tanks, adjacent to Holy Brook. As the nature of the tanks had not been ascertained, it was decided to leave them *in situ*.

4 Archaeological potential

4.1 Realisation of original research aims

The following research aims and objectives were established in the *Method Statement* for the evaluation (Section 2):

1. What is the nature and level of natural topography?

The natural topography comprised of chalk, overlain by sand and gravel, or fine silty clay, and covered with a subsoil layer. The chalk was recorded at between 36.27m OD rising to 36.99m OD at its highest point. The sand and gravel was recorded at a height of 36.54m OD.

2. What are the earliest deposits identified?

The earliest deposits identified comprised of three features truncating the natural. Two of these features could not be dated, the third contained animal bone and pottery of a medieval date.

3. What are the latest deposits identified?

The latest deposits identified comprised of make up and building debris, associated with the construction of Abbey Mill House and Forbury Vaults in the 1960s.

4. Can the pre-monastic topography and environment of the area be reconstructed using the alluvial deposits of the Holy Brook?

No. The archaeological investigation was such that no soil samples could be recovered from test pits 4 and 6, due to water inundation and collapse of the test pit sides, making access to the test pits unsafe. No evidence of alluvial deposits were noted in trench 1.

5. Does any of the fabric of the medieval Abbey Mill House survive? Can the plan be further refined, and can Slade's findings be linked to Ordnance Datum and OS grid?

No further evidence for the fabric of the medieval Abbey Mill House was uncovered. However, it would be possible to tie in the plans produced by Slade, with the OS grid, although it would be difficult to tie in Slades' findings with Ordnance datum.

6. Does any evidence survive of other waterfront activities or revetments on the site?

No evidence for waterfront activity was uncovered.

7. Do any post-medieval deposits survive?

No post-medieval deposits were noted on the site, only the remains of 20th-century construction activity.

4.2 General discussion of potential

The evaluation has shown that the potential for survival of ancient ground surfaces (horizontal archaeological stratification) on the site is likely along the southern side of the site, adjacent to Holy Brook. There is also potential for survival of deeply cut features. However, such survival is likely to be extremely limited because of the high degree of truncation by terracing. Future work in this area would also be restricted by its close proximity to the Holy Brook.

4.3 Significance

Whilst the archaeological remains are undoubtedly of local significance there is nothing to suggest that they are of regional or national importance.

5 Proposed development impact and recommendations

The proposed redevelopment at Abbey Mill House and Forbury Vaults, Reading involves the demolition of the above properties and the construction of a 12-storey office building and flats on the site. The footprint of the proposed development will extend across the full extent of the site east–west, and will extend from approximately the northern perimeter of the site to a line approximately 4m north of the Holy Brook.

The impact of this on the archaeological deposits will be to completely remove any surviving deposits within the footprint of the proposed development (Harwood 2001, Section5).

MoLAS considers that the extent of the truncation on the site, is such that no further archaeological evaluation is required. It is also recommended that the area to the north fronting onto Abbey Square be monitored by means of an archaeological watching brief, when ground reduction takes place for the proposed basement.

The final decision on the appropriate archaeological response to the deposits revealed on the site rests with the Local Planning Authority and their designated archaeological advisor.

6 Acknowledgements

The author would like to thank Edward Jones of PMB Holdings and Mildmay Partnership, for their commissioning and funding of this report. Kevin Wood, Eric Hatch and John Hickman of Davis and Samson for their help and co-operation in enabling the archaeological investigation to take place.

Museum of London Archaeology Service staff involved with this project included Liz Howe, Stewart Hoad, Catherine Drew, Joe Severn, and Sarah Jones.

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Mesolithic	Saxon (pre-AD 1066)
Neolithic	Medieval (AD 1066-1485)
Bronze Age	Post-Medieval
Iron Age	Unknown

6) PERIOD SUMMARIES

Undated: Two pits excavated on the site were undated, although it is probable that they were of a medieval or later date.

Medieval: One pit [5] was interpreted as evidence for the remains of a quarry pit noted during earlier excavations in the 1960's. The pit contained a homogenous layer of brown organic silt and clay 0.80m thick. This deposit contained frequent wood, animal bone and charcoal fragments. Three potsherds recovered from this deposit comprised of South Hertfordshire greywares, dated to between *c* 1170 and 1350. A fourth potsherd has been provisionally identified as London-type ware dated to between *c* 1080 and 1350.

7) NATURAL

Type: **Chalk**

Height above Ordnance Datum: **36.27m OD to 36.99m OD**

8) LOCATION OF ARCHIVES

a) Please provide an estimate of the quantity of material in your possession for the following categories:

Notes	PLans Digitised	PHotos 8 COL slides 1 BW contact sheet 23 digital photos	NGatives
Slides	Correspondence	MScripts (unpub reports, etc.) 1 method statement	
BULK finds 4 potsherds	SMall finds	SOil samples 30 litres	Other (please specify)

b) The archive has been prepared and stored in accordance with MGC standards and has been deposited in the following location: Reading Museum

c) Has a security copy of the archive been made?: YES/NO

Have you arranged for RCHME microfilming?: YES/NO

9) BIBLIOGRAPHY

Harwood, C, 2001 Abbey Mill House and Forbury Vaults, Abbey Square, Reading: Archaeological Impact Assessment, MoLAS unpub report

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SIGNED: DATE: 06/04/04

NAME (Block capitals):

APPENDIX 2: Evaluation of the medieval pottery

Nigel Jeffries

Description of the pottery

Summary/Introduction

The medieval pottery from the BR-ABB03 was recovered from environmental sample <1> taken from context [12] and comprises four potsherds from up to four vessels (estimated number of vessels) and weighed 35 grammes; the pottery is therefore from a small-sized group (contexts yielding with fewer than 30 sherds).

Methodology

The assemblage has been quantified using the MoLSS post-medieval London type series and followed standard MoLSS conventions; the numerical data therefore consists of sherd count, estimated number of vessels and weight, recorded on paper, and entered onto the ORACLE database.

The Pottery

<i>Table 1: Pottery General</i>		
Post-Roman Pottery	35 grammes	4 sherds/4 ENV/from 1 context

Fabrics and forms

Three of the sherds found are South Hertfordshire greywares (SHER). SHER is one of the major suppliers of coarse, unglazed jars and jugs into London between *c* 1170 and 1350 and is the generic term applied to a range of wheelthrown greyware fabrics (Blackmore and Pearce in prep). The most substantial vessel is the rim and partial upper section from a bowl; the other two sherds have been recorded as jars and are unscooted.

The remaining sherd has been provisionally identified as London-type ware (LOND). This is one of the major sources of glazed jugs used in London between *c* 1080 and 1350 (see Pearce, Vince and Jenner 1985).

APPENDIX 3: ASSESSMENT OF THE PLANT REMAINS

Kate Roberts

Quantification and assessment

Site archive: finds and environmental, quantification and description

<i>Table 2: Finds and environmental archive general summary</i>	
Bulk soil samples	Flot and residue from 1 sample; 10. 1 retained unprocessed for insect analysis

The botanical samples

Introduction/methodology

One sample was submitted for environmental analysis from a provisionally dated medieval/post-medieval context. All samples were processed by flotation, using a Siraf flotation tank, and meshes of 0.25mm and 1.00mm to catch the flot and the residue respectively. Part of the flot was dried and part was kept wet and residue was dried. The latter was sorted for finds and environmental material. The flot was briefly scanned using a low-powered binocular microscope, and the abundance, diversity and general nature of plant macrofossils and any faunal remains were recorded on the MoLAS ORACLE database. Table 1–Table 6 show the contents of the samples.

Charred remains

There were no charred plant remains.

Mineralised remains

A fragment of a possible rose family (Rosaceae indet) stone was present in this sample.

Waterlogged remains

Waterlogged remains were extremely common and extremely well preserved in this sample. In addition to large amounts of waterlogged wood this sample was very rich in waterlogged seeds, with a high species diversity. These included seed from plants common on disturbed ground including common chickweed (*Stellaria media*), dock (*Rumex* sp.), oraches (*Atriplex* sp.), goosefoot (*Chenopodium* sp.), sow-thistles (*Sonchus* sp.), poppy (*Papaver* sp.), knotgrass (*Polygonum aviculare*), black-bindweed (*Fallopia convolvulus*), black borehound (*Ballota nigra*) and carrot family (Umbelliferae indet.). There were also some seeds from plants common on arable and disturbed ground, including stinking chamomile (*Anthemis cotula*), corncockle (*Agrostemma githago*), goosegrass (*Galium* sp.) and field penny cress (*Thlapsi Pottery Generalarvense*). Also present were seeds from plants that like nitrogen rich,

disturbed soil, and these included henbane (*Hyoscyamus niger*), stinging nettle (*Urtica dioica*). Seeds from blackberry/raspberry (*Rubus fruticosus/ideaus*) were present, which could represent scrubby vegetation and/or consumption. These were the only seeds from edible plants present. Spike-rush (*Eleocharis* sp.), marshworts (*Apium* sp.), sedge (*Carex* sp.), marsh/lesser stitchwort (*Stellaria palustris/graminea*), buttercup (*Ranunculus acris/bulbosus/repens*), black mustard (*Brassica* c.f. *nigra*) and gypsy wort (*Lycopus europaeus*) were all present and may represent damp ground in the vicinity of this context.

Faunal remains

There were large amounts of fish bone present in this sample.

Artefactual remains

There were occasional occurrences of burnt flint, burnt stone, CBM, mortar and pottery.

The invertebrates

Introduction/methodology

There were no molluscs present in this sample.

Insects

There were occasional waterlogged puparia present in this sample.

Table 3: Summary of botanical assessment data

GP	Con	Sample	Planting	Proc. vol.	Lot vol.	Proc	HD Grain	HD Chaff	HD Seeds	HD Misc	HD Wood	VLG Seed	VLG Misc	VLG Wood	IIN Seeds	IIN Misc	Comments
	2			0	500							3		1			WET1DRY,RICH FLOT, ENV SPECIES COMMON
						✓						1		1	1		WOOD & GRAVEL

Table 4: Sample processing details

Subgrp	Context	Sample	Planting	Bulk vol	Lot	Lot vol	Any un-processed	Comment
	2		shed/post-shed	0		500		0L KEPT

Table 5: Artefacts from sample

Subgrp	Context	Sample	Planting	Constituent	Proportion
	2			FLINT)
				STONE)
				BM)
				MORTAR)
				OT)

Table 6: Flora and fauna from environmental samples

Subgrp	Context	Sample	Site	Dating	Process	Constituent	Abundance	Diversity	Comment
	2					VLG SEEDS			YCEUR,STEGRPA,FOEVU, ONAS,PAP,SONOL,BALNI,UMBE,ATR, LE,ANTCO,API,HYONI, THLAR, RTDI,CAR,BRA,STEME, UM,RUBFRID,FALCO,CHE, OLAV,POL,RAN,AGRGI,GAL
						VLG WOOD			
						FISH BONE			
					✓	ONE FISH			
					✓	ONE LMAM			
					✓	EGGSHELL			
					✓	VLG SEEDS			FOR AV FRAGS
					✓	VLG WOOD			INSAMPLED
					✓	MIN SEEDS			RU FRAGS

APPENDIX 4: ASSESSMENT OF THE ANIMAL BONES

Alan Pipe

Site archive: finds and environmental, quantification and description

Table 7: Finds and environmental archive general summary

Animal bone	estimated 90 fragments. Total 0.015 kg
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The animal bone

Table 8: Contents of animal bone archive

	Weight (kg)	No. fragments	No. boxes
Hand-collected animal bone	nil	nil	nil
Wet-sieved bone (from residue)	0.015	90	1 archive quality 'shoebox'

Introduction/methodology

The animal bone was recorded directly onto the MoLAS Oracle 8 animal bone assessment database. The material was described in terms of species, carcass-part, fragmentation, preservation, modification, and the recovery of epiphyses, mandibular tooth rows, measurable bones, complete long bones, and evidence for presence of sub-adult age-groups. All identifications referred to the MoLSS reference collection. Fragments not identifiable to species level were allocated to the approximate category 'sheep-sized'.

Summary, medieval

This material is summarised in Table 7 and Table 8.

Sample [12] {1}, dated to 1170–1350 at time of writing, produced 0.015 kg, approximately 90 fragments, of well-preserved animal bone fragments. This material derived from ray Rajidae, probably thornback ray *Raja clavata*, herring family Clupeidae, mackerel *Scomber scombrus*, eel *Anguilla anguilla*, carp family Cyprinidae, chicken *Gallus gallus* and sheep/goat *Ovis aries/Capra hircus*. There was no recovery of amphibians, wild birds, wild 'game' species or commensal fauna. The

fish material derived largely from vertebrae with dermal spines from thornback ray, and skull elements from carp family. Chicken was represented by vertebra and foot elements; sheep/goat by vertebra, lower jaw and toe fragments.

There was a single mandibular tooth row and two epiphyses, but no complete or measurable limb bones, and no evidence for modification. Chicken and sheep/goat produced evidence of mature and juvenile individuals.

The lack of evidence for modification and absence of potential for metrical study limits the potential of the sample group to study of species-composition, carcass-part representation and age-at-death.

Table 9: The animal bone

CONTEXT	SAMPLE	WT(kg)	FRAG	PRES	NOS	LMAM	SMAM	FISH	BIRD	AMPH	MANDIBLES	MEASURABLE	EPIPHYSES	LongBONES
12	1	0.015	25-75mm	good	90	2	0	2	1	0	1	0	2	0
TOTAL		0.015			90	11-100		11-100	1-10		1	0	2	0

Table 10: The animal bones detailed summary

CONTEXT	SAMPLE	TAXON	PART	AGE	STATE
12	1	chicken	foot	juvenile	unmodified
12	1	chicken	vertebra	mature	unmodified
12	1	herring family	vertebra	mature	unmodified
12	1	carp family	head	mature	unmodified
12	1	carp family	vertebra	mature	unmodified
12	1	eel	vertebra	mature	unmodified
12	1	mackerel	vertebra	mature	unmodified
12	1	sheep/goat	head	juvenile	unmodified
12	1	sheep/goat	toe	juvenile	unmodified
12	1	'sheep-sized'	vertebra	mature	unmodified
12	1	thornback ray	dermal spine	mature	unmodified