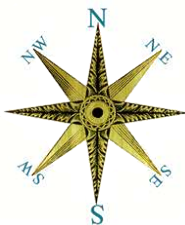


BREAKSPEAR HOUSE
BREAKSPEAR ROAD NORTH
HAREFIELD UB9 6NA
LONDON BOROUGH OF HILLINGDON
AN ARCHAEOLOGICAL FIELD EVALUATION



COMPASS



ARCHAEOLOGY

September 2009

BREAKSPEAR HOUSE

BREAKSPEAR ROAD NORTH

HAREFIELD UB9 6NA

LONDON BOROUGH OF HILLINGDON

AN ARCHAEOLOGICAL FIELD EVALUATION

PLANNING APPLICATION REFERENCE: 7610/APP/2008/1012 (Condition 23)

SITE CENTRE NGR: TQ 06035 89655

SITE CODE: BZH09

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September 2009

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Abstract

An archaeological evaluation was conducted in July 2009 on land adjacent to Breakspear House, Harefield, London Borough of Hillingdon. The work was carried out on behalf of Clancy Developments Ltd. and as a condition of planning consent, to assess the archaeological impact of a proposed development of new build housing units and an underground car park. Breakspear House is a Grade I listed building and has previously been investigated as part of a Desk-based Assessment and Historic Building Record (Compass Archaeology March 2009).

Breakspear's origins lie in the medieval period. Some of the surviving fabric of the House dates to the late 16th or early 17th centuries, although the building was substantially extended and rebuilt during the 19th century, and in the 1950s was converted for use as a residential home. Since 1987 the property has been vacant and has undergone gradual structural deterioration. The current development aims to restore the main house as a number of apartments: the new build units and underground car park will be located just to the west/northwest, in the area which formed the subject of the present evaluation.

Six trial trenches were dug in advance of development to assess sub-surface archaeology, and targeted several 17th to 19th century features and buildings recorded on the estate. However, the evaluation did not expose any significant remains: the evidence relates entirely to post-medieval activity on the site, and largely to developments in the mid 19th century or thereafter.

The four trenches nearest the House exposed brick footings of the former stables and coach house, which have been dated by material analysis and map evidence to c 1850-65. This development had removed virtually all earlier deposits and features to the level of the natural silty clay, with the exception of a reused brick rubble foundation, probably for a later 18th/early 19th century boundary wall. Two further trenches were located in what had been the walled garden. One of these contained an east-west ditch type feature dating to the first half of the 19th century, plus a slightly later 6" iron pipe that probably carried the main water supply to the House. The final trench had been truncated by a series of glasshouses constructed around 1900.

The lack of significant finds notwithstanding, the dating of the former stables and coach house does form a useful addition to the history of the estate. Moreover, it is quite likely that these works took place at the same time as the major rebuilding and extension of the House itself – and probably within a few years either side of 1850.

In view of the absence of any significant or early finds, it is proposed that no further archaeological mitigation should take place in relation to the proposed development of this area.

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1. Introduction

- 1.1** This report summarises the results of an archaeological field evaluation carried out in advance of the construction of new build residential housing and an underground car park at Breakspear House, Breakspear Road North, Harefield, London Borough of Hillingdon. The evaluation was carried out toward fulfilment of condition 23 as part of the planning application reference 7610/APP/2008/1012. Fieldwork was conducted on behalf of Clancy Developments Ltd. by Compass Archaeology from July 23rd to July 30th 2009.
- 1.2** The investigated site lay immediately to the northwest of Breakspear House, a Grade I listed building earmarked for restoration and conversion into residential apartments. The recorded history of the house begins in the 16th century, although the majority of the current historic standing building fabric reflects the remodelling of the house in the mid-later 19th century. A previous Desk Based Assessment (DBA) and Standing Building Survey carried out by Compass Archaeology has highlighted the historical significance of the house and associated grounds, and has identified the earliest phase of the house as dating to the later 16th century. Historical maps indicate the presence of various former structures and drains in the grounds surrounding the site that relate to the listed building.
- 1.3** The evaluation was required by Hillingdon Council planning authority, in consultation with the English Heritage Greater London Archaeological Advisory Service (GLAAS), as part of the planning process following a previous Desk-based Assessment and Historic Building Record (*Compass Archaeology*, March 2009).

The aim of the evaluation was to model the potential impact of the proposed development – underground car park and new housing units – on any sub-surface archaeology in the immediate area. For this purpose, Compass Archaeology submitted a Written Scheme of Investigation (WSI) to English Heritage GLAAS, dated 6th July 2009. The WSI specified the excavation of six evaluation trenches within the proposed development footprint, covering a total area of approximately 136 square metres, to evaluate the extent and significance of any buried archaeological remains.

2. Acknowledgements

Compass Archaeology is grateful to Clancy Developments Ltd. for commissioning the project, and also to the following individuals for their assistance prior to and during the evaluation:

Sharon Mungoven, John Kelly and Paul Dyer, Clancy Developments Ltd.

The work was monitored by Kim Stabler, Archaeological Adviser, English Heritage GLAAS, on behalf of the London Borough of Hillingdon.

Specialist assessment of brick samples was undertaken by John Brown of Gifford.

3. Site Background

3.1 Location

The evaluation site was located in the London Borough of Hillingdon, approximately centred at National Grid Reference TQ 06035 89655 (see Fig. 1). Breakspear House lies approximately one kilometre to the south east of Harefield Village, within a rural setting in the Green Belt. The local land surface is gently undulating, at a height of about +80m above Ordnance Datum in the evaluation area but sloping away to the southeast.

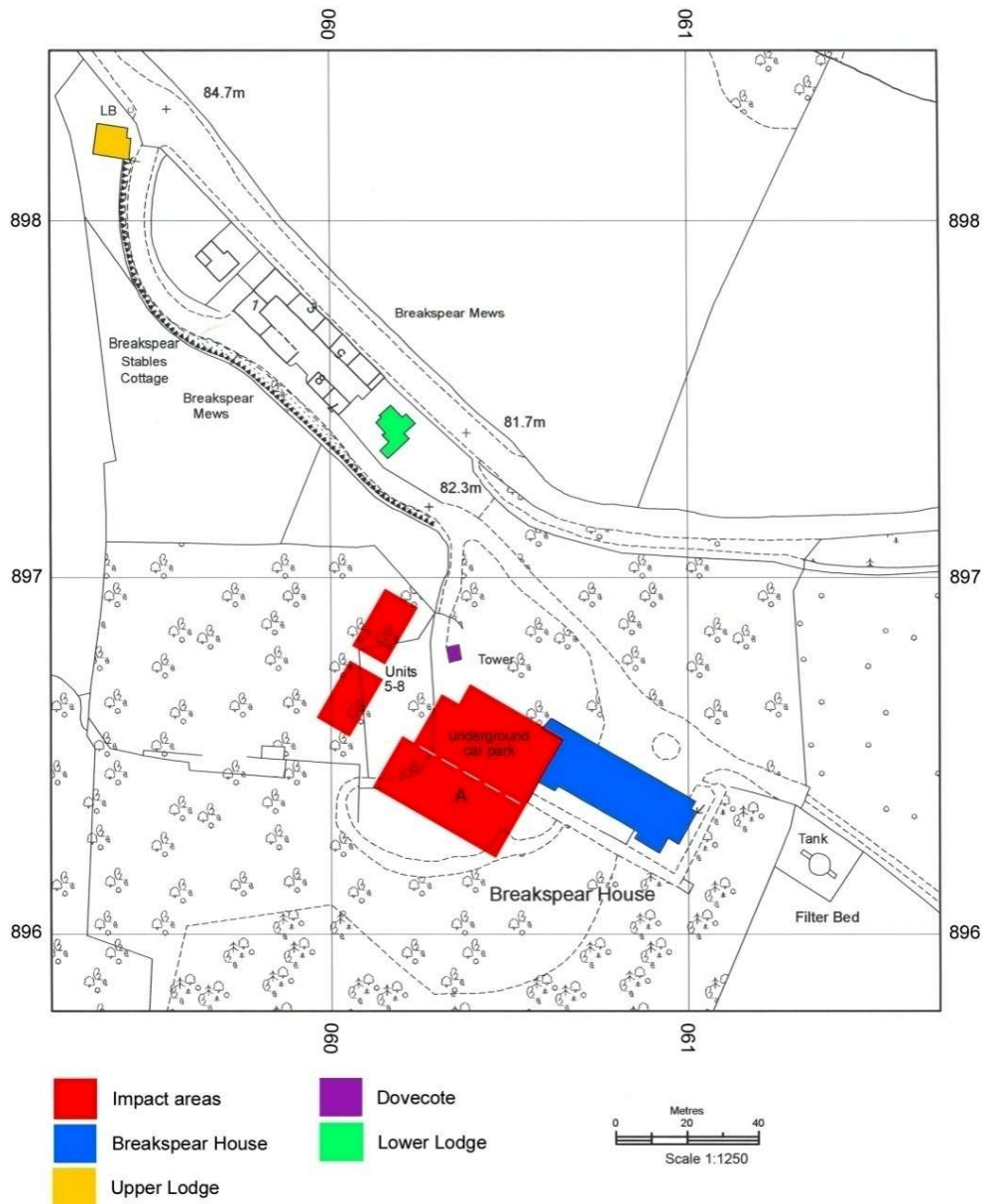


Fig. 1: Extract from the 2008 OS plan, adapted to show the footprint of the proposed new build areas and underground car park (red) in relation to the present house (blue) and other heritage features.

Reproduced from the OS map with the permission of the Ordnance Survey on behalf of the Controller of Her Majesty's Stationery Office, ©Crown Copyright (Compass Archaeology Ltd, 5-7 Southwark Street, London SE1 1RQ, licence no. AL 100031317).

The British Geological Survey indicates that the site is located at the junction of the London Clay and Glacial sand/gravel plus Head deposits (Sheet 255; Fig. 2). The drift Head deposits have yielded artefacts from early periods across the Borough, and any site located at the meeting of geological strata may have proved favourable for settlement from the earliest times.

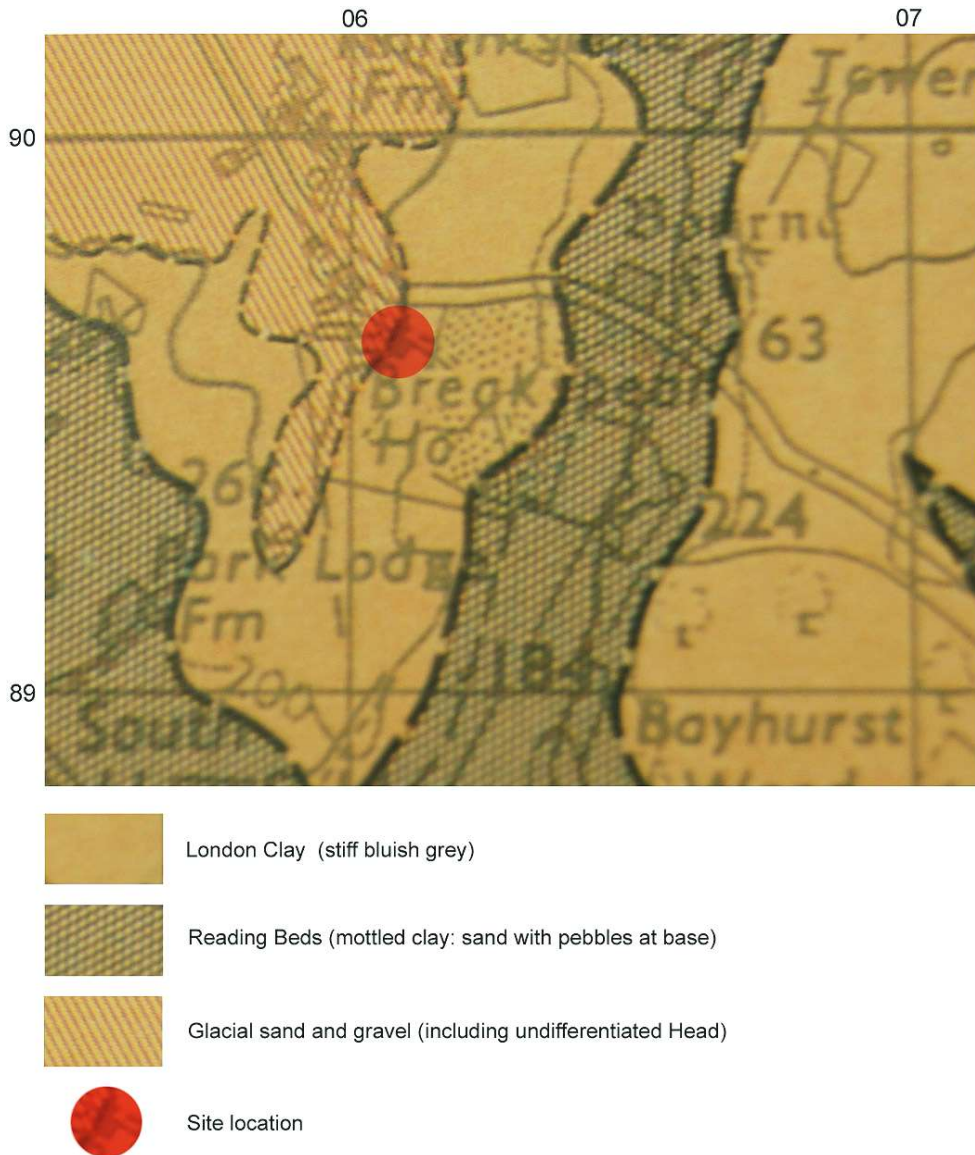


Fig. 2: The site in relation to the current British Geological Survey map (Sheet 255).

3.2 Archaeology and History

The archaeology and history of Breakspear House and the surrounding area is discussed in detail in the relevant sections of the Desk-based Archaeological Assessment and Historic Building Record (*Compass Archaeology* March 2009, section 6, page 20). Since the present report is an addition to this previous work the archaeological and historical background will only be briefly reiterated here. For a more detailed account the previous report should be consulted.

3.3 Prehistory

There are no known prehistoric finds from the property or the immediately surrounding area. The nearest prehistoric find spots are two localities that have produced Mesolithic and Neolithic chipped stone, and are both located *c* 1km to the south of the site: the material from these find spots is also considered to be residual. The poorly drained clay soils underlying the site would not be best-suited to early agricultural exploitation, or therefore a most likely location for prehistoric settlement.

3.4 Roman and Saxon

No Roman or Saxon era finds are recorded anywhere in the vicinity of the site.

3.5 Medieval

Harefield was a village during the medieval period and several contemporary sites have been recorded in the vicinity. However, during much of the period the site of Breakspear House was probably open fields and not permanently occupied. However, the name Breakspear does date back at least to the 14th century. A William *Brekespere* was granted lease to a house in Harefield in 1376. A Nicholas *Brakespere* had already been mentioned in connection with Ruislip in 1246, suggesting that the family was in the area prior to the 14th century – if not on the present site.

3.6 Post-medieval and Modern History of the Breakspear Estate

A variety of cartographic and documentary evidence provides a wealthy source of information for the post-medieval development of the site. Generally the area was dominated by estates and large farms with associated enclosed fields. Agriculture appears to have been the main economic activity in the area, with little evidence for other industries. Breakspear House and estate is well known in the locality by the 17th century and is recorded in numerous documents and on later maps of the area.

By the beginning of the 17th century the Ashby family were the owners of Breakspears¹, which was the largest non-manorial estate in the parish. The estate appears to have been purchased by the Ashby family during the later 15th century, from the previously recorded Breakspear family (see above). It remained in the possession of the Ashbys throughout the 16th and 17th centuries. The estate passed to Elizabeth Ahsby in 1769 and from her into the possession of the Partridge family. Through inheritance it passed to William Wickham, and then to Captain Alfred Henry Tarleton in or about 1886².

Captain Tarleton died in June 1921, and although his widow lived at Breakspears until her death in 1951 the estate was acquired in 1942 by the county council as 'green belt' property. Between 1956 and 1987 the house was in use as residential

¹ The house was generally referred to as 'Breakspears' until *c* 1950.

² This date is based upon map evidence that William Wickham Drake's widow was still alive in 1886, although the Victoria County History gives the date of 1877 for the transfer of the estate.

care home for the elderly. After 1987 the house was not permanently occupied, and gradually fell into a state of disrepair³.

Breakspears is first shown on maps in the 16th century: the road layout is of some antiquity and is also shown on many of the early maps for this area. However, some of the historic maps show great swathes of undeveloped countryside and fields, and therefore, only those maps that specifically relate to the archaeological potential of the site are illustrated and discussed below.

The first detailed survey of Middlesex is Rocque's *Map of the County of Middlesex*, published c 1754 (Fig. 3). This gives a good picture of the historic settlement pattern, and although the map base is not totally accurate the site is shown as a reasonably sized estate in a rural setting. At this time Breakspears was occupied by Robert Ashby: the estate is clearly marked and named and the house appears to be quite accurately drawn when compared to the more detailed survey of 1771 (Fig 4). However, there are more substantial buildings at Knightscode (the large estate to the north, not shown here) as well as several buildings around *The Place* and to the east at *Bourn Farm*. The L-shaped Breakspear House itself was modest in comparison to the large structure that stands on the site today. The extensive avenue of trees projecting from the front entrance can be seen and this obviously was a formally planted vista or walk. Other formal planting and ponds are not shown, although some of the mature trees now standing on the site probably date to the middle of the 18th century.



Fig. 3: Map of the County of Middlesex by John Rocque (1754) with the location of the Breakspear Estate shown in red © Guildhall Library.

³ This section extracted from Reynolds, S. (Editor) 1962. 'Harefield: Manors', A History of the County of Middlesex: Volume 3: ...Harefield, Harlington *et al* (1962), pp. 240-246. URL: <http://www.british-history.ac.uk/report.aspx?compid=22351>.



Fig. 4: Extract from the 1771 Plan of the Estate of Joseph Partridge, with new build areas and underground car park area are highlighted in red (©London Metropolitan Archive).

The above plan shows in detail the configuration of the buildings then on the site, with the main house as an L-shaped building in the centre of the image; the long southeastern extension being a service wing. The proposed new build areas lie to the west and northwest. Formal and kitchen gardens (and probably orchards) are laid out around the house, with what appears to be a walled garden just to the southwest, and the home farm is established to the east. There is an oval carriage drive to the northeast, and elsewhere six large ponds. The Dovecote can be seen between the two smaller ponds at the top of the image.

The surrounding fields are named (eg. ‘Grove Meadow’; ‘Barn Meadow’), as are all the fields on the plan. The large rectangular ponds to the northwest are probably for fish, and at least one of appears to fall within the northern part of the new build area. The cluster of buildings to the east of the house do not appear on any later plans but are known to be the farm buildings, and are well outside any proposed redevelopment work. Whether these buildings were not shown on Rocque’s plan of 1754 because they were not surveyed or simply because they had not been built is not known.

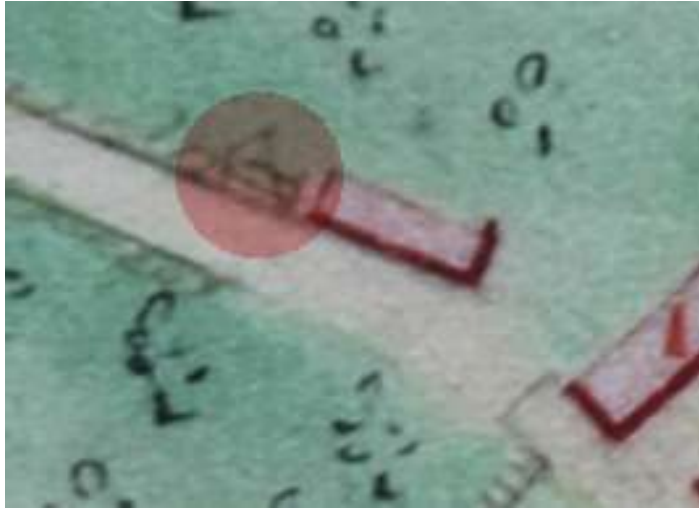


Fig. 5: Detail of Plan of the Estate of Joseph Partridge (1771), taken within the area of the proposed car park and Units 1-4 (see Fig 4).

The area shown highlighted in red appears to indicate a gate, with a path or drive to the south (bordered by a fence and hedge) and small adjacent buildings to the east. These buildings are not shown on the Rocque plan so their date is uncertain, and any archaeological remains relating to them depends on subsequent phases of construction and clearing of the site. It is possible that John Partridge had further buildings constructed on his estate, although as the survey was drawn up just two years after his wife inherited the estate in 1769, it seems unlikely that construction had taken place immediately upon their occupancy. It is more likely that the survey represents the estate as John Partridge acquired it.

However, the buildings shown in Fig 5 were of direct relevance to the evaluation, being within the new build impact areas. Although we do not know the function of these buildings or how they were constructed they were probably outbuildings of some kind, possibly sheds or stables.

The Enclosure map of 1813 shows that the house and estate had changed significantly since the survey of 1771 (Fig 6). In 1813 the owners were John and Elizabeth Partridge and the Partridge family remained at the house until 1857: the name 'Partridge' is visible near the top of the map, bordering Breakspear Road North and identifying the owners of the estate.

Most notable on the Enclosure map are two fairly large buildings to the northwest (and parallel to) the main house, the easternmost possibly linked to the house by a narrow corridor whilst the other building stands across the proposed new build area. The main house has also changed, with an additional projection out of the southeast front. The nature of the land around the house also appears to have changed, with the area directly west of the house no longer part of 'Kitchen Field', which is shown further west. The entrance to Breakspears continues to be the northeast front, and although no elaborate driveway is drawn in there was presumably an exit onto Breakspear Road North. The farm buildings and formal gardens have now completely gone.

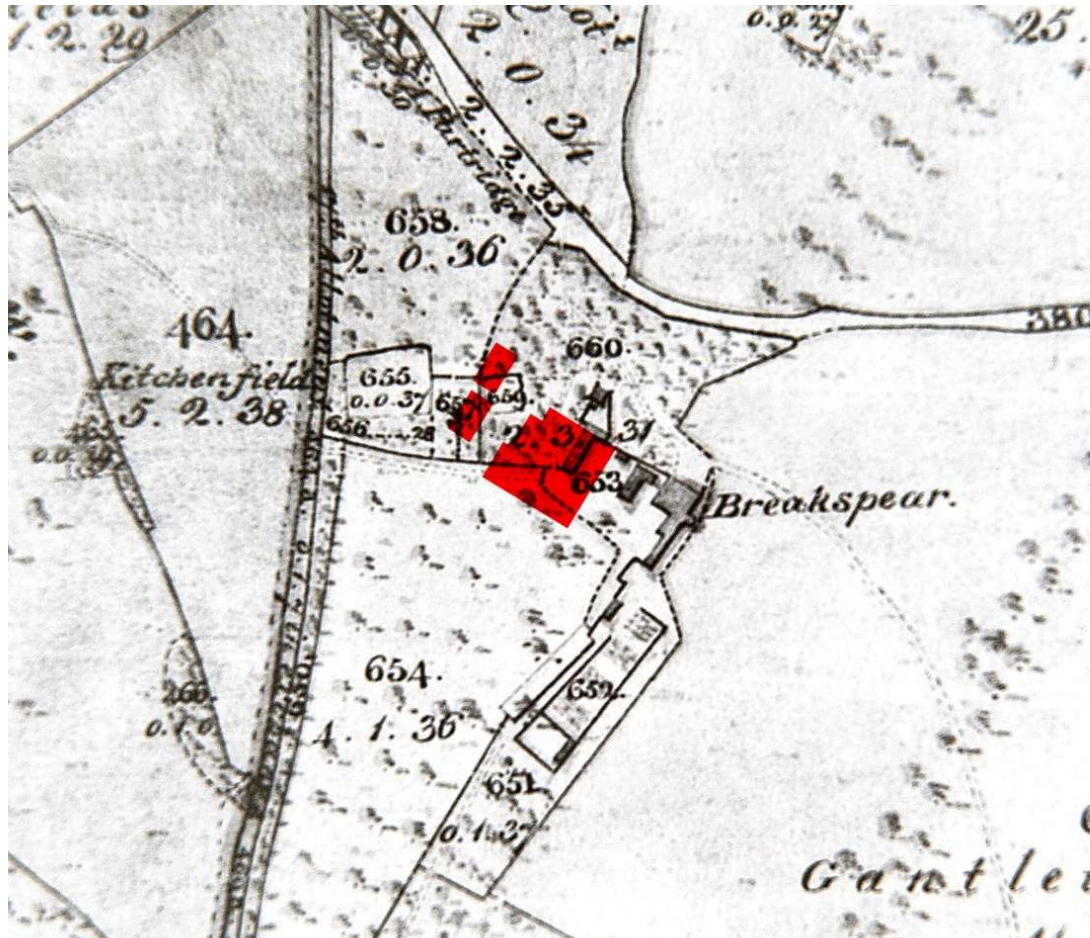


Fig. 6: Extract from the Enclosure Map (1813). Breakspear is shown on the map, together with a house called Little Breakspears about a mile to the north. This may be the house referred to in the 16th century as *'Breakspears next the heath, otherwise Saunders'*, when it was not part of the estate.⁴

Unfortunately there was no available plan of Breakspears between 1813 and 1866. Although tithe maps were produced in the 1840s it appears that the house was not on titheable land, as it is not shown on the Harefield tithe map or apportionment. Therefore some mystery surrounds what happened after 1813. On Elizabeth Partridge's death in 1817 the estate passed to her son, Joseph Ashby Partridge, who passed it on to a relative of his wife, William Wickham Drake, on his death in 1857. However, the First Edition of the 25-inch Ordnance Survey – originally surveyed in 1866 – shows that the house and grounds had undergone considerable alteration since 1813 (Fig 7). The main house had been extended to form the large building much as it stands today (although there were to be even later additions). Most notably, the narrow wing at the southern end of the southeastern elevation of the house was demolished, leaving a stump which may well have been converted to a window (a bay window is shown and there are impressive views from that side of the house to this day). The lodges and other cottage buildings on the estate have also not yet been built.

⁴ From Reynolds, S. (Editor) 1962.

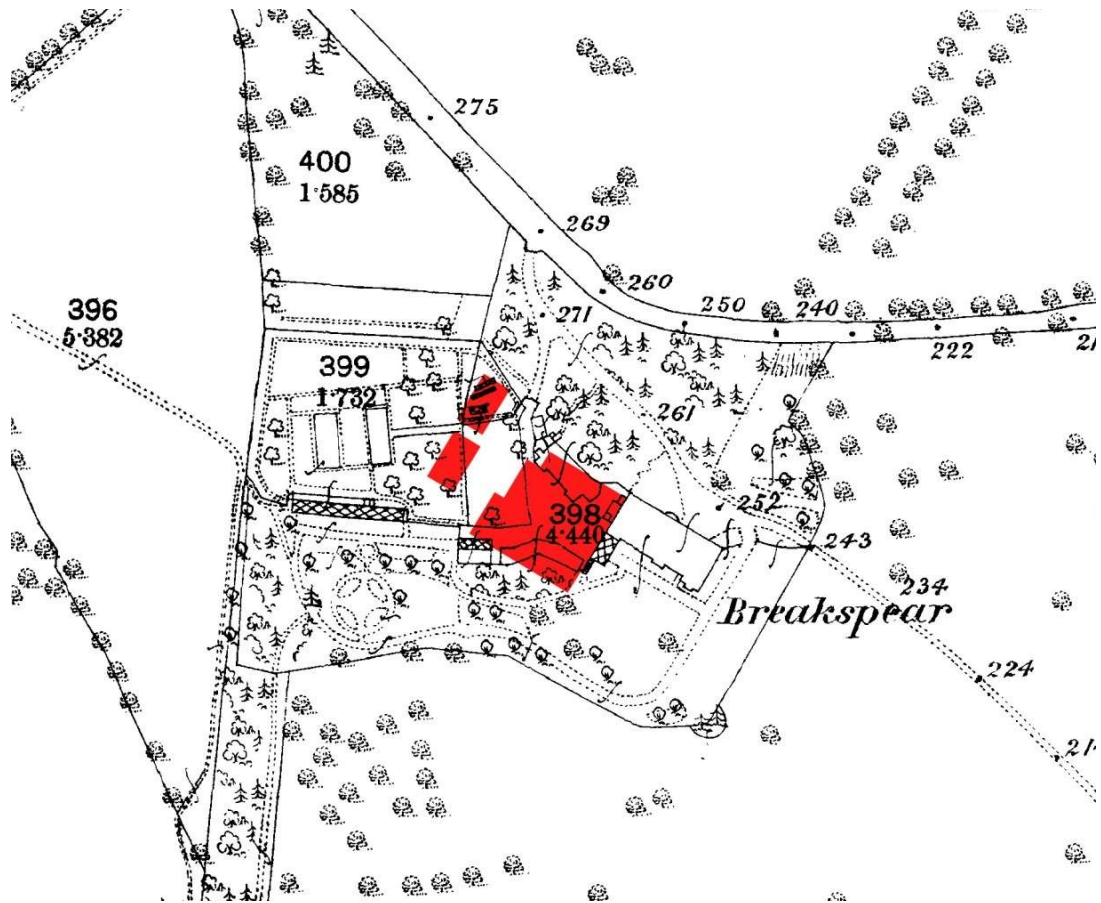


Fig. 7: Extract from the Ordnance Survey 25-inch 1st Edition map (surveyed 1866; this copy reprinted 1890)

Figure 7 shows little change from the OS 1866 plan, and in fact is really only a clearer version or reformatting of the same map. The walled garden is shown much more clearly on this plan, with glasshouses and the conservatory at the southwest corner of the House shown cross-hatched.

In 1886 the architect Roger Field produced a detailed plan of the drainage arrangements and water supply at Breakspear House, subsequently updated in 1894 and reproduced in Fig. 8 overleaf. This plan provides information of relevance to the proposed impact area, and also shows valuable details of the internal floor plan and arrangements.

Also superimposed on Figure 8 are the principal new build areas (Units 1-4) and underground car park, to indicate how these will impact upon the area of the former stable block and other ancillary buildings (including part of the coach house, outlined with associated drain runs to the south).

The National Grid survey of 1972 (not illustrated) shows the house when it was established as a residential care home. Relatively little change has taken place since the late 19th century, with the notable exception of the disappearance of the stable block – which had occurred by 1914. The reasons for this change are unknown, for example whether the structure was damaged in some way (eg., fire) or had simply become redundant.

4. The Archaeological Evaluation

4.1 Archaeological Planning Legislation

The need for an archaeological evaluation arose as a result of the proposal by Clancy Developments Ltd. to construct new housing units and an underground car park to the northwest of Breakspear House (Planning Application Reference 7610/APP/2008/1012). As part of condition 23 of the planning consent Hillingdon Council, in consultation with English Heritage, mandated that the impact of the proposed development on potential archaeological remains should be investigated by evaluation (trial trenching).

This evaluation therefore relates to a specific development proposal. Other aspects of the proposed development, including the restoration and conversion of Breakspear House into apartments, are covered by Grade 1 Listed Building status, by the Planning (Listed Building and Conservation Areas) Act 1990 and by PPG15, and will be covered by separate programmes of work.

Against this background a Written Scheme of Investigation (WSI) was prepared on behalf of the client by Compass Archaeology, submitted to English Heritage in its final form on 6th July 2009, and subsequently approved by Kim Stabler.

4.2 Evaluation Research Questions

The site presents an opportunity to address several research questions, as set out in the WSI. These include:

- What is the natural topography and geology of the site?
- Is there any evidence for prehistoric, Roman, Saxon or medieval activity, and can the nature of this be defined – for example, land drainage, agriculture?
- What heritage features survive from the various phases of construction of Breakspear House?
- What heritage features survive from the various phases of development of the historic estate and garden layout?
- What are the nature, form, function, extent and date of these features?

4.3 The Archaeological Brief

The accepted brief for archaeological evaluation is to determine, as far as is reasonably possible, the location, extent, date, character, condition, significance, and quality of any surviving archaeological remains liable to be threatened by the proposed development (English Heritage, *Model Brief for an Archaeological Evaluation*).

Thus the objective will be to establish information on as many of the research questions as possible, whilst primarily answering the terms of the brief which is to

provide information on which decisions can be taken as to the need for any further archaeological action (eg, preservation *in situ* or archaeological rescue excavation), or for no further action.

5. Methodology

- 5.1** As noted previously, a written scheme of investigation for the project was prepared and submitted for approval by English Heritage in July 2009. The evaluation was carried out in accordance with this document and English Heritage guidelines (including *Standards and Practices in Archaeological Fieldwork*, 1998) and those of the Institute of Field Archaeologists (*Standard and Guidance for Field Evaluations*).
- 5.2** The evaluation comprised a total of six trial trenches across the proposed impact area of the new build residential units (1-8) and the underground car park. The layout of the trenches is illustrated in Figure 9 overleaf. This plan includes some revision to the proposed locations in the WSI, mainly in response to existing disturbance and truncation around the western end of the house.

The trenches were located to optimise the potential of archaeological deposits and features as indicated by the historic map record (*cf.* Figs 4, 8 & 10). These included the site of the 19th century stable block and carriage house, but also some earlier structures plus boundary and path lines, and in the walled garden a large pond feature.

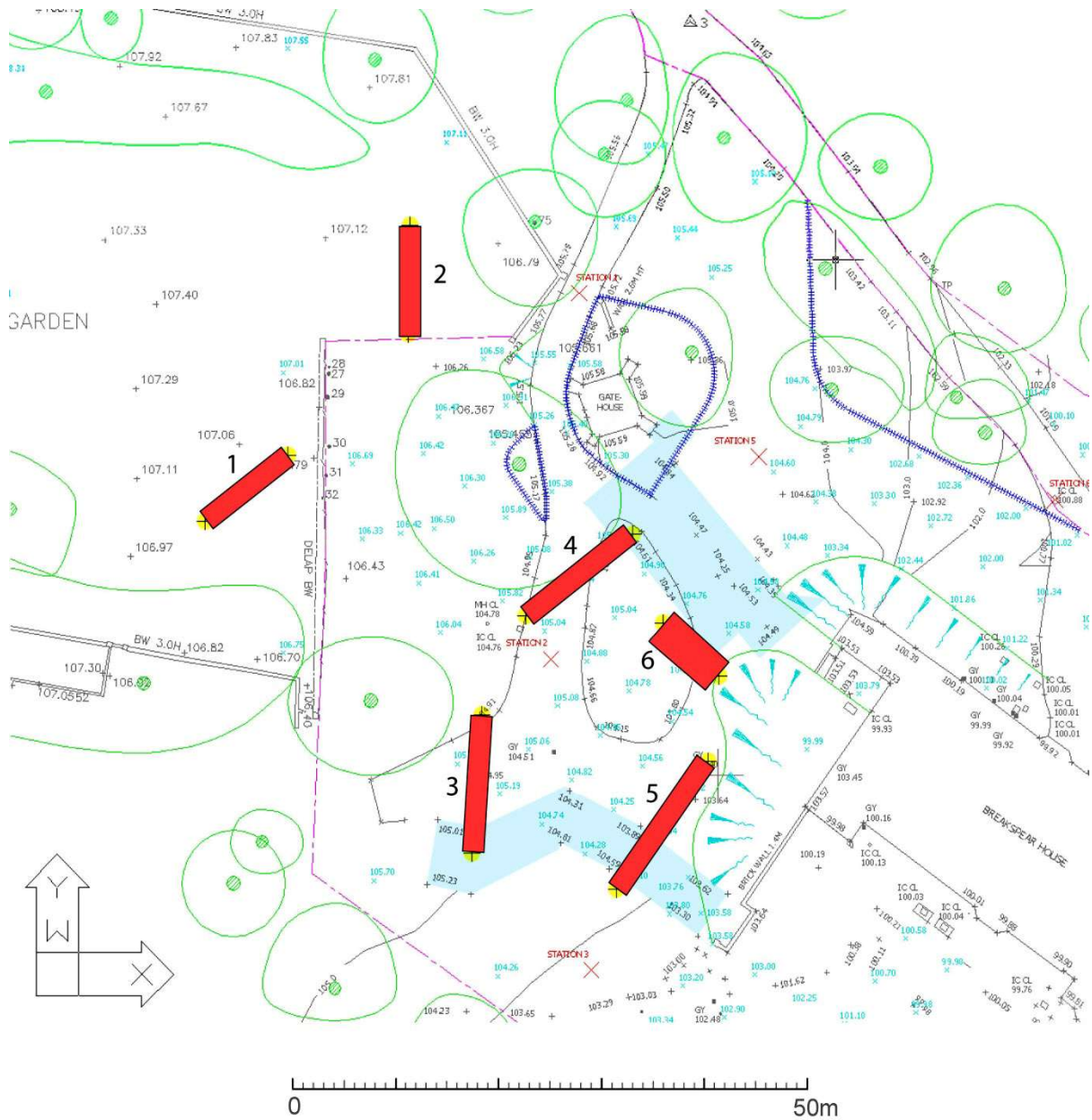
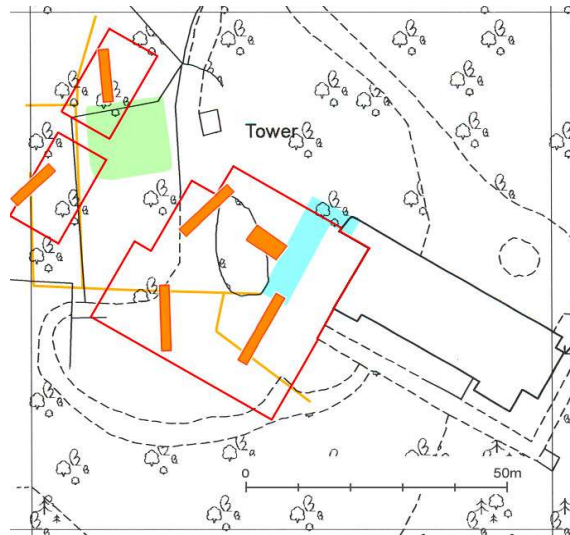


Fig. 9: Plan of the evaluation area showing the location of trenches (red) in relation to the house, with the location of the former stable block and coach house shaded in blue.

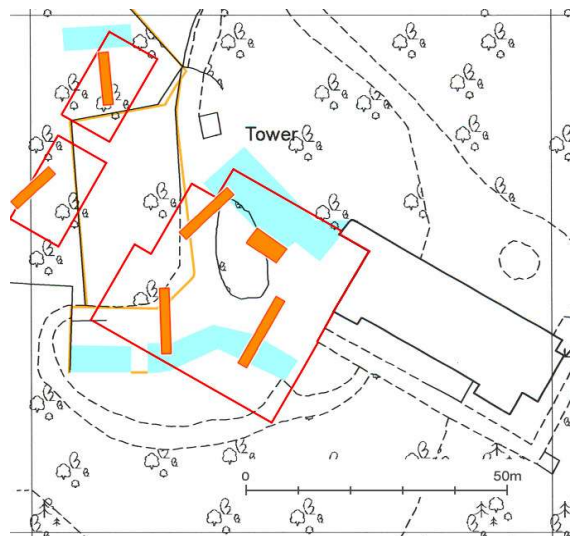
Based on a Site Survey by Structa LLP (Drg No: 1677-SS01, March 2009)



1771



1813



1899

Fig. 10: Evaluation trench layout (in orange) with features taken from historical maps superimposed, and showing potential archaeological signatures to be encountered.

- 5.3** Initial clearance of the trial trenches was undertaken by a 360° tracked mechanical excavator working under archaeological supervision⁵. Deposits were removed in this way to the latest significant archaeological horizon, or, in the case of absence of archaeological remains, to a clean natural/subsoil layer. Where necessary the sides of the trenches were stepped or battered back to a width greater than 2m in order to maintain safe access. Thereafter exposed deposits and features were selectively excavated and recorded in stratigraphic sequence.
- 5.4** Archaeological contexts were recorded on *pro forma* sheets by written and measured description, and drawn in plan and section. The trench positions were recorded on a general site plan by taped measurement and related with appropriate accuracy by ‘best fit’ to the Ordnance Survey grid.

The recording system used followed the Museum of London Site Manual for on-site work. By agreement the recording and drawing sheets used were directly compatible with those developed by the Museum. The fieldwork record was supplemented by photography as appropriate (35mm/digital).

- 5.5** Levels taken during the evaluation were derived from an Ordnance Survey Bench Mark (OSBM) located on the northeast corner of Breakspear House, value 76.54 m AOD.
- 5.6** Finds and samples were treated in accordance with the appropriate guidelines, including the Museum of London’s ‘*Standards for the Preparation of Finds...*’. All identified finds and artefacts were retained and bagged with unique numbers related to the context record, although ceramic building material samples were discarded once an appropriate record had been made. Assessment of finds and samples was undertaken by appropriately qualified staff.

6. Results

6.1 Trench 1

Trench 1 was the westernmost excavation area, measured 9.8m by 2.1m and was orientated on a northeast-southwest alignment (Figs. 9 to 12). It was located inside the walled garden and within the proposed footprint of Units 5-6. The trench was excavated by machine, generally to a depth of 0.6m-0.75m below the present grass surface. The topsoil in this area consisted of a dark brown sandy clay-silt merging to the base to a lighter, more solid subsoil, and overall *c* 0.2m to 0.3m thick. Inclusions consisted of medium to fine pebbles, as well as occasional small fragments of brick, chalk, mortar and CBM. Underlying this was the natural subsoil [7], superficially weathered and consisting of a mixed silty clay with sand, gravel and more homogeneous clay inclusions.

Machine excavation revealed a concentration of firm homogeneous clay across the northern corner of the trench (see Fig. 13). A sondage excavated by hand into this deposit [18] revealed part of cut feature (20): this was aligned east-west and some 0.60m deep (including the upper portion, visible in section to the base of the

⁵ The machine and operator were provided by Clancy Developments Ltd.

reworked soil but which had been reduced by machine). The cut sloped in at approximately 45°, onto a fairly level base in the northeast corner of the sondage. There was no indication of the overall extent or function of the feature. The clay fill was quite clean apart from occasional fragments of ceramic roof tile, which are most likely to be of 16th to 18th century date – although probably residual in this context (Appendix I).

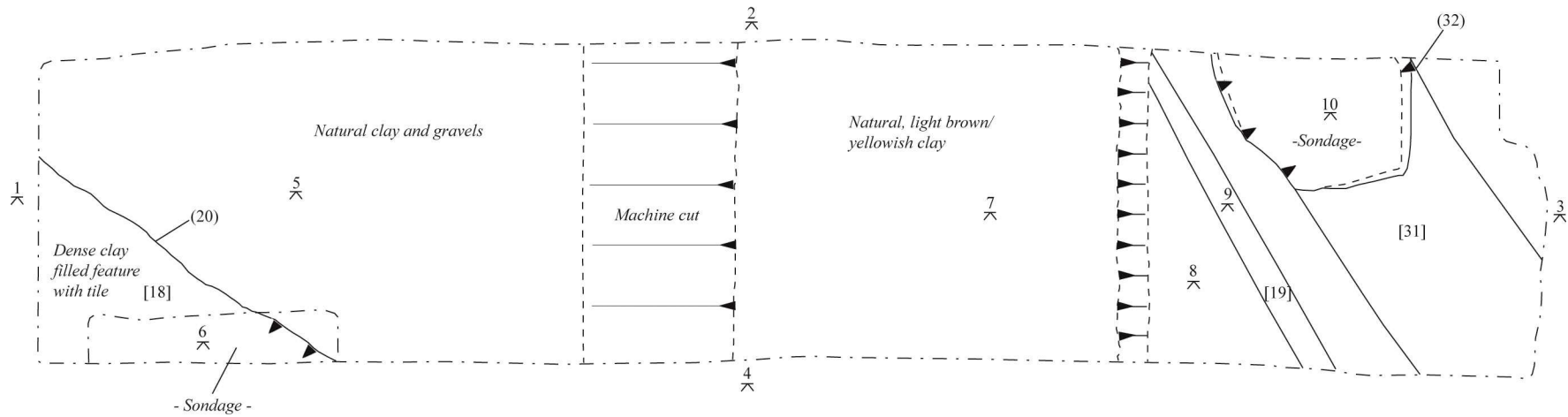
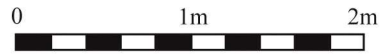
In the southern part of the trench deeper machine excavation into made ground deposits revealed an east-west running cast iron pipe [19] c 1.2m below the present ground level (Fig. 13). The pipe had an external diameter of 170mm (suggesting a designed internal diameter of 6”), and appears to relate to the water supply arrangements depicted on Field’s 1886 plan (Fig. 8). Here an east-west running pipe is shown, to the east of that in Trench 1 but on the same alignment, which connected the house’s supply system to Battlers Well. The location of the Well itself is unknown but was evidently further to the west (and may have fed the series of ponds shown on the 1771 Estate Plan, Fig. 4). Given the appearance of the exposed pipe [19] and its alignment it is fairly certain that this dates to the mid 19th century – quite possibly constructed during the substantial alterations and expansion of the House.

Immediately adjacent to and to the south of the pipe [19] an earlier east-west cut into the natural deposit was observed. The surviving edges of this feature (32) were quite clear, with a fill [31] of mainly medium brown sandy silty-clay. At its uppermost surviving level – below a reworked soil horizon and truncated to the north by [19] – (32) was at least 1.6m wide and some 1.3m deep (Fig. 15). This feature is difficult to interpret due to the small area of horizontal exposure (some 2m to 3m overall) but appears to have been some form of ditch or artificial water course, although there was no silting at the base. The fill was relatively clean, but produced one small sherd of plain white earthenware of 19th century date (REFW; Appendix II. 1). There was also a small assemblage of ceramic building material of broadly post-medieval date (Appendix I) – fragments of floor tile and vitrified brick, and a number of pieces of roof tile. Fill [31] can therefore be dated to the first half of the 19th century – as it is also cut by the pipe trench [19] – although the associated feature may well be earlier.

The natural deposit in Trench 1 [7] generally comprised a firm mid brownish yellow silty clay, with variable quantities of medium-fine pebbles/gravel and occasional pockets of coarse sand or more homogeneous clay (the latter visible just above and to the left of the scale in Fig. 12. This layer presumably represents the Glacial deposits and undifferentiated Head that is identified by the Geological Survey (*cf.* Fig. 2)

The evidence in Trench 1 reveals some activity in this area, at least in later post-medieval period and certainly in the 19th century. While the function of features (20) and (32) is not entirely clear, they are likely related to gardening activities and/or drainage.

Breakspear House
 Breakspear Road North
 London Borough of Hillingdon
 Archaeological Evaluation 2009
 Trench 1



Reduced Levels			
TBM 1: 84.52 m			
BS : 1.10 m			
HoI: 85.62 m			
Level	Elev.	Level	Elev.
1	83.61 m	6	82.60 m
2	83.60 m	7	83.04 m
3	83.79 m	8	82.57 m
4	83.67 m	9	82.55 m
5	82.88 m	10	81.88 m

Fig. 11: Plan of Trench 1



Fig. 12: Overview of Trench 1 looking southwest (*scale 1m*)



Fig. 13: The northern corner of Trench 1, showing the line of the cut feature (20), with solid clay infill [18] directly below the 0.5m scale



Fig. 14: View of the southern corner of Trench 1, with the east-west aligned iron pipe [19] in the foreground and unexcavated linear feature (32) to the rear (*scale 1 m*)



Fig 15: The southeastern section of Trench 1, showing the excavated slot through the probable ditch (32) with exposed fill [31] behind the 1m scale. To the left is the later cast iron pipe and associated fill [19]

6.2 Trench 2

Trench 2 was located inside the Walled Garden and was the northernmost trench excavated as part of the evaluation (within the footprint of proposed Units 7-8). The trench measured 9.4m in length (north-south) by 2.1m in width: from the present grass surface it was excavated by machine to the natural geology, at a maximum depth of 1.0m to 1.1m.

The topsoil in this trench was superficially comparable to that in Trench 1, and of similar depth (*c* 0.25m – 0.3m), although here it did not merge into the underlying natural. Instead, it overlay a deposit of demolition material, fragmentary brickwork and iron piping, which itself overlay and was cut into the natural silty clays – as clearly seen in Fig. 17 overleaf. The Ordnance Survey record shows that three east-west aligned glasshouses were constructed in the area between the late 1890s and 1914, with the two largest (which completely covered the northern two-thirds of the trench) still present in 1934. The soil here is thus of a recent origin, most if not all having been imported or re-deposited after the latter date.

No sub-surface archaeological features were otherwise encountered in this trench, and there was no sign of the apparently rectangular pond that is indicated on the Estate Plan of 1771.



Fig. 16: Overview of Trench 2 looking northeast (*scale 1 m*).



Fig. 17: Overview of Trench 2 looking northwest (*scale 1 m*).

6.3 Trench 3

This trench was located within the impact area of the new build (Units 1-4) and underground car park. It was 12m long (north-south) by 2.3m wide and was excavated to an average depth of 0.3m to 0.5 m. Brick building remains were encountered in the southern part of the trench, being situated relatively close (>0.3m) to the modern surface (*cf.* Figs. 18 & 19). Otherwise the stratigraphic situation in this trench, as in trenches 4 to 6, was very straightforward. The present surface was made up of very recent levelling /demolition material, *c.* 0.2m to 0.3m thick, overlying compacted made ground and gravel of probable mid 19th century date. The underlying natural [7] consisted of a firm, mid brownish yellow silty clay, with pockets of coarse sand which included rounded pebbles and angular gravel.

The archaeological contexts encountered in this trench are described in the table below:

Context	Description	Interpretation
12	Small brick wall base, single stretcher-width at the top (<i>c.</i> 230mm), aligned NW to SE and to the north abutting dog-legged wall [15]. The full depth of the wall was exposed to the SW and totalled 3 courses, lower 2 stepped out. Constructed from purple stock bricks of large standard size & with sharp arises; <i>c.</i> 0.23 m wide x 0.46m long x 0.23m thick.	Possibly small internal room division of 19 th century coach house, stratigraphically later than main construction
13	Cut for wall [12]: linear cut, limited exposure, not fully excavated	Shallow cut for foundation of internal wall of 19 th century coach house

Context	Description	Interpretation
14	Lime mortar spread on southern side of top of wall [15]; 0.7m N-S x 0.2m E-W, 0.05 m thick.	Mortar scar on top of wall [15], possibly just bedding for a further course though could be base of doorway or similar
15	An external wall; dog-legged shape in plan but all of one build. Constructed of red brick and some yellow frogged stock brick (<i>c</i> 224mm x 100mm x 65mm) with sharp arises; alternate coursing of headers over stretchers (English bond). Exposed section of wall is 2.16m long, 0.36m wide & 0.46m high; consists of six courses; two steps out at base on northern side (not exposed on southern side).	External wall of 19 th century coach house, facing into yard area opposite stables
16	Linear cut for wall [15].	Construction cut for wall [15]
17	Compact mixed brown clay/silt mix with inclusions of flints, CBM fragments, <i>etc.</i>	Construction backfill for wall [15].

The brick wall bases and associated construction cuts encountered in this trench can be directly related to the 19th century coach house that occupied this area (Figs. 20-22). The dog-legged shape of wall [15] clearly fits the footprint of the coach house known from historical plans (*cf.* Figs. 7 & 9), and this also establishes that the building was in existence 1866 when the first of these plans – the OS 25-inch 1st Edition – was originally surveyed. Alongside this brick samples from the wall have been dated to *c* 1830-1900, although a date after 1850 is more likely (Appendix I). The latter date is particularly likely in this context as the yellow stock bricks in question (seen immediately above the 0.2m scale in Fig. 22) also show evidence of reuse, with traces of previous limewash on unexposed faces.

Thus the date of the wall [15] – and associated coach house – can be placed with some confidence in the period *c* 1850-1865. To the south [15] was abutted by the smaller and shallower wall base [12], of which a short length (0.46m) was exposed within the trench. This presumably marks an internal sub-division of the coach house, although as it is not directly bonded into [15] may represent a later alteration to the building rather than a contemporary feature.

All features found in this trench relate to known uses of the site during the mid-late 19th century. Any earlier surfaces and/or soil horizons had clearly been truncated to the level of natural by the development of the coach house and adjacent yard. In particular, there was no sign of the broad path or track that appears to cross the area on the 1771 Estate Plan (Figs. 4 & 10).

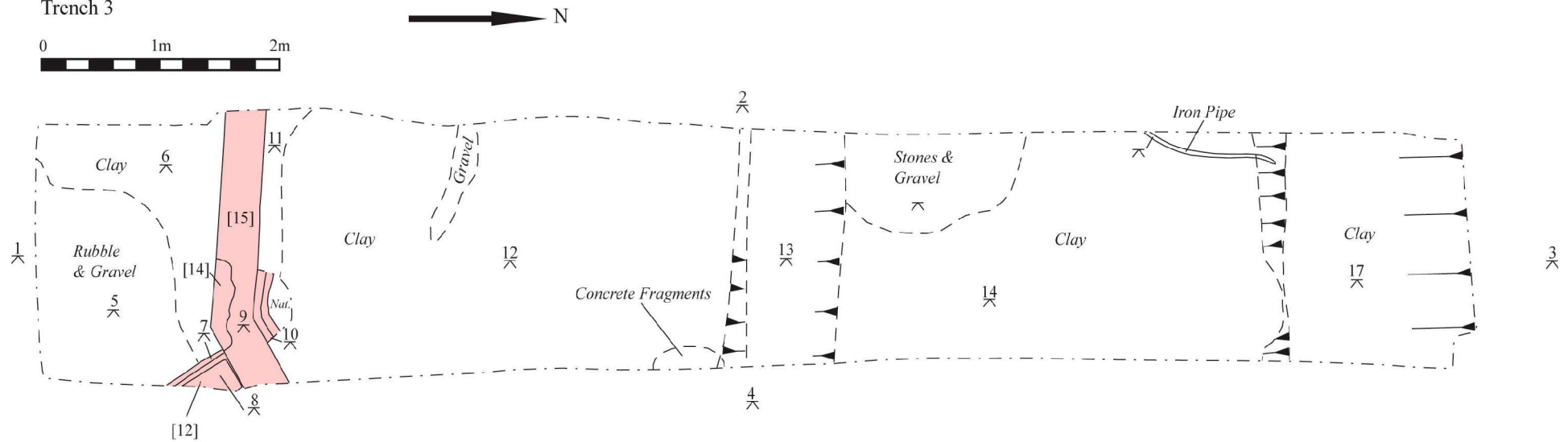


Fig. 18: Overview of Trench 3 looking north (*scale 1m*).



Fig. 19: Trench 3, view looking east along the line of wall [15] (*scale 0.2m*)

Breakspear House
 Breakspear Road North
 London Borough of Hillingdon
 Archaeological Evaluation 2009
 Trench 3



Reduced Levels							
TBM 1: 80.54 m							
BS : 2.16 m							
Hol: 82.7 m							
Level	Elev.	Level	Elev.	Level	Elev.	Level	Elev.
1	81.51 m	6	81.28 m	11	81.15 m	16	81.31 m
2	81.73 m	7	80.98 m	12	81.15 m	17	81.34 m
3	81.76 m	8	81.24 m	13	81.04 m		
4	81.53 m	9	81.23 m	14	81.18 m		
5	81.16 m	10	80.78 m	15	81.22 m		

Fig. 20: Plan of Trench 3



Fig. 21: Trench 3. Detailed view of brick wall base [15] looking east, with internal wall [12] in the background and running into unexcavated section (*scale 0.2 m*).



Fig. 22: Trench 3. Detailed view of brick wall base [15], showing stepped lower two courses (*scale 0.2 m*). Abutting the rear of [15] is wall [12], representing a subdivision within the building – and also stepped out at its base although only 3 courses deep.

6.4 Trench 4

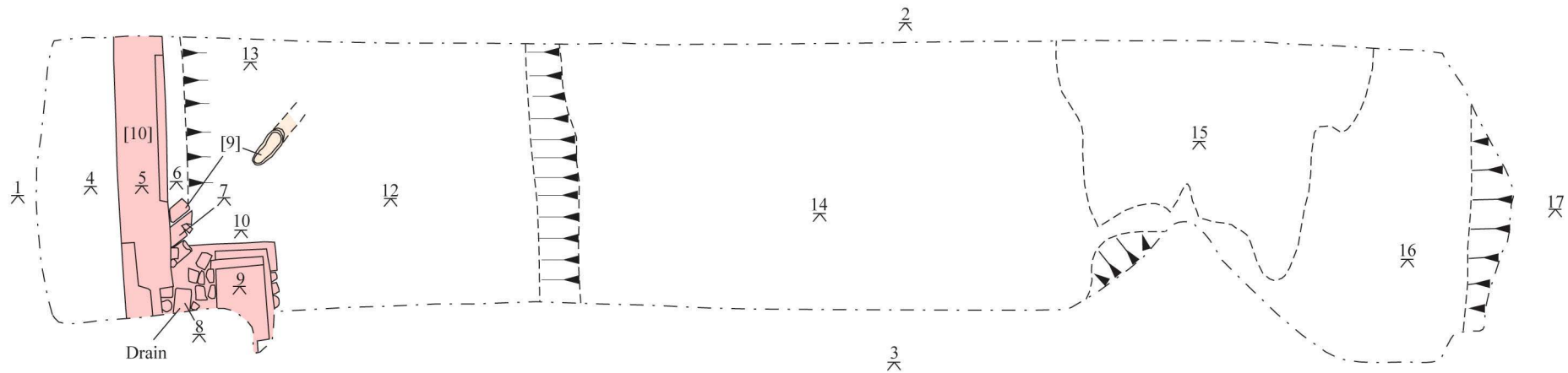
Trench 4 measured 12.2m in length (NE-SW) by approximately 2.3 m in width. It was excavated by machine to an average depth of between 0.3m to 0.6m. Archaeological features were encountered in the northeastern part of the trench, consisting of a brick wall base and associated drainage works (Figs. 23 & 24). The brickwork was capped by modern levelling and demolition rubble, whilst elsewhere this surface deposit overlay compact gravelly made ground. The underlying natural was very similar to that encountered in Trench 3, *etc.*, (context [7]), with a trench for the wall foundation [11] and a further cut for the ceramic drainpipe [9] having been dug into this.

Context	Description	Interpretation
8	Construction backfill deposit alongside and over stepped base of wall [10]	Same as context [1] in Trench 6
9	Small brick sided drain box with tile base (width of latter 180 mm). Constructed adjacent to the front wall [10] of the 19 th century stable block. Exposed face of [10] had been rendered in the area of the drain, evidently to protect it from water/damp. [9] also includes a broken ceramic pipe running into the ground <i>c</i> 0.3m to the south	Drain box adjacent to and contemporary with wall [10], Location is shown on the 1886-94 drainage plan, and presumably took rainwater from a downpipe set in the internal angle of wall [10]. Adjacent pipe arrangement is the same as context [3] in Trench 6
10	A red brick wall, aligned approx. NW-SE and with external (SW-facing) elevation exposed. Includes frogged & unfrogged bricks: frogged bricks are <i>c</i> 225mm x 105mm x 65mm; unfrogged bricks <i>c</i> 215mm x 100mm x 60mm. Appears to be laid in a more uniform Flemish bond than at its southeastern end in Trench 6 (Context [2]). Yellow coarse sandy mortar + white lime mortar surviving at highest level. Exposed length was slightly greater than the general width of the trench, at 2.6m x 0.4 m wide. 6 courses high, measuring 0.45 m.	External front (SW facing) wall of the 19 th century stable block, with recess in main face marking probable window location. Also includes projecting corner section to north and stepped out footings. Same structure as [2] in Trench 6
11	Linear cut adjacent to wall [10].	Construction cut for the wall [15]: same as [1] in trench 6.

The brick wall base [10] crossed the northern end of the trench from northwest to southeast (*cf.* Figs. 26-29), and with the associated drain [9] clearly represents part of the front elevation of the former stable block. Both the wall line and drain are shown on the Field plan of 1886-94 (Figs. 8 & 29), and the building itself also appears on the Ordnance Survey 25-inch 1st Edition, originally surveyed in 1866 (Fig. 7). Brick samples from [10] have been dated between 1830-1900, although more likely after about 1850. It is probable therefore that the stables were constructed between *c* 1850 and 1865 – the same period as proposed for the coach house building in Trench 3 (6.3 above).

The wall [10] and adjacent drain were cut by a later ceramic pipe, also aligned northwest to southeast but evidently laid after the building had been demolished – probably in the earlier 20th century.

Breakspear House
 Breakspear Road North
 London Borough of Hillingdon
 Archaeological Evaluation 2009
 Trench 4



Reduced Levels							
TBM 1: 80.54 m							
BS : 2.38 m							
HoI: 82.92 m							
Level	Elev.	Level	Elev.	Level	Elev.	Level	Elev.
1	81.52 m	6	80.86 m	11	80.91 m	16	81.19 m
2	81.56 m	7	81.10 m	12	80.92 m	17	81.69 m
3	81.72 m	8	81.33 m	13	81.19 m		
4	81.37 m	9	81.29 m	14	81.20 m		
5	81.29 m	10	80.87 m	15	81.17 m		

Fig. 23: Plan of Trench 4



Fig. 24: General view looking northwest across Trench 4, with the Dovecote to rear right



Fig. 25: Overview of Trench 4 from the southwestern end (*scale 1 m*).



Fig. 26: Trench 4, view northwest along the brick wall base [10] that formed the front wall of the stable block, plus the remains of drain [9] (*scale 0.2 m*). The drainpipe cut into the brickwork near the top of the picture is a later and apparently unrelated feature



Fig. 27: Trench 4, showing the external (southwest) face of the brick wall [10] plus step out towards the northwest corner of the original building (*scale 0.5m*)



Fig. 28: Trench 4. Detail of the northwest end of the exposed wall base [10] (scale 0.2m)

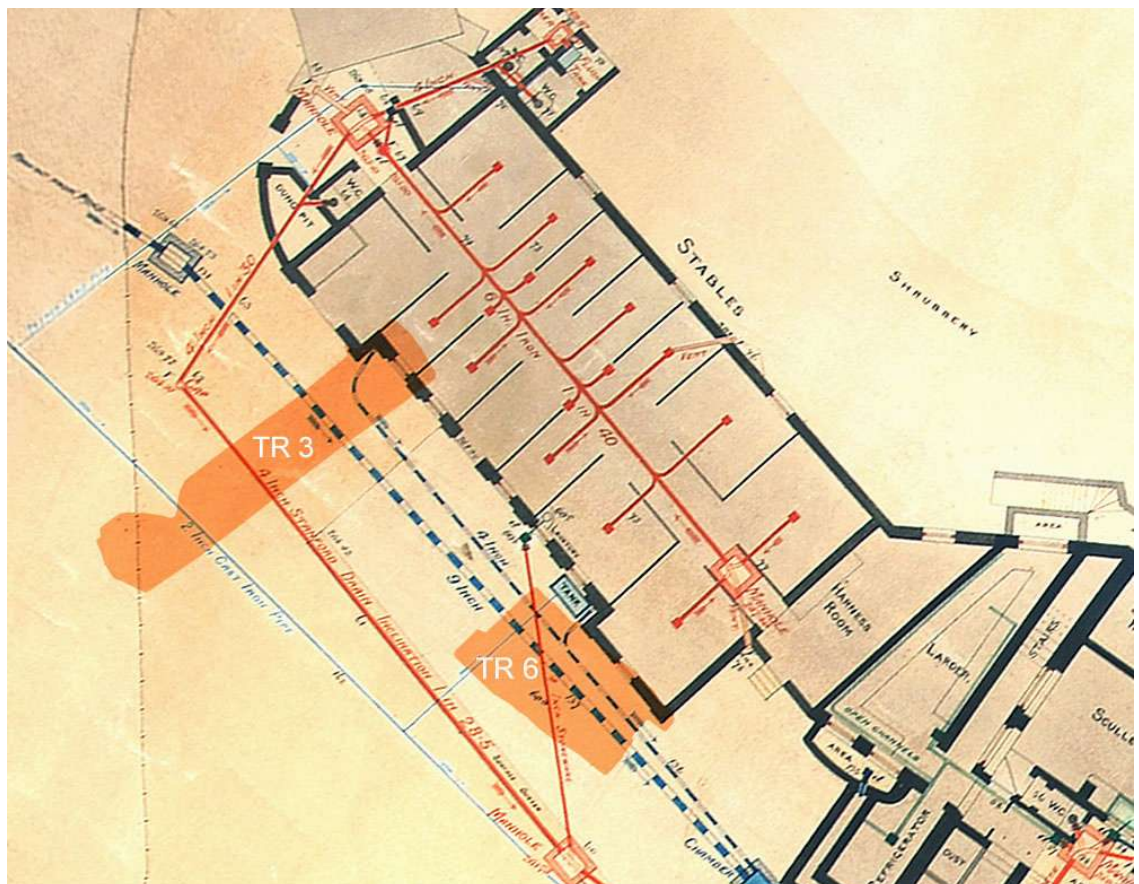


Fig. 29: Detail from the 1886-94 ground floor and drainage plan of Breakspears (Fig. 8), reorientated to north and with the location of Trenches 3 and 6 superimposed

6.5 Trench 5

This trench was located in the southeastern part of the evaluation area (see Fig. 9) and measured *c* 14m (NE-SW) in length by 2.3m in width. It was excavated by machine to a maximum depth of 0.5 m, although this was not uniform across the trench. Towards the southern end brickwork structures were encountered very close to the present surface (*c* 0.1m; Fig. 31).

To the north and in the centre of the trench the modern surface was concrete, with recent levelling and earlier (?mid 19th century) block paving to the south. As in trenches 3 and 4 there was an underlying layer of compact made ground and gravel, probably also of 19th century date, and thence a similarly truncated natural deposit (context [7]) – a silty clay with occasional sandy and gravelly inclusions (*cf.* Fig. 30). The following features and remains were recorded:

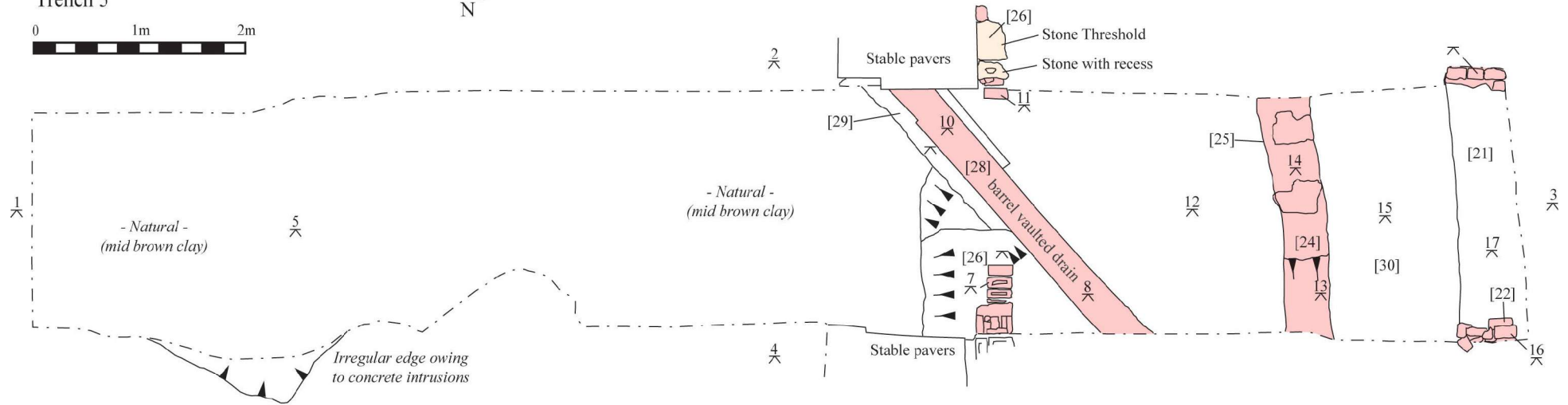
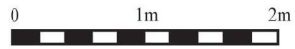
Context	Description	Interpretation
21	Brickwork, up to two courses surviving at very southern end of Trench 5. Contains some reused bright red handmade bricks and also some frogged brick. Fragmentary but clear that this originally formed a NW-SE alignment.	Shallowly-founded brick wall base – rear (southern) wall of the coach house.
22	Masonry: purple stock frogged bricks adjoining brick wall [21] in SW corner of Trench 5.	Small area of fairly modern brickwork, rebuild of or addition to original wall
23	Shallow construction cut for originally continuous wall footing [21]. Only really visible as a spread of sand bedding across the southern end of the trench.	Construction cut/fill for wall [21]; rear (S) wall of coach house.
24	Foundation of broken red brick crossing near southern end of Trench 5, on approximately E-W alignment. As exposed <i>c</i> 2m in length by 0.46m wide, and localised excavation indicated depth of about 0.2m to 0.25m. Consists of large, rough fragments of reused masonry, up to <i>c</i> 290mm x 350mm, bonded together. No coursing or bonding visible; hard crusty lime mortar.	Wall foundation made up of reused rubble fragments, apparently predating adjacent walls [21] & [26].
25	Shallow cut underlying rubble wall foundation [24] and into underlying natural deposit.	Construction cut for rubble wall base [24]. Probably truncated.
26	Mortared brick wall running approximately NW-SE. Very truncated and only survives to one brick course depth. Building material consists of purple and bright red frogged stock bricks of standard size, with sharp arrises. Mixture of pale lime mortar and some grey mortar visible. Wall is 0.4 m in width and 0.1 m deep; truncated in centre but evidently originally crossed the trench, <i>c</i> 2m+ in length. Also overlies brick drain [28], but could be quite closely contemporary.	The front (north-facing) wall of the mid 19 th century coach house, presumably part of the same build as [21] above. Immediately to the east of the trench [26] included a stone slab and second smaller stone with a recess, apparently part of a doorway (<i>cf.</i> Fig. 31)
27	Cut adjacent to & below wall [26], though very truncated and difficult to discern.	Construction cut for north-facing wall of coach house [26].

Context	Description	Interpretation
28	Barrel-shaped drain constructed of purple-red brick (<i>ie.</i> , ovoid cross-section), running approximately east-west. At least six bricks on edge form the upper half of the arch (Fig 33), and a further six form the base; internal diameter <i>c</i> 0.2m. The brick is crumbly, loosely mortared in grey sandy mortar, and irregularly bonded with bricks laid lengthwise. Interior was filled with a fine silty sand.	A brick drain, roughly dated to 1780-1850 and underlying coach house wall [26].
29	Cut underlying & adjacent to brick drain [28]. Visible as a line roughly parallel with and <i>c</i> 0.25m to the south of the brick drain, and 0.14m wide to the north.	Construction cut for barrel-shaped drain [28].
30	Mixed sandy silty deposit with flints/pebbles and occasional CBM frags.	Construction backfill against sides of drain [28].



Fig. 30: Overview of Trench 5, looking southeast and showing exposed natural clays in foreground (*scale 1 m*).

Breakspear House
 Breakspear Road North
 London Borough of Hillingdon
 Archaeological Evaluation 2009
 Trench 5



Reduced Levels							
TBM 1: 80.54 m							
BS : 2.38 m							
HoI: 82.92 m							
Level	Elev.	Level	Elev.	Level	Elev.	Level	Elev.
1	80.39 m	6	80.46 m	11	80.41 m	16	80.49 m
2	80.49 m	7	80.42 m	12	80.29 m	17	80.28 m
3	80.55 m	8	80.32 m	13	80.27 m	18	80.40 m
4	80.58 m	9	80.16 m	14	80.31 m	19	80.35 m
5	79.92 m	10	80.30 m	15	80.24 m		

Fig. 31: Plan of Trench 5

Four distinct brick-built structures were encountered in Trench 5, as shown in Fig. 32. They consisted of three wall bases [21]/[22], [24] and [26], and the drain [28].

Wall bases [21]/[22] and [26], with their associated construction cuts [23] and [27], relate to the 19th century coach house that appears on the first 25-inch Ordnance Survey map from 1866 (Fig. 7). The walls are parallel, of similar construction and some 4.2m apart, and clearly represent the north [26] and south [21] & [22] walls of the coach house. However, they are also very shallow and quite narrow, and in both respects less substantial than the wall base [15] in Trench 3 – which is shown by the 1866 and all subsequent surveys as part of the same building. It is possible that the wall bases in Trench 5 formed a slightly later addition, but it may simply be that they supported a less substantial structure – perhaps ancillary storage at the eastern end of the coach house.

The barrel vaulted brick drain [28] with its associated construction cut [29] (Fig. 33) directly underlies the northern wall base of the coach house [26], and it is possible that these structures are more or less contemporary. However, the dating of brick samples from [28] might suggest an earlier date (Appendix I). Moreover, by the 1850s – which is the most likely date for the coach house – the construction of small brick-built drains was being rapidly eclipsed by the new and much more cost-effective stoneware pipes (as seen in Trenches 4 and 6, contexts [9] & [3]). The brick drain [28] does not appear on the 1886 Field plan (Fig 8), and although this plan does not show the coach house in any detail it does show several other drains in this area.

The rubble wall base [24] is situated between the coach house walls [21] and [26] and is on a similar alignment, but is constructed quite differently from large fragments of reused brickwork. Assessment of samples from this structure has indicated that the much of this material may derive from the 16th or 17th centuries, although within the matrix of the wall base there are also small fragments of material that could be as late as 1800 (Appendix I).

Base [24] is itself truncated and has no direct relationship with the adjacent walls [21] or [26], but it seems very likely that this forms part of an earlier structure that was cleared before the coach house was built. Although there are buildings shown on the 1813 Enclosure Map (Fig. 6) none fall directly into the area touched by the southern part of Trench 5. The only relevant feature on this map is a boundary, apparently between gardens to the north and a larger field to the south. The alignment of wall base [24] is consistent with this boundary, making it highly likely that it represents the remains of this feature. This also indicates that the contemporary property was sectioned off from the field by a brick wall, rather than simply a hedgerow or fence line. This wall was likely constructed sometime after 1771 since it is not shown on the Estate Plan (Fig. 5), and was probably demolished when the coach house was built. This latter may have part of a general programme of works, including the redevelopment of the house as is shown by 1866 (Fig 7).

Trench 5 did not reveal any other features predating the mid 19th century. In particular, there was no sign of the broad path that appears to cross the area on the 1771 Estate Plan, or of the two phases of building at the northern end of the trench shown then and in 1813 (*cf.* Figs. 4 & 10).



Fig. 32: View of the southern part of Trench 5, showing barrel vaulted drain [28], coach house wall bases [21] and [26] and earlier brick rubble base [24] (*scale 1 m*). The stable pavers on either side of the trench would have formed a continuous surface to the north of the coach house



Fig. 33: Trench 5, detail of barrel vaulted drain [28] after removal of fill (*scale 0.2 m*).



Fig. 34: Trench 5. Detail of rubble brick wall base [24], looking northeast (*scale 0.5 m*).

6.6 Trench 6

Trench 6 measured *c* 6.0m in length (NW-SE) by up to 3.5m in width. As in trenches 3 and 4 the area was capped by a surface of recent demolition material and rubble, overlying a gravely made ground which probably dates to the mid 19th century. This generally sealed the truncated natural deposit [7] – a mid-brownish yellow silty clay very similar to that found in the other trenches.

The recorded features in Trench 6 were as follows:

Context	Description	Interpretation
1	Very compact mixed light to dark brown clay /silt mix with fragments of flint, CBM and occasional chalk flecks. <i>c</i> 0.3-0.4m thick.	Construction backfill, sealing stepped base of wall [2] and also over drain pipe [3]
2	Red brick wall base with stepped footings, running approximately NW-SE across the northern side of the trench. Wall runs for 4.4m between corners, is <i>c</i> 0.4 m wide, and survives up to 0.65m at highest point. Rather irregularly built – includes whole bricks measuring <i>c</i> 225mm x 110mm x 65mm, plus some $\frac{3}{4}$ bat & $\frac{1}{2}$ bats; in places rough English bond with intermediate courses of headers. Some bricks also appear reused, with occasional patches of white lime mortar adhering to exposed faces. Elsewhere yellow sandy mortar, but evidence for a white lime mortar on upper course at southern end.	Eastern end of front (SW-facing) wall of the 19 th century stable block. To the west stepped back, but continuation of wall was not exposed. Part of the same structure as [10] in Trench 4.

Context	Description	Interpretation
3	Ceramic drain pipe, probably contemporary with wall base [2]. Diameter: 0.14m (ext.), 0.10m (int.). Yellow clay fabric with irregular caramel-coloured glaze on interior and exterior, and in places biscuit finish with hardly any glaze.	Drain pipe running out from front elevation of the stable block. A contemporary plan (Fig. 8) and comparable arrangement [9] in Trench 4 indicate that this took rainwater from a downpipe set in the internal angle of the wall just to north of [2].
5	4-inch ceramic pipe, originally running the length of the trench (NW-SE) but largely removed by machine. Later than drain [3].	Drain run, including cut, fill and ceramic pipe. Appears to continue in Trench 4 (cutting wall [10]) so probably 20 th century, postdating demolition of the stable block.
6	Small Fe water pipe, 35mm in diameter, running NW-SE across part of Trench 6 – only 1.32m surviving at northern end of trench. Stratigraphically predates drain [5] and postdates drain [3] plus construction backfill [1].	Fe pipe; not shown on 1886-94 drainage plan & possibly of 20 th century date.

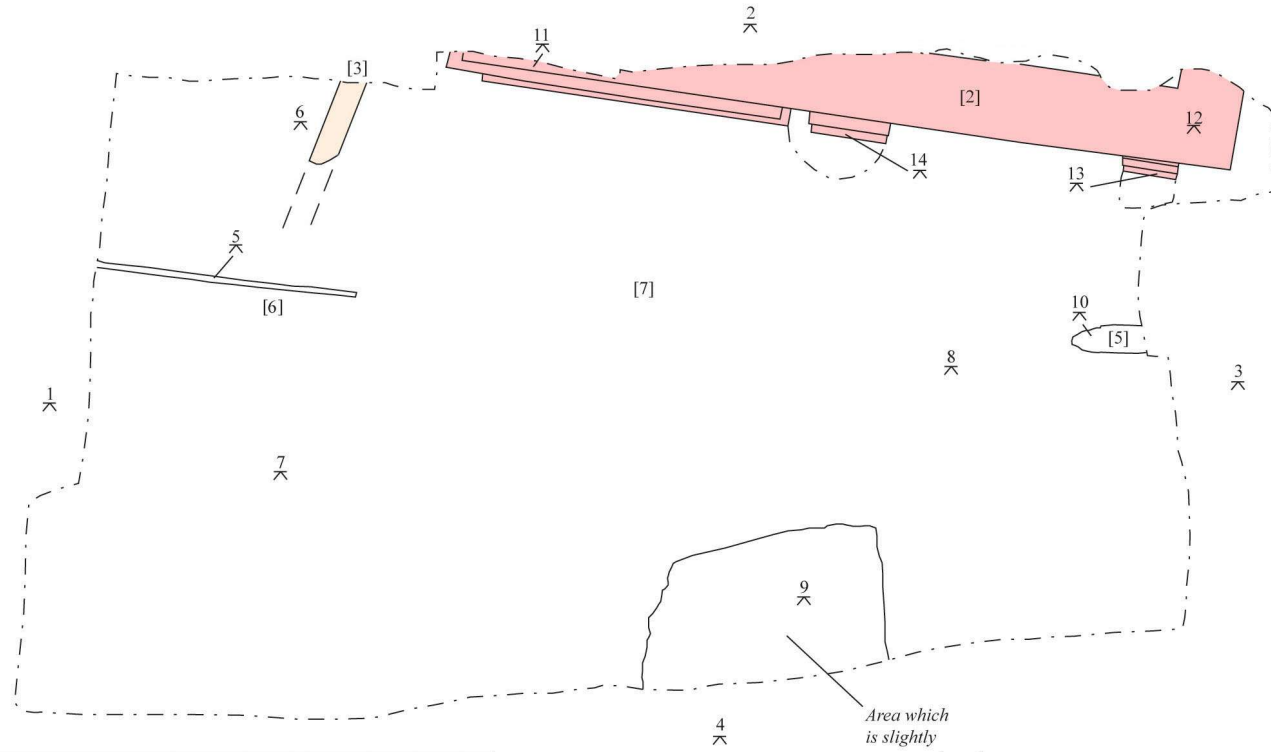
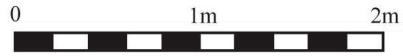
The principal feature in Trench 6 was represented by a northwest-southeast aligned brick wall base [2] that ran for some 4.3m close to the northeastern edge of excavation (Fig. 35). There were corners and returns to the north at either end of this structure, which can clearly be related to the eastern end/southeast corner of the former stable block – and as depicted in the Field plan of 1886-94 (Figs. 8 and 29). The construction and alignment are both consistent with this interpretation, and [2] clearly forms part of the same building frontage as wall base [10] in Trench 4. However, assessment of brick samples from [2] only provided a broad 18th to mid 19th century dating (Appendix I), and it is likely that at least some of the material was reused.

In addition to the wall base [2] three pipe or drainage features ([3], [5] & [6]) were located in Trench 6. The first of these, the ceramic drain pipe [3], disappeared into the north section but can be directly related to the 1886-94 plan – evidently a surface water drain running away from the building and fulfilling the same function as [9] in Trench 4.

Contexts [5] and [6] represented subsequent features, and in the case of the ceramic drain [5] probably postdates the demolition of the stable block. The metal pipe [6] is of uncertain date, but does not appear on the updated 1896 plan so is probably also a later feature.

No other features or remains were recorded in Trench 6. It is evident that the 19th century development of the stables and adjacent yard area to the south was accompanied by levelling and truncation of earlier surfaces and soil horizons, to leave only the exposed surface of the natural silty clay deposit [7].

Breakspear House
 Breakspear Road North
 London Borough of Hillingdon
 Archaeological Evaluation 2009
 Trench 6



Reduced Levels					
TBM 1: 80.54 m					
BS : 2.38 m					
Hol: 82.92 m					
Level	Elev.	Level	Elev.	Level	Elev.
1	81.30 m	6	80.27 m	11	80.53 m
2	80.99 m	7	80.33 m	12	80.34 m
3	81.28 m	8	80.24 m	13	79.76 m
4	81.12 m	9	80.27 m	14	79.89 m
5	80.32 m	10	80.23 m		

Fig. 35: Plan of Trench 6



Fig. 36: Overview of Trench 6 looking southeast, with the brick wall base [2] to the left of the 1m scale



Fig. 37: Brick wall base [2], located along the northeastern edge of Trench 6 (scale 1 m)



Fig. 38: Trench 6. Overhead view from the eastern end of the wall base [2] (*scale 0.2m*)



Fig. 39: Trench 6. Detail of exposed face and stepped base of the central section of wall [2] (*scale 0.2m*). The change in level and deeper footing to the east may simply reflect the proximity of the southeast corner of the building.

7. Summary and Conclusions

7.1 Evaluation Research Questions

A number of research questions were framed in the WSI (see above 4.2). The following responses can now be given:

What is the natural topography and geology of the site?

The natural geology of the site consists of silty clay deposits, which are often mixed with – or contain pockets of – sandy gravels. This material probably represents the Glacial deposits and Head defined by the Geological Survey (*cf.* Fig. 2). In the area of trenches 3 to 6 the natural surface was exposed directly below mid 19th century or later made ground deposits, and it is apparent that the whole area had been truncated during the development of the stables, coach house and adjacent yard.

Despite this truncation the extant surface of natural showed a consistent rise to the west in the area of trenches 3 to 6, with the greatest rise occurring between trenches 5 and 3 (*c.* 80.0m to 81.35m OD). This clearly reflects the natural east-facing slope into which the House itself is terraced, and is continued into the former walled garden area where the natural in Trench 2 survives to an untruncated height above 83m OD.

Is there any evidence for prehistoric, Roman, Saxon or medieval activity, and can the nature of this be defined – for example, land drainage, agriculture?

The evaluation produced no evidence for prehistoric, Roman, Saxon or Medieval activity at the site. Such evidence has either been obliterated by later activity or is not to be found on site. From the results of the evaluation there is no expectation that remains from any of these periods are likely to be compromised by the proposed development.

What heritage features survive from the various phases of construction of Breakspear House?

The structural evidence from the evaluation suggests that there was one main period of development in the mid 19th century, which witnessed the construction of the stable block, coach house and associated yard. Trenches 4 and 6 revealed brickwork that formed parts of the front (southwest-facing) wall of the stable block, plus associated drains (contexts [10], [2], [9], *etc.*). Similarly trenches 3 and 5 produced evidence for the coach house, in the form of brick footings for the front and back walls ([15], [21/26] *etc.*) as well as part of an internal wall. The dating of brick and other material from these buildings indicates a construction date that is not likely to be much before 1850, and certainly both buildings were in existence by the 25-inch Ordnance Survey of 1866.

This development may well be contemporary with the major rebuilding and extension of the main House – particularly as this work would have removed two buildings (possibly a former stables & coach house) that appear on the 1813 Enclosure Map just to the west of the old House. The rebuilding of the House itself is not well dated, although again it is recorded by the 1866 Survey. However, the decoration of lead drainwater hoppers with a partridge does suggest that the House

was extended before 1857, as it was in this year that the ownership passed from the Partridge family (who had been at Breakspears since 1769) to the Drakes. If this is the case, and if the various buildings were part of a single programme, then a narrow date range of c 1845-1855 can be offered for the construction of the stables and coach house and for the rebuilding of main House.

One further localised feature that may well relate to the mid 19th century rebuilding is represented by the 6" iron pipe [19] that was recorded in Trench 1, and which most probably formed the main water supply to the House and ancillary areas in the later 19th century.

The limited evidence for earlier activity that was provided by the evaluation appears to relate to the historic estate rather than to the development of the House or adjacent/associated buildings, and is discussed in the following section. Certainly there was no evidence for any of the earlier structures that are shown on the maps of 1771 and 1813 and which were potentially located towards the northern end of trench 5. The area beyond this point and also immediately east of Trench 6 is also heavily truncated by the previous (19th century) development of the House.

What heritage features survive from the various phases of development of the historic estate and garden layout?

What are the nature, form, function, extent and date of these features?

There was relatively little evidence for the development of the estate or garden layout. No evidence for the rectangular pond or for the broad east-west path shown on the 1771 Estate Plan was found, and which were potentially located in trenches 2 and 3/5 respectively.

However, Trench 5 did reveal two adjacent structural features from the historic estate. The first of these was a truncated brick rubble wall base [24], which appears to form part of a boundary shown on the 1813 Enclosure map (although not on the 1771 Plan), and which may have been demolished as part of the mid 19th century rebuilding works. The other feature was a barrel-shaped brick drain [28], which may be roughly contemporary; certainly its design was becoming obsolete by about 1850.

Two further features found in Trench 1 – within the area of the former walled garden – also relate to activity on the estate. The function and date of feature (20) is unknown (other than post-medieval), but the cut (32) was evidently some form of drainage ditch or water channel, and was backfilled in the first half of the 19th century.

The latest evidence for the development of the estate was represented by fragmentary brick remains and demolition material in Trench 2, and which derives from three separate glasshouses that were constructed here between the mid 1890s and 1914. This development had also removed any evidence for earlier activity in this area.

7.2 Assessment of the Evaluation

The evaluation did not produce any significant archaeological finds or remains. The evidence that was recovered relates entirely to post-medieval activity on the site, and very largely to developments in the mid 19th century or thereafter – so most of the recorded remains can be related to known structures. There were a few features of probable later 18th or early 19th century date, primarily the brick wall base and drain in Trench 5, and possibly also the presumed ditch and adjacent cut feature in Trench 1.

However, most of the site had been truncated by mid 19th century development to the level of the natural silty clay, throughout the area of trenches 3 to 6 – and by still later activity (c 1900) within Trench 2.

However, the evaluation did produce evidence for the construction of the former stables and coach house that can be directly related to the cartographic record after 1866. Moreover, these remains can be quite closely dated by material analysis – and do not appear to be much earlier than 1850. This forms a useful addition to the history of the estate, and moreover provides a potential framework for the major rebuilding and extension of the main House. In summary, it seems most likely that these works took place as parts of a single programme, and probably within a few years either side of 1850.

In view of the results and the absence of any significant or early finds, it is proposed that no further archaeological mitigation should take place in relation to the proposed residential and car parking development of this area.

8. Select Bibliography

Bowl, E M, 1996 *Ickenham & Harefield Past*

Compass Archaeology, March 2009 *Breakspear House, Breakspear Road North, Harefield, LB of Hillingdon. An Archaeological Assessment and Level 1-2 Historic Building Record*

LB of Hillingdon, Unitary Development Plan adopted 1998.

Lee, R. 2000 Breakspear House, Breakspear Road, Harefield, Middlesex. Historic Building Record. *Unpublished Report*.

Planning Policy Guidance Note 16 (Archaeology and Planning), 1990.

Reynolds, S. (ed) 1962 'Harefield: Manors', in *A History of the County of Middlesex: Volume 3*

Appendix I: Building Material Assessment

Compiled with the assistance of John Brown (Gifford)

Some ceramic building material (mainly roof tile) was recovered during the evaluation from features in Trench 1. However, the bulk of the assemblage comprised building material samples from seven contexts, mostly brick taken from the *in situ* structures exposed in trenches 3 to 6. A few contexts included samples of mortar and ceramic drainpipe.

The remains in Trench 2 were dated from map evidence to around 1900 (consistent with a brief examination on site), so no material evidence was retained.

The assessed material is described below as follows:

1. Recovered finds – Trench 1

1.1 Fill of cut feature in northern corner of trench [18]:

- Eight fragments of roof tile. Fabric Type 2276, probably from a local brickearth. Most likely to be post-medieval, 16th to 18th century, but quite possibly residual.

1.2 Fill of probable east-west ditch [31]:

- Large fragment of unglazed floor tile, 40mm thick. Fabric similar to Type 2276, probably from locally-sourced micaceous brickearth. Post-medieval.
- Six fragments of roof tile. Type 2276; very similar to those noted above (1.1). Probably 16th to 18th century.
- Small fragment of vitrified brick; *c* 1600 or later.

This is not closely dated by the above finds, and these may all be residual – a single potsherd provides a date of 1800+ (see Appendix II below).

2. Brick & other ceramic samples – Trenches 3 to 6 inclusive

2.1 Trench 3 – base of north wall of coach house [15]

- Two examples of Type 3035 fabric: London yellow stock brick, with machine stamped frog. Dimensions 224-230mm x 100-104mm x 65-66mm. Machine presses were first introduced after *c* 1830, but these are more likely to be 1850-1900.

Both bricks also show evidence of reuse, faces that were within the body of the wall having been previously limewashed.

- One example of brick in a local orange-fired fabric (222mm x 108mm x 68mm); dating to post-1780.
- Lime-based mortar, which was rapidly replaced by Portland cement from the 1860s – following the successful use of the latter in Bazalgette's sewer works.

Construction date is therefore likely to be post-1850, but was certainly in place when the 1st Edition Ordnance Survey 25-inch map was surveyed in 1866.

2.2 Trench 4

2.2.1 Stable block drain [9].

- The drain box adjoining the exposed (SW) face of wall included an incomplete unfrogged brick in fabric type 3032, dimensions 105mm x 60mm. Could be of 19th century date or a bit earlier.
- Associated Roman-style (hydraulic) cement mortar, patented in 1798 and produced by various manufacturers throughout the 19th century.
- An adjacent stoneware drainpipe running into the ground. Internal diameter 101mm (4"), external diam. 140mm. Buff-yellow fabric with feldspathetic (Bristol) glaze. Patented in 1830 so definitely after this date, and becoming very popular from *c* 1850. However, the character of the coupling and the use of lime (rather than bituminous-based) mortar indicates a date before 1880.

The feature is most likely to be post-1850, but (assuming the drainpipe is original) was in place by 1866 when the building was recorded by the 25-inch Ordnance Survey.

2.2.2 Base/northwest end of front wall of stable block [10]

- One example of brick in fabric Type 3032. Sharp arrises, unfrogged, dimensions 218mm x 105mm x 60mm. Broadly late 18th/19th century date.
- Further example similar to above, appears to be intermediate Type 3033 near 3032; dimensions 215mm x 100mm x 60mm.
- One example in fabric 3034. Frogged and stamped, dimensions 226mm x 105mm x 63mm. Could be post-1830, but more likely 1850-1900.
- Reused and quite early brick in local fairly soft fabric Type 3046. Near-Tudor dimensions of 214mm x 115mm x 56mm.

Date of construction is likely to be after *c* 1850, but certainly before 1866 when the stables were recorded by the First Edition of the 25-inch Ordnance Survey (as also 2.2.1 above).

2.3 Trench 5

2.3.1 Brick rubble wall base [24]

- Two incomplete examples of brick in local variant Type 3046. Soft orange fabric, extant dimensions 115-118mm x 48-51mm. 'Tudor-type', *c* 1500-1700.
- One incomplete example of flared header. Local variant of Type 3039 in silty clay. Similar dimensions to above, *ie.*, 112mm x 50mm, although the date may be a bit later into the 18th century.
- The lime & sand mortar matrix includes frequent crushed brick (grog) plus a few larger fragments. The latter can be identified as local variants of Type 3032, date *c* 1630-1800.

Date: the feature does not appear on the Estate Plan of 1771, but fragmentary brick inclusions suggest that construction had taken place by *c* 1800.

2.3.2 Barrel-shaped drain [28]

- Two examples of Type 3032 brick. Unstamped frog, sharp arrises, dimensions 222-224mm x 98-100mm x 62-65mm. Date post-1780.
- One example of fairly late Type 3032. Unfrogged and apparently overfired – slightly irregular & vitrified on three sides. *c* 1775-1850.
- One local late variant of Type 3065. Dimensions 220mm x 106mm x 56mm. Similar clay to earlier examples but post-1750.

Three of the bricks noted above (& one in particular) had been roughly cut or trimmed on one face to a voussoir shape, obviously to fit within the arch of the drain. The overall date of the construction is 1780 or later, but is not likely to be after than 1850 given the rapid introduction of stoneware pipes from this date. On this basis [28] probably also predates the overlying coach house construction (walls [26], [15] in Trench 3, *etc.*).

2.4 Trench 6

2.4.1 Base/southeast end of front wall of stable block [2]

- Two incomplete examples of brick Type 3032. Inferior quality/seconds – vitrified surfaces and slightly misshapen.
- One example of probable local manufacture, akin to Type 3032 but fired orange. Wide, shallow unstamped frog, sharp arrises, dimensions 225mm x 110mm x 63mm.

The date of the samples is broadly 18th to mid 19th century, certainly pre-1870 – and in fact the associated structure is recorded by the 25-inch Ordnance Survey of 1866.

2.4.2 Ceramic drain pipe at northwest end of wall [3]

An apparently related stoneware drainpipe, running into the ground and also identical to that in Trench 4 (context [9] & 2.2.1 above). Internal diameter *c* 101mm (4”), buff-yellow fabric with feldspathetic glaze. Post-1830 and probably *c* 1850 or slightly later.

Appendix II: Pottery Assessment

Only two sherds of pottery were recovered from the evaluation, from trenches 1 and 4. These are described as follows:

1. Trench 1, ditch fill [1]: Small rim sherd of Refined white earthenware (REFW). Plain & undecorated; weight 3gms., *c* 1800-1900.
2. Trench 4, wall construction backfill [8]: Rim sherd from large bowl, Post-medieval fine redware (PMFR). Weight 102gms., *c* 1580-1700.

The pottery finds, specifically the REFW sherd from Trench 1, are only of value in dating their associated contexts. The PMFR sherd found in Trench 4 was residual, within a context that dates approximately to the mid 19th century. Neither sherd is of any intrinsic interest.

Appendix III: Oasis Data Collection Form

OASIS ID: compassa1-

Project details

Project name	Breakspear House
Short description of the project	<p>Archaeological evaluation in the grounds of Breakspear House, Harefield, LB of Hillingdon. Total of 6 trenches, targeting documented 17th to 19th century features and buildings related to the development of the estate.</p> <p>No very significant remains were found. The four trenches nearest the House exposed brick footings of the mid 19th century stables and coach house. This development had removed virtually all earlier remains except a reused brick rubble foundation, probably for a later 18th/early 19th century boundary wall. Two further trenches were located in the former walled garden. One of these contained an E-W ditch-type feature dated to the first half of the 19th century, plus an adjacent and slightly later 6" iron pipe (probably bringing the main water supply to the House). The final trench had been truncated by a series of glasshouses that were constructed around 1900.</p>
Project dates	Start: 23-07-2009 End: 30-07-2009
Previous/future work	No / Unknown
Any associated project reference codes	BZH09 – Sitecode
Any associated project reference codes	7610/APP/2008/1012 – Planning Application No.
Type of project	Field evaluation
Site status	Listed Building
Current Land use	Other 5 – Garden
Monument type	WALL Post Medieval
Monument type	DRAIN Post Medieval
Monument type	DITCH Post Medieval
Monument type	PIT Post Medieval
Significant Finds	POTTERY Post Medieval
Methods & techniques	'Sample Trenches'
Development type	Urban residential (e.g. flats, houses, etc.)
Prompt	Direction from Local Planning Authority - PPG16
Position in the planning process	After full determination (eg. As a condition)

Project location

Country	England
Site location	GREATER LONDON HILLINGDON HAREFIELD Breakspear House
Postcode	UB9 6NA
Study area	0.18 Hectares
Site coordinates	TQ 06035 89655 51
Height OD	Min: 80.25m Max: 83.10m

Project creators

Name of Organisation	Compass Archaeology
Project brief originator	English Heritage/Department of Environment
Project design originator	Compass Archaeology
Project director/manager	Geoff Potter
Project supervisor	Gill King
Type of sponsor / funding body	Developer
Name of sponsor / funding body	Clancy Developments Ltd.

Project archives

Physical Archive recipient	Museum of London archaeological archive
Physical Archive ID	BZH09
Physical Contents	'Ceramics'
Digital Archive recipient	Museum of London archive
Digital Archive ID	BZH09
Digital Media available	'Images raster / digital photography', 'text'
Paper Archive recipient	Museum of London archive
Paper Archive ID	BZH09
Paper Media available	'Context sheet', 'Drawing', 'Map', 'Miscellaneous Material', 'Research', 'Plan', 'Report', 'Section', 'Unpublished Text'

Project bibliography

Publication type	Grey literature (unpublished document/manuscript)
Title	Breakspear House, Breakspear Road North, Harefield UB9 6NA, LB of Hillingdon. An Archaeological Field Evaluation
Author(s)/Editor(s)	Potter, G <i>et al</i>
Date	2009
Issuer or publisher	Compass Archaeology
Place of issue or publication	Compass Archaeology, 5-7 Southwark Street
Description	A4 in-house developer report
Entered by	Geoff Potter (mail@compassarchaeology.co.uk)
Entered on	23 September 2009

Appendix IV: *London Archaeologist* Publication Summary

Site Address: Breakspeare House, Breakspeare Road North, Harefield UB9 6NA

Project type: Archaeological Evaluation

Dates of Fieldwork: June 23rd – 30th 2009

Site Code: BZH09

Supervisor: Gill King

NGR: TQ 06035 89655

Funding Body: Clancy Developments Ltd.

In advance of a new build development six trenches were dug to the west of the Grade I-listed House, mainly targeting documented 17th to 19th century features and buildings on the estate.

No significant remains were found. The trenches nearest the House exposed brick footings of the former stables and coach house, which have been dated by samples and map evidence to *c* 1850-65. This development had removed almost all earlier deposits and features with the exception of a reused brick rubble foundation, probably for a later 18th/early 19th century boundary wall. Two further trenches were located in what had been the walled garden: one revealed an east-west ditch feature dating to the first half of the 19th century, plus a slightly later 6" iron pipe that probably carried the water supply to the House. The final trench had been truncated by a series of glasshouses constructed around 1900.

The natural drift geology generally comprised a silty clay with inclusions of sand and gravel – probably the Glacial and Head deposits identified by the Geological Survey.