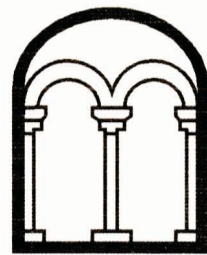


**157 BEDFORD ROAD
WOOTTON
BEDFORDSHIRE**

**ARCHAEOLOGICAL OBSERVATION
INVESTIGATION AND RECORDING**

Albion
archaeology



**157 BEDFORD ROAD
WOOTTON
BEDFORDSHIRE**

**ARCHAEOLOGICAL OBSERVATION
INVESTIGATION AND RECORDING**

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Produced for:
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Contents

List of Figures	4
List of Photographs	4
Preface	5
Key Terms	5
Non-technical Summary	6
1. INTRODUCTION	7
1.1 Planning Background	7
1.2 Status of this Document	8
1.3 Site Location and Description	8
1.4 Archaeological Background	8
1.5 Project Objectives	10
2. METHOD STATEMENT	11
2.1 Standards	11
2.2 Observation, Investigation and Recording	11
2.3 Post-Fieldwork Analysis and Archiving	12
2.4 Project Programme	12
3. RESULTS	13
3.1 Introduction	13
3.2 Ground Reduction within the Lobby-Entry Dwelling (Dining Room and Kitchen)	13
3.3 Ground Reduction within the End-stack Dwelling (Lounge and Sitting Room)	15
3.4 Ground Reduction within the Pantry	16
3.5 Foundation Trench for New-build Lounge	19
3.6 The New Manège Enclosure	20
4. SUMMARY OF FINDINGS	21
5. BIBLIOGRAPHY	23
6. APPENDIX: BEDFORD HER RECORDS	24



List of Figures

- Figure 1: Site location plan
 Figure 2: Known heritage assets and recorded historical features
 Figure 3: Wootton and environs as depicted on the Jefferys map of Bedfordshire (1796)
 Figure 4: Detail from the Wootton Enclosure map (1838)
 Figure 5: Detail from the Ordnance Survey First Edition (1883)
 Figure 6: Detail from the Ordnance Survey Second Edition (1901)
 Figure 7: Detail from the Ordnance Survey Third Edition (1926)
 Figure 8: Location of works to the farmhouse and archaeological observations
 Figure 9: Location of works to the manège
 Figure 10: Section (dining room)
 Figure 11: Section (lounge)
 Figure 12: Section (pantry wall foundation trench)
 Figure 13: Section (foundation trench for new extension)

List of Photographs

- Photo 1: Foundations in ‘dining room’ of lobby-entry dwelling
 Photo 2: Brickwork in north corner of ‘dining room’
 Photo 3: Foundations of north-west gable of lobby-entry dwelling
 Photo 4: North-west gable of lobby-entry dwelling, exterior view
 Photo 5: The ‘kitchen’ fireplace in the lobby-entry dwelling
 Photo 6: Brickwork infilling adjacent to the fireplace in the lobby-entry dwelling
 Photo 7: Detail of construction, right-hand pier of the fireplace
 Photo 8: Former structural timbers re-used as sleepers beneath the floor boards in the end-stack dwelling
 Photo 9: Brickwork at the back of the ‘kitchen’ fireplace
 Photo 10: Foundations of the north-east wall in the ‘kitchen’ of the lobby-entry dwelling
 Photo 11: Foundations of the south-east end of the lobby-entry dwelling visible from inside the end-stack dwelling
 Photo 12: Foundations, dwarf wall within the end-stack dwelling
 Photo 13: Small pit identified in the south-west side of the pantry wall foundation trench.
 Photo 14: ‘Ash chute’ collection box (608) with final use deposit (609) still *in situ*
 Photo 15: Foundations and ‘ash chute’ collection box within the ‘pantry’ extension
 Photo 15: Foundations and ‘ash chute’ collection box within the ‘pantry’ extension
 Photo 16: ‘Ash chute’ collection box (608) with fill removed
 Photo 17: Features observed in the foundation trench for the new-build extension
 Photo 18: Former opposing door of lobby-entry dwelling that was later blocked by the addition of the fireplace
 Photo 19: The manège under construction.
 Photo 20: The manège, showing main axial land-drain trench

The figures and photographs are bound at the back of the report.



Preface

All statements and opinions in this document are offered in good faith. Albion Archaeology cannot accept responsibility for errors of fact or opinion resulting from data supplied by a third party, or for any loss or other consequence arising from decisions or actions made upon the basis of facts or opinions expressed in this document.

This document has been prepared by Ian Turner (Archaeological Supervisor) and Jeremy Oetgen (Project Manager). HER data was collated by James Newbould (Project Officer). The figures were produced by Jeremy Oetgen and Joan Lightning (CAD Technician). All Albion projects are under the overall management of Drew Shotliff. Albion Archaeology would like to acknowledge the assistance of Vanessa Clarke and Geoff Saunders of the Bedford Borough Council's Historic Environment Team.

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Key Terms

Throughout this document the following terms or abbreviations are used:

HER	Bedford Borough Council's Historic Environment Record
HET	Bedford Borough Council's Historic Environment Team
IfA	Institute for Archaeologists
WSI	Written Scheme of Investigation



Non-technical Summary

Albion Archaeology has completed a programme of archaeological observation, investigation and recording undertaken during groundworks. This was in accordance with Condition 4 of planning permission (09/02668/FUL) for renovation and extension of a Grade II listed farmhouse at 157 Bedford Road, Wootton, Bedfordshire. The house is also located within the site of a medieval moat recorded on the Bedford Historic Environment Record (HER 8276)

Planning permission (10/02072/FUL) was additionally granted for a 20m by 40m manège located within the curtilage of the property, subject to a similar archaeological condition. Commensurate with the results of trial trenching of the manège site (the subject of a separate report) Albion Archaeology also observed the groundworks.

This report presents the combined results of both programmes of observation which took place between 8th August 2011 and 10th May 2012.

Two features of unknown date were recorded in foundation trenches for works to the listed farmhouse — a small pit and a ditch on a NE-SW alignment. Both features lay beneath thick layers of cultivated soil and probably predate the existing house by a considerable time. Given their location within the medieval moat, it is surprising that they did not contain any medieval artefacts. This might suggest that either the moat was not a homestead, or that the features predate the moat. Given their association with the medieval moat, these features must be assumed to be of local or regional significance.

The listed building itself is known to comprise two timber-framed elements: a late 16th- or early 17th-century lobby-entry dwelling and a later 18th-century end-stack dwelling. Groundworks within the building revealed hitherto unrecorded details of the construction of the foundations, which in turn adds to the understanding of the upstanding structure. The foundations of the lobby-entry dwelling were more substantial than the later additions and entirely constructed of stone. The end-stack dwelling, and alterations/additions to the lobby-entry dwelling, all made use of brick, which supports the view that they are unlikely to date from before the mid 18th century. Within the lobby-entry dwelling it was demonstrated that the insertion of the brick chimney stack had blocked off an original doorway in the north-east elevation of the building. The foundations of an early lean-to addition to the lobby-entry dwelling were also uncovered.

Archaeological monitoring of the groundworks for the manège confirmed that no significant archaeological deposits were disturbed. The area of Roman settlement identified by trial trenching therefore retains its potentially regional significance.



1. INTRODUCTION

1.1 *Planning Background*

In 2009 Bedford Borough Council granted planning permission (09/02668/FUL) and listed building consent (09/2669/LBC) for the renovation of, and a two-storey extension to, a Grade II listed farmhouse at 157 Bedford Road, Wootton, Bedfordshire. The works included underpinning of the existing building, groundworks for the extension and landscaping of land immediately surrounding it.

The Design, Access and Heritage Statement (Scott Wilson 2009) included a description and photographic survey of the building and no further recording of the standing structure was required as a consequence of the development. However, as well as being listed, the house is located within an archeologically sensitive area, identified on the Bedford Historic Environment Record as the site of a medieval moat (HER 8276). Therefore, in accordance with Policy BE24 of the Bedford Borough Local Plan 2002, the following condition was attached to the planning permission:

'No development shall take place until the applicant, or developer, has secured the implementation of a programme of archaeological work in accordance with a written scheme of investigation, which has been submitted to and approved in writing by the Local Planning Authority.'
(09/02668/FUL, Condition 4, 16/10/2009)

Archaeological advice to the Local Planning Authority is provided by Bedford Borough Council's Historic Environment Team (HET). Their brief (HET 2010) recommended a programme of work comprising archaeological observation, investigation and recording during the groundworks associated with the construction of the proposed extension.

On behalf of the client, Albion Archaeology prepared a Written Scheme of Investigation (WSI: Albion Archaeology 2011a), which was vetted by the HET to ensure compliance with the brief. The programme of archaeological work was completed in accordance with the WSI and the results are presented in this report.

A further application for a 20m by 40m manège located within the curtilage of the property was approved in 2010, subject to a similar archaeological condition. Trial trenching of the manège site was carried out by Albion Archaeology, in compliance with the advice of the HET; the results are the subject of a separate report (Albion Archaeology 2011b). Trenching demonstrated that the construction of drains for the manège had the potential to disturb archaeological remains. Consequently, the HET required a programme of archaeological monitoring of the construction. With the agreement of the HET, monitoring of the manège works was undertaken by Albion Archaeology as a variation to the existing WSI for the works on the house. The report on these observations is, therefore, included in the present document.



1.2 Status of this Document

This is the final report on the archaeological works undertaken as required by planning condition. The document will be submitted to the HET for approval. Once approved by the HET, it will be used by the client in support of an application to the Local Planning Authority for discharge of the relevant planning conditions.

1.3 Site Location and Description

The development area is located in the northern part of Wootton village, Bedfordshire and is centred at TL 0903 4624 (Figure 1). It sits within a parcel of land 2.5ha in size, lying at a height of *c.* 41m OD. The underlying drift geology comprises head deposits of sand, silt and clay gravels. The development area is bounded by mature hedgerows. Except for the farmhouse, outbuildings, and remnants of an old orchard, the land was predominantly under pasture.

1.4 Archaeological Background

1.4.1 Desk-based assessment

At the outset of the archaeological programme, known heritage assets within a 1km radius of the development area were identified by searching Bedford Borough Council's Historic Environment Record (HER). The majority of remains recorded within the search area comprise historic buildings within the settlements of Wootton and Kempston Wood End. These range in date from the 16th to 19th centuries. Figure 2 shows the known heritage assets and any features of interest that are recorded in historical documents.

Few sites comprising sub-surface archaeological remains are known within the search area. However, the development lies within a wider landscape that has recorded evidence of settlement and agriculture dating from prehistoric to medieval times. Investigations in advance of the construction of the Bedford Western Bypass, *c.* 2km north and east of the development, revealed intensive settlement from the Bronze Age to the middle Saxon period (EBB652). Recent investigations at Marston Moretaine, Stewartby and Marsh Leys Farm demonstrate that land adjacent to the Elstow Brook, *c.* 2km east of the development, was settled in the Iron Age and Romano-British periods.

Within the search area, evidence of Roman settlement was found on land at 2 Keeley Lane, *c.* 200m south of the development (HER15804). Here small trial excavation revealed a ditch on a NW–SE alignment, a pit and a shallow gully, which contained pottery dating from the 1st century AD and some animal bone. The Viatores postulated that the route of a Roman road from Dorchester-on-Thames to Alconbury (HER 485; Viatores 173) ran through the development area and a possible embankment or agger (HER 10291) has been observed in the field to the north. However, this is one of many putative Roman roads in Bedfordshire whose existence has been questioned by Simco (1984) and no evidence for a major road was found in recent excavations where the line of Viatores 173 crosses the Biddenham/Great Denham Loop. What might have existed, based on current archaeological evidence, is a local



network of un-metalled roads which broadly coincided with the alignment of Viatores 173 (M. Luke, pers. comm.).

The property affected by the proposed extension (157 Bedford Road) is itself a Grade II listed farmhouse (HER 2799) and was subject of a separate heritage statement submitted as part of the planning application (Scott Wilson 2009). The earliest element is a lobby-entry dwelling, which may date from the late 16th or early 17th century. An end-stack dwelling was added to the eastern end of the building, probably in the later 18th century.

The setting of the property at 157 Bedford Road is enhanced by the presence of numerous features associated with the medieval and post-medieval landscape.

The listed farmhouse sits within a rectangular medieval moated site (HER 8276), one of two at Keeley Green, including that at Keeley Farmhouse (HER 3435). Both moats are now infilled, but each is clearly shown on the Wootton Enclosure Map of 1838 (Figure 4). They must have been filled in by the 1880s, because they are not even indicated as dry earthworks on the Ordnance Survey maps from 1883 onwards (Figures 5–7). Such moated sites are thought to be associated with the conversion of woodland to farmland in the 12th and 13th centuries (Edgeworth 2007, 100). The farmhouse at 157 Bedford Road may represent continuity of occupation of the site from the Middle Ages to the present and it is possible that significant archaeological remains predating the extant property may be present within the boundaries of the moated site.

The historical maps from the Enclosure survey onwards (Figures 4–7) all show a second large house (HER 11708) within the development area, located at the south corner of the moat. The house is now gone and its site occupied by farm outbuildings.

Jefferys' 1796 map of Bedfordshire (Figure 3) shows a village green, Keeley Green (HER 11534), located at the junction of Keeley Lane and Bedford Road. The green was probably originally a feature of the medieval village. The map also depicts a road south-east from Keeley Green to Hardwick Bridge. This road is now apparent in the landscape as a sunken way (HER 11532).

Within the development area, the field to the west of the listed farmhouse contains slight ridge and furrow earthworks of medieval cultivation (HER 5135). These earthworks form part of a larger preserved landscape of ridge and furrow earthworks surrounding the settlements of Wootton and Keeley Green. The development area also lies immediately to the south of the Wootton /Kempston Rural parish boundary. This is a historic boundary likely to have medieval origins.

1.4.2 Field evaluation of the manège site

In 2011, trial trenching undertaken to evaluate the impact of the construction of the manège discovered that the south-east corner of the development area



contains the remains of early to middle Roman period rural settlement, post-medieval quarrying, and further undated features (Albion Archaeology 2011). The Roman features comprised two boundary ditches, a small gully, and two quarry pits, which predate the westernmost revealed boundary. The quantity of pottery that was recovered indicates relatively low intensity of settlement, which is potentially of regional significance. The post-medieval quarrying was probably associated with the farmstead focused on the Grade II listed building.

1.5 Project Objectives

Because the development was located within an area of archaeological interest, it was possible that groundworks associated with renovation and construction might impact upon archaeological remains. In particular, there was potential for the survival of sub-surface archaeological remains associated with the moated site and earlier remains of the house.

The specific aims of the archaeological fieldwork were therefore to:

- Monitor/supervise all groundworks that have the potential to reveal archaeological remains.
- Investigate, characterise and record any archaeological deposits encountered within them.

The broader objectives of the project were to add to the knowledge and understanding of the archaeology of Bedfordshire and produce an archive report that fully describes the archaeological works.

The following local and regional research frameworks are relevant: *Bedfordshire Archaeology: Research and Archaeology: Resource Assessment, Research Agenda and Strategy* (Oake et al 2007) and *Research and Archaeology Revisited: A Revised Framework for the East of England*. (Medlycott 2011). The latter updates *Research and Archaeology: a Framework for the Eastern Counties, 2. Research Agenda and Strategy* (Brown and Glazebrook 2000).



2. METHOD STATEMENT

The methodological approach to the project is set out in detail in the WSI (Albion Archaeology 2011a). A summary of the work actually undertaken is provided below.

2.1 Standards

Throughout the project the standards and requirements set out in the following documents will be adhered to:

- Albion Archaeology *Procedures Manual: Volume 1 Fieldwork* (2nd edition, 2001).
- Association of Local Government Archaeological Officers *Standards for Field Archaeology in the East of England* (2003)
- Bedford Borough Council *Procedure for Preparing Archaeological Archives for Deposition with Registered Museums in Bedfordshire* (version 2.8, 2010)
- English Heritage *Management of Research Projects in the Historic Environment (MoRPHE) Project Managers' Guide* (2006)
Environmental Archaeology: A guide to the theory and practice of methods, from sampling and recovery to post-excavation, 2nd edition (2011)
- HET *Brief for a Programme of Archaeological Field Evaluation and Archaeological Observation, Investigation, Recording, Analysis and Publication at 157 Bedford Road, Wootton, Bedfordshire* (November 2010)
- IfA By-Laws and Code of Conduct
Standard and Guidance for Archaeological Watching Briefs and Field Excavations (revised 2012) and finds (revised 2012)

2.2 Observation, Investigation and Recording

All groundworks relating to the construction were monitored, these comprised the excavation of footings and ground reduction for the insertion of floor slabs (Figure 8). The construction contractors undertook this digging by hand and using a mechanical excavator fitted with a flat-edged bucket and operated by an experienced driver under the supervision of an archaeologist.

Construction of the manège entailed levelling of the ground by infilling hollows with imported aggregate and spreading soil from higher areas to create a flat base for the manège surface. Land drains were then laid in trenches c. 0.35m wide that were excavated by machine (Figure 9). Trial



trenching had demonstrated that levelling was unlikely to affect archaeological remains (Albion Archaeology 2011b), but the excavation of the land drains was potentially damaging and was therefore monitored by an archaeologist.

Archaeological recording was carried out by experienced Albion Archaeology staff in accordance with the *Procedures Manual*. All recorded structural elements and features were identified using a unique number sequence, commencing at (500) to follow on from the numbers assigned for trial trenching on the manège site. These numbers are used to identify the provenances of artefacts recovered. No deposits with potential for environmental sampling were encountered.

There was no requirement to record the standing structure of the listed house, but some changes to the building have been incidentally documented in ‘working shots’ taken by the archaeologists attending groundworks. Observations of the standing structure have also assisted interpretation of the sub-surface archaeological features.

The fieldwork was monitored by the HET on behalf of the Local Planning Authority.

2.3 Post-Fieldwork Analysis and Archiving

All records have been checked and cross-referenced to ensure they are internally consistent. Recording, cleaning and conservation of finds followed the *IfA Guidelines for Finds Work*. Site drawings were digitised and geo-referenced.

Once this report has been approved by the HET, data gathered during the fieldwork will be consolidated into an archive compliant with standards outlined in English Heritage’s *Management of Research Projects in the Historic Environment* and those set out by Bedford Borough Council.

On completion of the project the archive will be deposited at Bedford Museum under accession number BEDFM:2011.45.

Details of the project and its findings will be submitted to the OASIS database in accordance with the guidelines issued by English Heritage and the Archaeology Data Service. The OASIS project reference is albionar1-100638.

2.4 Project Programme

Archaeological observation of the works to the house was undertaken between 8th August 2011 and 10th May 2012. The construction of the manège was observed on 12th and 14th September 2011.



3. RESULTS

3.1 Introduction

This section describes the archaeological observations made during each stage of the groundworks, namely the ground reduction inside the existing building and excavation of foundation trenches for new build elements. There is also a note on the results of observation of the manège construction.

Ground reduction within the extant building was undertaken by conservation building contractors in order to rectify any deterioration in the foundations and enable a concrete slab to be laid within each of the main rooms of the building. The building was made up of separate structural entities constructed at different dates (Scott Wilson 2009). These comprised:

- a possibly late 16th- or early 17th-century lobby-entry dwelling on a NW-SE alignment that contained the existing ‘dining room’ and ‘kitchen’;
- a lean-to ‘pantry’ of uncertain date, which is a later addition to the north-east side of the lobby-entry dwelling; and
- an end-stack dwelling of probable late 18th-century date attached to the south-east end of the lobby-entry dwelling. This contained the existing ‘lounge’ and ‘sitting room’.

For consistency, each room is identified in accordance with the architect’s deposited plan (TJPL drawing no.610.07.W.8D, amended 24/09/2010). These terms do not necessarily indicate the historical functions of the rooms. Natural ground was only exposed in the ‘pantry’ (see Section 3.4), so generally it is not possible to say whether any archaeological features survive beneath the made ground within the building. However, the ground reduction did enable a record to be made of the exposed foundations of the existing building and in places revealed hitherto unrecorded phases of the structure.

3.2 Ground Reduction within the Lobby-Entry Dwelling (Dining Room and Kitchen)

3.2.1 Composition of the layers removed during ground reduction

Dining Room

The existing floor of the dining room comprised suspended wooden boards. After removal of the floor boards, the ground within the dining room was reduced by 0.40m. The ground comprised five levelling layers which are described from top to bottom (Figure 10):

- 0.08m thick upper levelling layer of dark red-brown silty sand with frequent modern (post-1750) brick and tile inclusions (627);
- 0.03m thick levelling layer of light yellow-orange sand (626);
- 0.07m thick levelling layer of dark brown-grey silty clay (625) with occasional charcoal flecks;
- 0.03m thick levelling layer of light yellow-orange sand (624);



- 0.20m thick levelling layer of dark grey-brown clay silt (623) with moderate charcoal flecks and containing occasional small fragments of modern (post-1750) pottery, brick, roof tile and clay tobacco pipe.

Undisturbed geological deposits were not exposed.

Kitchen

The kitchen had a solid floor. After removal of two layers of floor tiles, the ground within the kitchen room was reduced by 0.26m. The ground comprised two levelling layers which are described from top to bottom:

- 0.07m thick upper levelling layer of light grey-yellow sand (628);
- 0.20m thick lower levelling layer of dark grey-brown clay silt (623) – the same deposit as recorded in the dining room.

Undisturbed geological deposits were not exposed.

3.2.2 Foundations exposed by ground reduction

Dining Room

Here, the foundations of the lobby-entry dwelling (Photo 1) were substantial in character, comprising roughly hewn blocks of pale grey sandstone (600). The foundations were random coursed and bonded with a light-greyish-yellow fine mortar in good condition. The base of the timber frame sat directly on these foundations.

Above the foundations, some brick patching (604) was observed close to the fireplace (Photo 2). The brickwork had been used to make-good an opening in the wall and fill the void behind the chimney stack. Originally the lobby-entry dwelling would have had two opposing doorways and a smaller, central fireplace — as was the custom for dwellings of this period. These observations suggest that the north-east facing door was blocked by the insertion of the brick fireplace. Further evidence for this was observed in the pantry (see 4.13 below).

Kitchen

The foundations within the kitchen (600) were of similar construction, except at the north-west end of the building, where they had been replaced and the entire gable rebuilt in brick to first-floor level (Photos 3 and 4). It was also observed that the base of the timber frame of the north-east wall had moved out off-centre of its foundations (Photos 5, 6 and 10). This suggests that the lobby-entry dwelling suffered significant structural movement, presumably due to decay of the timber frame at the north-west gable end of the building, which allowed the entire frame to spread outwards towards the north and west.

Viewed from the kitchen side, the left-hand side of the fireplace (603) clearly abutted the foundations of the north-east wall (Photos 5 and 6). However, above the foundations, brickwork (604) had been inserted to make-good a gap between the chimney stack and the kitchen wall.

The parish map of 1838 (Figure 4) indicates that the north-west gable end of the building sat right on the edge of the moat. The moat is now infilled, but it



is possible that subsidence into the ditch contributed to the instability of the structure.

As far as could be observed, the left-hand pier of the fireplace was entirely founded on brickwork. However, the right-hand pier had a foundation comprising large blocks of pale grey sandstone (Photo 7). The right-hand pier was also in poor condition, comprising several builds of brick and timber studwork.

The back of the fireplace had undergone several phases of rebuilding in brick (Photo 9) and it was clear that there was once an opening into the chimney from the dining room side.

At the base of the north-east wall, near the fireplace, a wide opening beneath the sill of the frame had been blocked up with bricks (605) (Photo 5, 6 and 9). The opening would have given access to a structure in the pantry that seems to have served as a sort of chute for disposal of ash (*see* Section 3.4.4).

The extant doorway into the pantry was probably a later addition, inserted into the north-east wall of the lobby-entry dwelling, most likely when the present chimney stack and pantry were added (*see* 3.4.3).

The south-west facing gable of the kitchen comprised a patchwork of modern brick repairs and had bowed out considerably. This wall was rebuilt as part of the present renovation.

3.3 Ground Reduction within the End-stack Dwelling (Lounge and Sitting Room)

3.3.1 Composition of the layers removed during ground reduction

The floors within both the lounge and sitting room comprised floor boards laid on wooden sills. The latter were re-used former structural beams, probably originally taken from a demolished dwelling or agricultural building. The floor boards and sills were in very poor condition and had been removed before the start of archaeological attendance (Photo 8).

The ground level within the lounge and sitting room was reduced by 0.38m. In both rooms the material removed comprised two levelling layers above a base layer of buried former top soil. They are described from top to bottom (Figure 11):

- 0.28m thick upper levelling layer of light grey-brown sandy silt (620) with occasional charcoal flecks, occasional lenses of mid-blue-grey clay. It contained occasional modern (Post-1750) artefacts: bottle glass fragments, pottery, brick/tile and nails;
- 0.03m thick lower levelling layer of light grey-yellow sand (622) (not present in Figure 11);
- > 0.10m thick buried topsoil layer of dark grey-brown sandy silt (621) with moderate charcoal flecks and occasional small fragments of modern (Post-1750) brick and roof tile.



Undisturbed geological deposits were not exposed.

3.3.2 Foundations exposed by ground reduction

The exposed foundations (600) of the lobby-entry dwelling were visible on the north-west side of the lounge (Photo 11). This would have originally comprised the outer face of the east gable of the earlier building and the foundations were clearly more substantial in character than the foundations of the end-stack dwelling, comprising roughly hewn blocks of light grey sandstone. The foundations were random coursed and bonded with a light greyish-yellow fine mortar in good condition, which was well spread over the stone suggestive of re-pointing.

The exposed foundations of the end-stack dwelling itself comprised a base of stone blocks (601) beneath a dwarf wall of brick (602), which in turn carried the sills of the end-stack dwelling (Photo 12). The stone foundations were at least 0.12m wider than the brick wall they supported.

The light grey sandstone blocks were poorly bonded. The dwarf wall (602) was 0.36m high and comprised four courses of mid pinkish-red bricks. The bricks were 170–200mm long and 60mm thick, laid in stretcher bond, bedded in greyish-yellow sandy mortar that was in good condition.

3.4 Ground Reduction within the Pantry

3.4.1 Pantry north-east wall underpinning trench

An attempt by the conservation builders to underpin the pantry wall was unsuccessful, so the wall had to be demolished and rebuilt. The foundation trench for the new wall was excavated under archaeological supervision (Figure 8).

The north-east-facing section of the foundation trench revealed the sequence of deposits beneath the pantry floor tiles, including two levelling layers above a buried former top soil and underlying geological deposits. They comprised from top to bottom (Figure 12 and Photo 13):

- 0.06m thick levelling layer of light grey-brown clay silt with occasional small and medium stones (635);
- 0.15m thick levelling layer of loose brown-yellow sand with moderate amounts of modern (post-1750) brick and tile fragments (634);
- 0.38m thick topsoil layer of mid grey-brown clay silt with occasional small and medium stones (633);
- > 0.70m thick geological layer of mid blue-grey clay with large patches of orange sandy clay with frequent gravel (630).

3.4.2 Pit

A concave-sided feature [631] that was sealed by layer (633) was identified in the north-east facing section of the new foundation trench (Figures 8 and 14). It was 0.90m wide and 0.28m deep and contained a deposit of light orange-brown clay silt with occasional charcoal flecks and medium stones (632). It did not contain any artefacts.



The feature did not extend to the opposing side of the foundation trench and is therefore considered to have been a pit. The date of the pit is not known but it predates the pantry wall and the compact nature of its fill (632) suggests that it is of considerable age, possibly medieval or older.

3.4.3 Composition of the layers removed during ground reduction

After removal of a layer of floor tiles the ground within the pantry was reduced by 0.25m. During ground reduction the foundations (607) of an earlier, smaller pantry or corridor were exposed (*see below*). The layers observed on either side of the earlier foundations were distinctly different. North of the foundation (607) the layers were the same as described in the underpinning trench (*see above*). South of the foundation (607) a single levelling layer (629) was encountered. This was over 0.25m thick and consisted of mid-grey-brown sandy silt (629) with occasional charcoal flecks and occasional small fragments of modern (post-1750) brick and roof tile. Geological deposits were not exposed during ground reduction and the evidence from the new foundation trench indicates that they lay c. 0.5m below modern ground level.

3.4.4 The foundations exposed by the ground reduction

The outer foundations of the lobby-entry dwelling (600) were visible along the south-west side of the pantry and were consistent with the previous exposed segments, being substantial in character comprising of roughly hewn blocks of pale grey sandstone bonded with a light grey-yellow fine mortar in good condition (Photos 14-16).

The outer face of the foundations of the end-stack dwelling was visible within the narrow corridor at the south-east end of the pantry. Both the stone base (601) and two courses of the brick dwarf wall (602) were observed beneath the wooden doorstep. On the pantry side, the stone base was at least 0.20m wider than the brick.

Ground reduction within the pantry also exposed the shallow foundations of an earlier, narrower pantry or corridor (Photo 15). These comprised two wall foundations and a small brick chute and ash collection box.

Foundation (607) ran down the middle of the pantry from its south-east end, continuing for at least 3.5m; it survived for two thirds of the length of the pantry. It comprised a single random course of pale grey, roughly squared sandstone blocks. The south-west (inside) face of the sandstone course had been consolidated by a course of un-mortared pinkish red bricks (606). The bricks were 174–208mm long, 90mm wide, and 60mm thick.

The foundation course of the second wall (606) was set at 90 degrees to the longer foundation wall, on a NE-SW alignment. It comprised two random courses of un-mortared pinkish red bricks. The second wall was 0.9m long and adjoined a brick ash collection box (608) (*see below*).

The earlier pantry or corridor was c. 6m long and did not extend the full length of the lobby-entry dwelling. Its south-east end wall clearly survived as part of



the extant structure (Photo 15) and the studwork suggests there had originally been a door at its south-east end. The existing staircase and low, narrow corridor that connected the pantry to the end-stack dwelling were later additions to the pantry, but it was unclear whether or not they were contemporary with the building of the end-stack dwelling.

Differences in the extant brickwork at the north-west end of the pantry also retained elements of the earlier structure (Photo 4), demonstrating that the narrow pantry / corridor had a more steeply pitched roof than the existing one.

The brick 'ash chute' and collection box (608) (Photo 14–16) may have been a later feature added to the first build pantry / corridor. It was 0.7m long, 0.5m wide and had survived to a depth of 0.12m. The structure comprised two courses of large, un-frogged bricks (188–215mm long, 105mm wide and 42–62mm thick). They were not bonded with mortar. The structure contained soot and hard fragments of fuel ash (609) from its last use, after which it was buried beneath the floor levelling layer (629). The fuel ash comprised burnt clay and other material that had reached a very high temperature, perhaps as the result of a mishap or accident such as a chimney fire (Holly Duncan, pers. comm.). When the fuel ash was removed, the sloping brick base of the chute was observed (Photo 16); this ran beneath the sill of the lobby-entry dwelling and had been created by removing part of the stone foundation (600). From inside the lobby-entry dwelling the chute would have been adjacent to the fireplace as if it had been placed to receive ash from the fire. The exact purpose of this structure is unknown. We can speculate that it may have been used to transfer hot coals for a variety of purposes: to heat a copper, or for smoking meat, perhaps? But this is unlikely, given that the proximity of the wooden sill. It may have been simply a bespoke, labour-saving solution to facilitate the disposal of cold ashes.

3.4.5 Evidence for the original north-east doorway to the lobby-entry dwelling

As previously described, the former opposing doorway of the lobby-entry dwelling became blocked off when the present chimney stack was constructed. The former doorway recess was clearly visible in the south-west pantry wall, where it had been carefully converted into a pantry cupboard (Photos 15 and 18). It is noted that the conversion of the opposing doorway into a cupboard provides good evidence that the earlier, smaller pantry / corridor must have been added by the time the fireplace was constructed, or it would have been more likely that the old doorway would have been bricked up.

The cupboard had a brick floor, shelves at waist and chest height and a hinged narrow-frame door fitted to the upper half of the feature. Visible brickwork at the back and sides of the cupboard clearly illustrated a patchwork of brick infilling to 'make good' gaps around the fireplace after its construction. The cupboard recess was 2.25m high, 1m wide and 0.45m deep.

The foundations of the enlarged pantry were found to comprise just two courses of brick, which is why underpinning was required as part of the renovation.



3.5 Foundation Trench for New-build Lounge

3.5.1 Deposits excavated within the foundation trench

The foundation trench was 23m long, 0.60m wide and 1.10m deep. Four layers interpreted as topsoil, buried former topsoil and two deposits of undisturbed natural were observed. They are described from top to bottom:

- 0.35m thick upper topsoil layer of dark grey-brown sandy silt (700) with occasional modern (post-1750) brick and roof tile fragments (Figures 8 and 13). Its thickness suggests it was cultivated soil, which in turn suggests some form of horticulture within the moat;
- 0.27m thick buried former topsoil layer of mid-brown-grey clay silt (701) with occasional modern (post-1750) brick and roof tile fragments (Figures 8 and 13). Again, this thick soil is likely to have derived from cultivation;
- > 0.50m thick geological layer of mid-grey-yellow clay sand (702) (Figures 8 and 13);
- > 0.50m thick geological layer of mid-yellow-grey clay (706) (Figure 8).

A single feature [703] was identified in the north-east foundation trench for the new build lounge (Figures 8 and 13; Photo 17). It was 1.90m wide and 0.32m deep, with a concave-sided, flat-based profile. It contained mid-brownish-grey clay silt (704), which produced no artefacts. The feature was sealed by the buried former topsoil layer (701). A depression in layer (701) that followed the profile of the ditch had been levelled with a mid-brownish-grey sandy silt deposit (705); it contained post-medieval brick and roof tile fragments. Above this was the topsoil layer (700).

The feature is interpreted as a ditch, based on its size and profile. The date of the ditch is not known but it is likely to be of some age since it had become sealed by two phases of cultivated soil (700 and 701). The depression above it is likely to have formed as a result of compaction of the fill and it must have been visible as an earthwork into the 19th century, since it contained modern artefacts. The relatively pale colour of the ditch fill and the lack of artefacts within it may indicate an earlier date for the ditch.

The parish map of 1838 (Figure 4) illustrates a small building located close to the north-east end of the end-stack dwelling and the boundaries of a small enclosure around the property that were probably defined by ditches. The ditch [703] may be associated with the small structure or the boundary ditches. The parish map also illustrates the presence of the end-stack dwelling but does not clearly illustrate the first build pantry. However, this is probably simply a drawing omission as the pantry is likely to be contemporary with the addition of the fireplace for the reasons discussed in section 3.4.4.

The later OS 1st edition map of 1883 (Figure 5) does illustrate the pantry but the separate building close to the north-east end of the end-stack dwelling is missing. Slight differences in the boundaries close to the property are also indicated. The OS 2nd edition map of 1901 is essentially the same as the 1883 map.



3.6 The New Manège Enclosure

Prior to laying the manège surface, the ground was levelled up to *c.* 41.2m OD. Below this formation level, drainage runs in a herringbone configuration (Figure 9) were machine excavated to a depth of between 0.2m (to the south-west) and 0.5m (to the north-east). The top of archaeological deposits identified by trenching lay between 40.9m OD and 40.8m OD, so some disturbance of archaeological deposits was possible. However, no archaeological features were observed, which demonstrates that the integrity of the underlying remains has not been compromised.



4. SUMMARY OF FINDINGS

Information contained in the HER suggests that the development area is located in an area of Wootton that has been a focus of settlement at least since the Roman period (see Section 1.4). The investigations undertaken as a consequence of the development have added moderately to this body of evidence.

Trial trench evaluation of the manège site (Albion Archaeology 2011) has now demonstrated that the south-east corner of the development area was inhabited in the early to middle Roman period. However, the construction of the manège had a minimal impact on the remains, which have been left *in situ*. Archaeological monitoring of the groundworks, in particular the insertion of the land drains has confirmed that no significant archaeological deposits were disturbed. This area of Roman settlement is still, therefore, considered potentially of regional significance.

Two features of unknown date were recorded in foundation trenches excavated as part of the renovation and construction works to the Grade II listed farm house — a small pit [631] of unknown date in the pantry underpinning trench and a ditch [703] on a NE-SW alignment. Both features lay beneath thick layers of cultivated soil and probably predate the existing house by a considerable time. Given their location within the medieval moat, it is surprising that they did not contain any medieval artefacts. This might be evidence that the moat was not a homestead site — not all moats were residences, some being used as gardens or orchards (Darvill 1988). However, it is also a possibility that the features may predate the moat. The lack of dating evidence means that the significance of these features in isolation is uncertain, but given their association with the medieval moat they must be assumed to be of local or regional significance.

Observation of the groundworks within the Grade II listed building has revealed hitherto unrecorded details of the construction of the foundations, which in turn adds to the understanding of the superstructure. Of particular interest is evidence for alterations to the oldest part of the house: the lobby-entry dwelling. The location of the original doorway in the north-east elevation of the building has been confirmed. It has also been demonstrated that the chimney stack was a later insertion, which blocked off the earlier doorway. A further significant discovery was the remains of the footings for the original ‘pantry’ addition to the lobby-entry dwelling. Because the blocked doorway recess was turned into a cupboard it is likely that the early ‘pantry’ was added at the same time as the fireplace.

The foundations of the earliest part of the property, the lobby-entry dwelling, are clearly more substantial than the later additions, being comprised of roughly hewn sandstone blocks. The end-stack dwelling and the later alterations and additions to the lobby-entry dwelling all make use of brick, which provides a broad indication that they are unlikely to date from before the mid 18th century, and could well postdate the abolition of the brick tax in 1850 (Cox 1979, 11–16). The bricks were presumably locally-made in the



Wootton brickyards. Overall, the archaeological evidence does not conflict with the construction sequence proposed in the Design, Access and Heritage Statement (Scott-Wilson 2009), but the only dating evidence is provided by the use of brick in the construction. The probable sequence of construction is as follows:

The lobby-entry dwelling was constructed with opposing doorways in the late 16th to 17th century (date assumed). A substantial brick chimney stack was later added that blocked the north-east doorway and a small lean-to (the original 'pantry') was added with an outer door at its south-east end and a new internal doorway inserted between it and the 'kitchen' in the original dwelling. The date of these changes is uncertain. The end-stack dwelling was added, probably in the late 18th century, and a narrow corridor to the pantry and a staircase to the upper floor of the lobby-entry dwelling were either added at this time, or they may have been a later addition. The final addition to the property was the widening of the pantry, probably in the late 19th or early 20th century.



5. BIBLIOGRAPHY

- Albion Archaeology 2001. *Procedures Manual Volume 1 Fieldwork*, 2nd ed.
- Albion Archaeology 2011a. *157 Bedford Road, Wootton, Bedfordshire: Written Scheme of Investigation for a Programme of Archaeological Observation, Investigation, Recording, Analysis and Publication*, Report 2011/58.
- Albion Archaeology 2011b. *157 Bedford Road, Wootton, Bedfordshire: Archaeological Field Evaluation*, Report 2011/113.
- Brown, N. and Glazebrook, J. 2000. *Research and Archaeology: a Framework for the Eastern Counties*, 2. *Research Agenda and Strategy*, EAA Occasional Paper 8
- Cox, A. 1979. *Survey of Bedfordshire: Brickmaking, a History and Gazetteer*. Bedford: Bedfordshire County Council and RCHM
- Darvill, T. 1988. *English Heritage Monuments Protection Programme Monument Class Description: Moats* [online] Available: <http://www.english.gov.uk/mpp/mcd/> (Accessed: 18/10/2013)
- Edgeworth, M. 2007 'Anglo Saxon and medieval Bedfordshire – AD400-1550'. In: Oake, M. 2007. *Bedfordshire Archaeology. Research and Archaeology: Resource Assessment, Research Agenda and Strategy*. Bedfordshire Archaeology Monograph 9.
- HET 2010. *Brief for a Programme of Archaeological Field Evaluation and Archaeological Observation, Investigation, Recording, Analysis and Publication at 157 Bedford Road, Wootton, Bedfordshire*. November 2010.
- Medlycott, M. (ed) 2011. *Research and Archaeology Revisited: A Revised Framework for the East of England*. East Anglian Archaeology Occasional Paper 24.
- Oake, M. et al, 2007. *Bedfordshire Archaeology. Research and Archaeology: Resource Assessment, Research Agenda and Strategy*. Bedfordshire Archaeology Monograph 9.
- Scott-Wilson. 2009, *Farmhouse at 157 Bedford Road, Wootton, Bedfordshire: Design, Access and Heritage Statement*
- Simco, A, 1984. *Survey of Bedfordshire: The Roman Period*. Bedford: Bedfordshire County Council and RCHM



6. APPENDIX: BEDFORD HER RECORDS

HER No.	Location	Description
3435	TL009461	Moated site and earthworks at Keeley Farm, Keeley Green, Wootton. Now mostly infilled and farm building situated on top; western circuit remains as a drain alongside Bedford Road. Extent of moat shown on map of 1838. Place names indicate that this was Culy Manor. (See also BCAS projects 223 and 438)
5157	TL007460 and TL006457	Gravel Pits , south of Keeley Green. Rectangular depression (TL 007 460) up to 2m deep with hedge running through it, the latter not marked on 1838 map. An irregular depression (TL 006 457). Gravel metalling visible along FP towards Keeley Green; gravel spread in north-east corner of wood.
8276	TL009462	Moated site , (157, Bedford Road); one element of a double moated site marked on the map of 1838; partly infilled, only the eastern circuit extant and water-filled. Towards north-west is crossed by an earthen causeway.
8519	TL009460	Keeley Farmhouse . C17th timber-framed farmhouse, refaced C19th. Grade II
11532	TL009462 to TL011460	Lane marked as Kempston/Wootton Boundary. Earthworks, some ridge and furrow and sunken way. Lane runs from Wootton Keeley, opposite moat of HER3435, to Pot Cross (HER 11533). Shown on Kempston Enclosure Map 1804.
11533	TL014458	Pot Cross. Adjoins open field called Potty Cross Field. Name derived from <i>Porteway</i> .
11538	TL010461	Dovecote , Keeley Green. A dove house, associated with Culy Manor is thought to have been situated in the Keeley farm area (i.e. within Dove House Close.
15804	TL008461	Roman Occupation , 2 Keeley Lane Wootton. Limited excavation revealed settlement related features and a quantity of first to early second century finds.

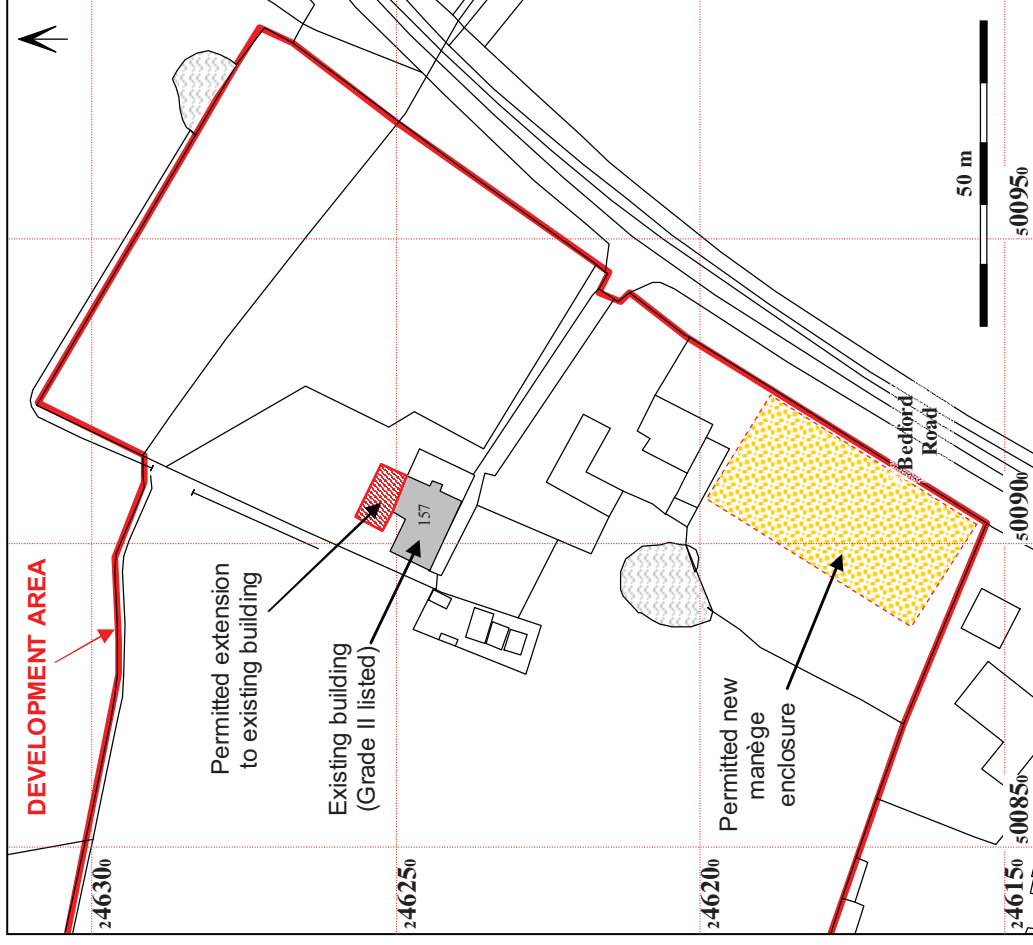
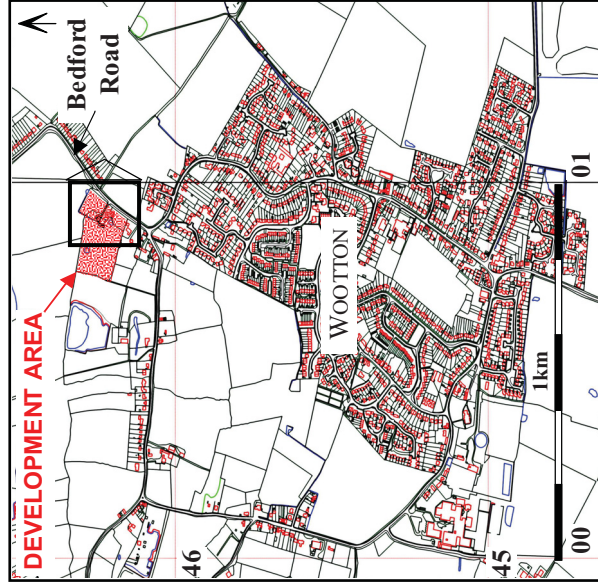
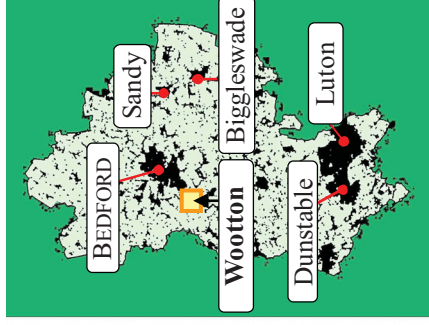
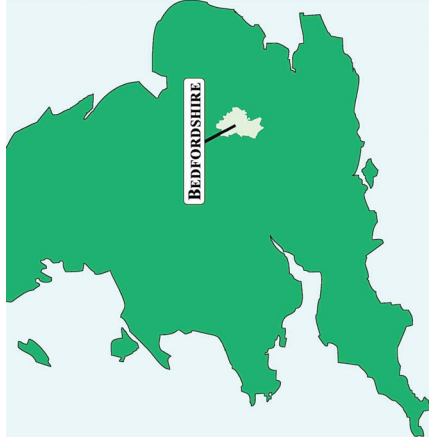


Figure 1: Site location plan

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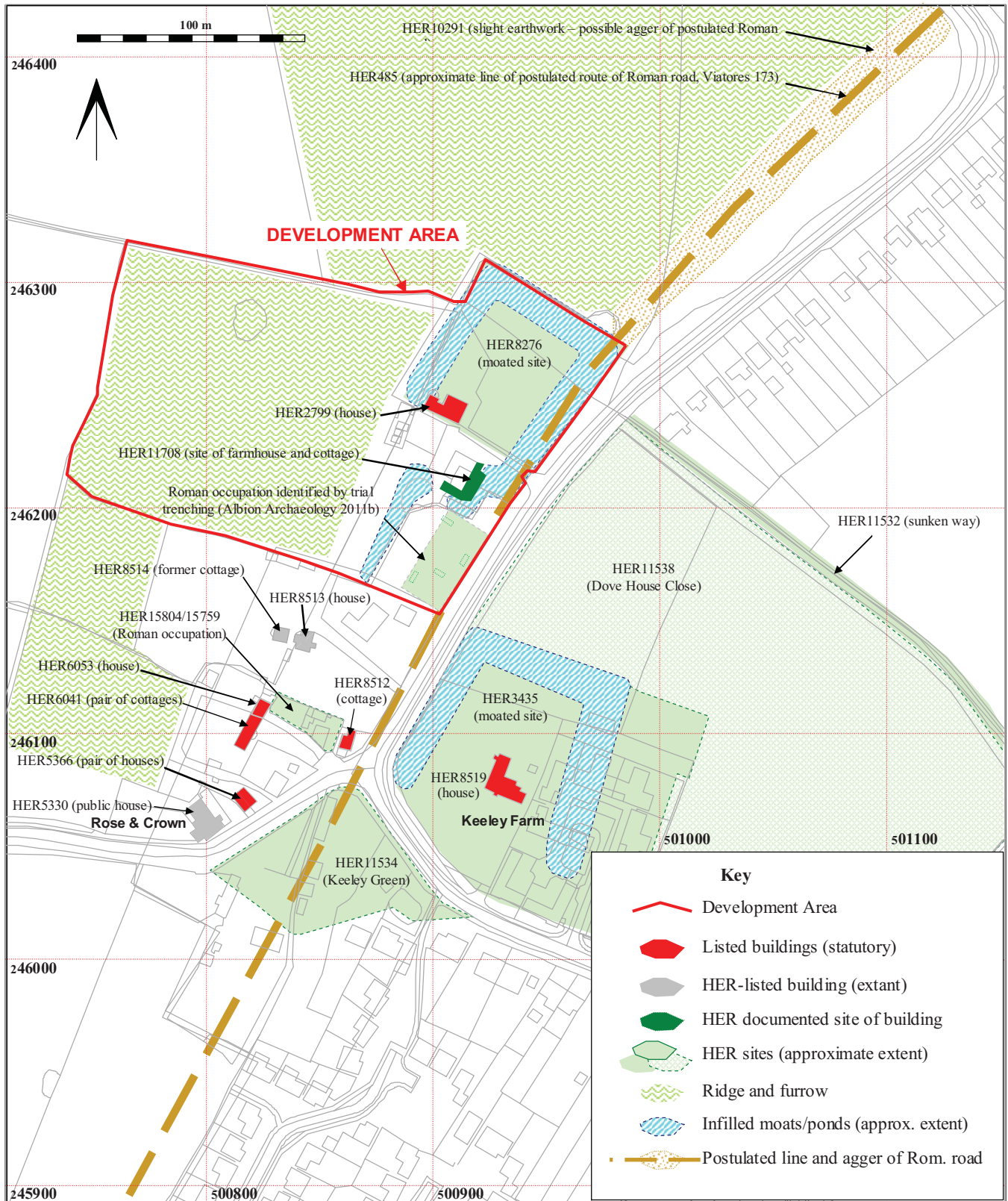


Figure 2: Known heritage assets and recorded historical features

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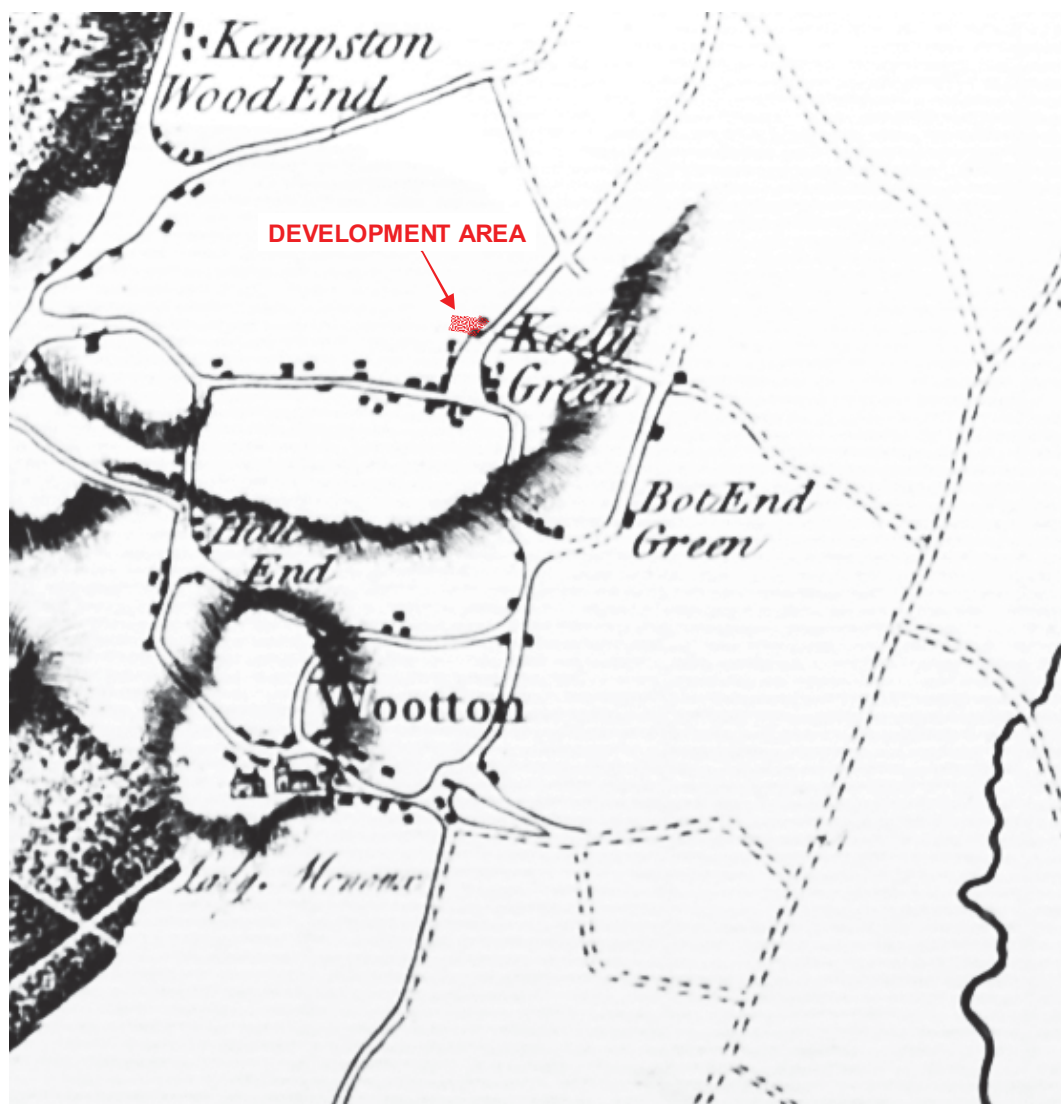


Figure 3: Wootton and environs as depicted on the Jefferys map of Bedfordshire (1796)

Courtesy of Bedfordshire and Luton Archives and Records Service

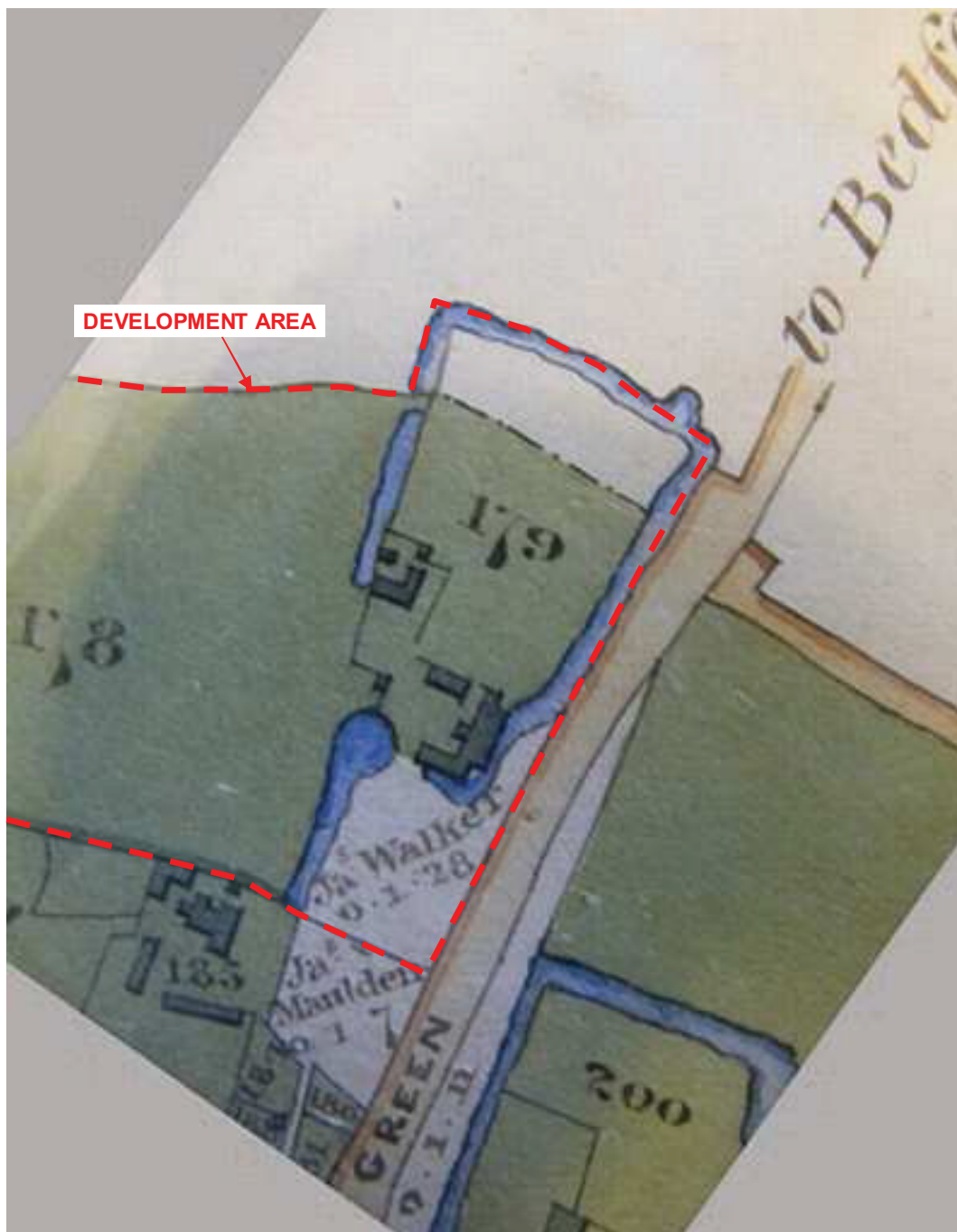


Figure 4: Detail from the Wootton Enclosure map (1838)

Courtesy of Bedfordshire and Luton Archives and Records Service



Figure 5: Detail from the Ordnance Survey First Edition (1883)

Courtesy of Bedfordshire and Luton Archives and Records Service



Figure 6: Detail from the Ordnance Survey Second Edition (1901)

Courtesy of Bedfordshire and Luton Archives and Records Service

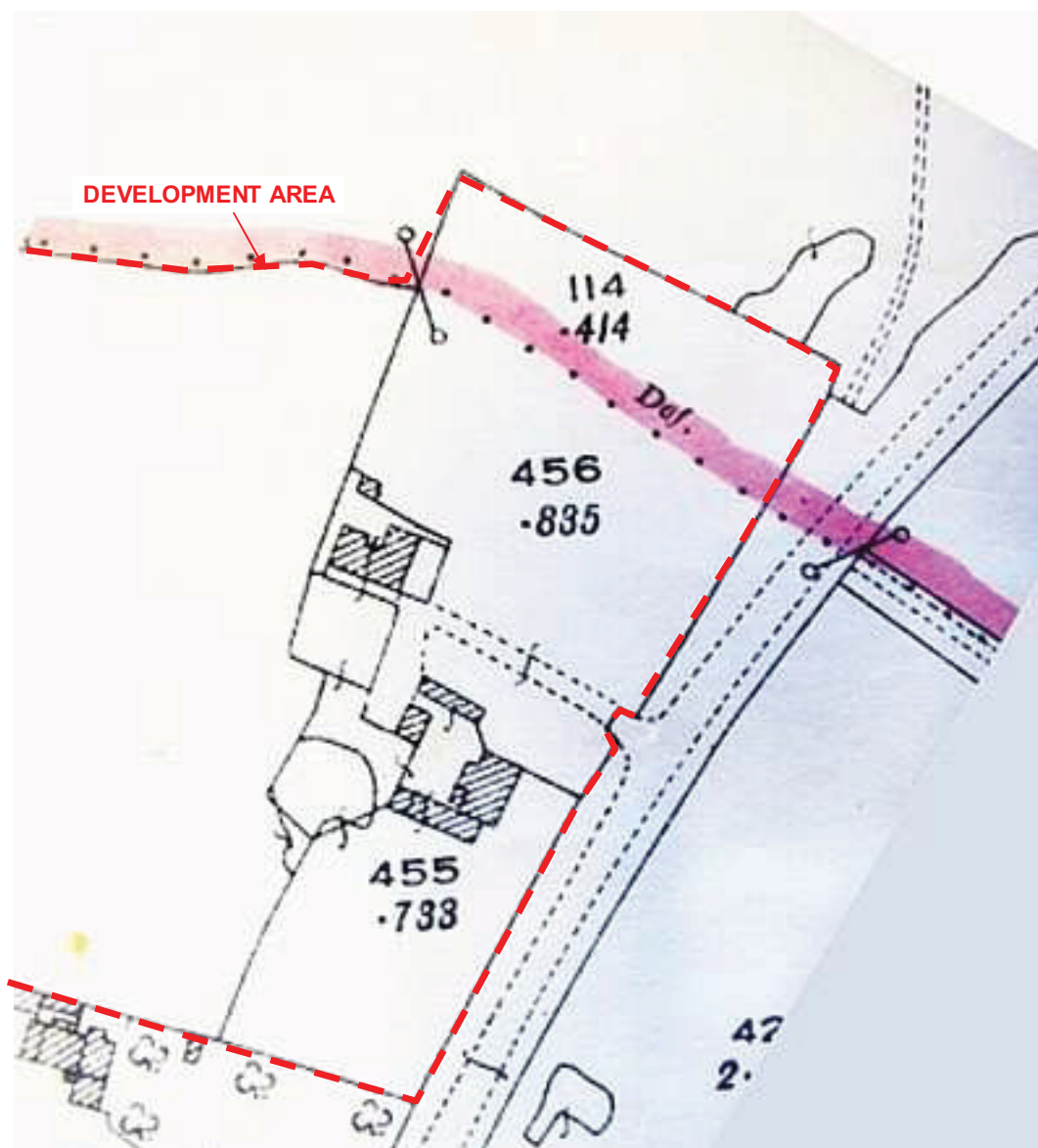


Figure 7: Detail from the Ordnance Survey Third Edition (1926)

Courtesy of Bedfordshire and Luton Archives and Records Service

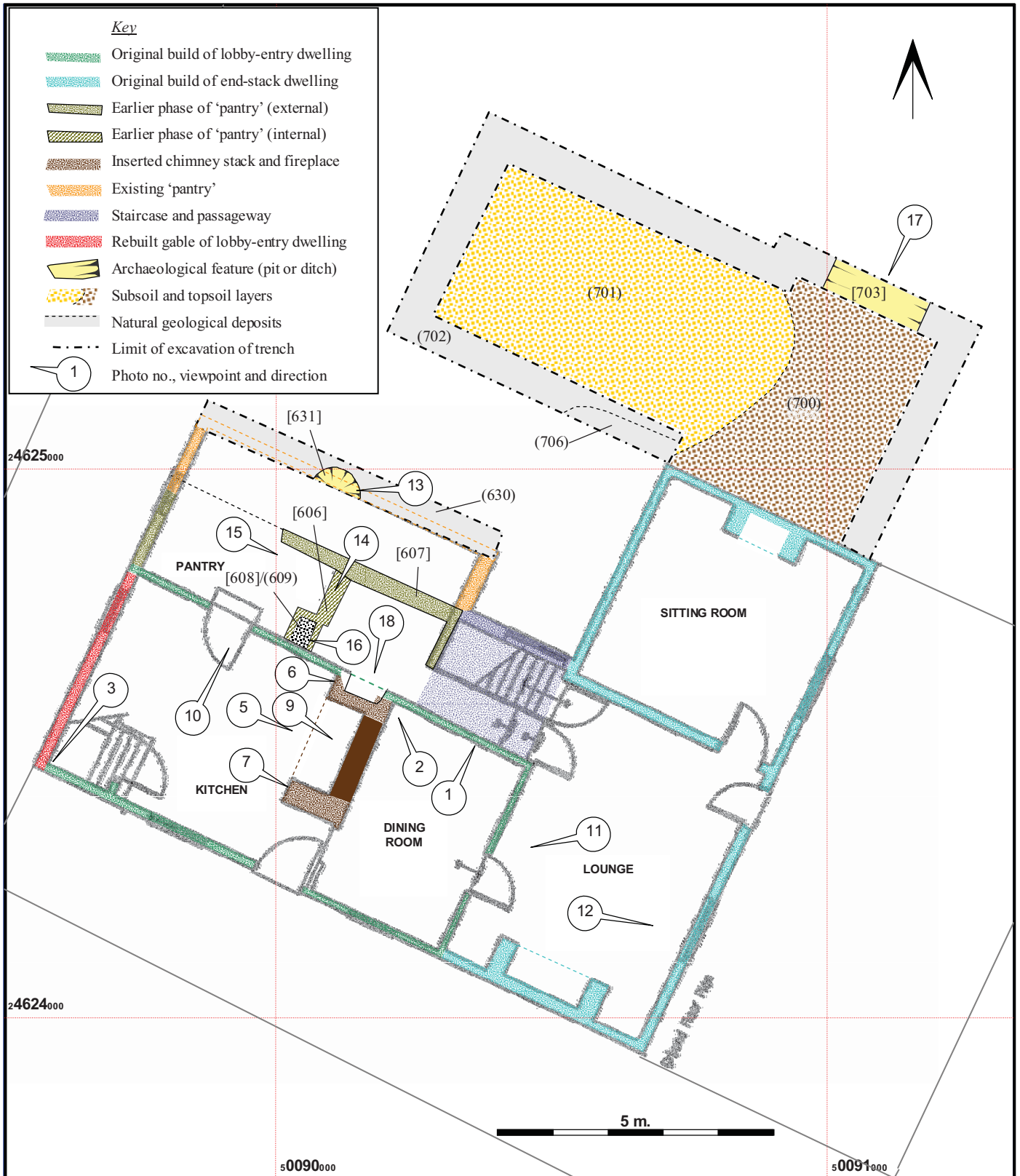


Figure 8: Location of works to the farmhouse and archaeological observations

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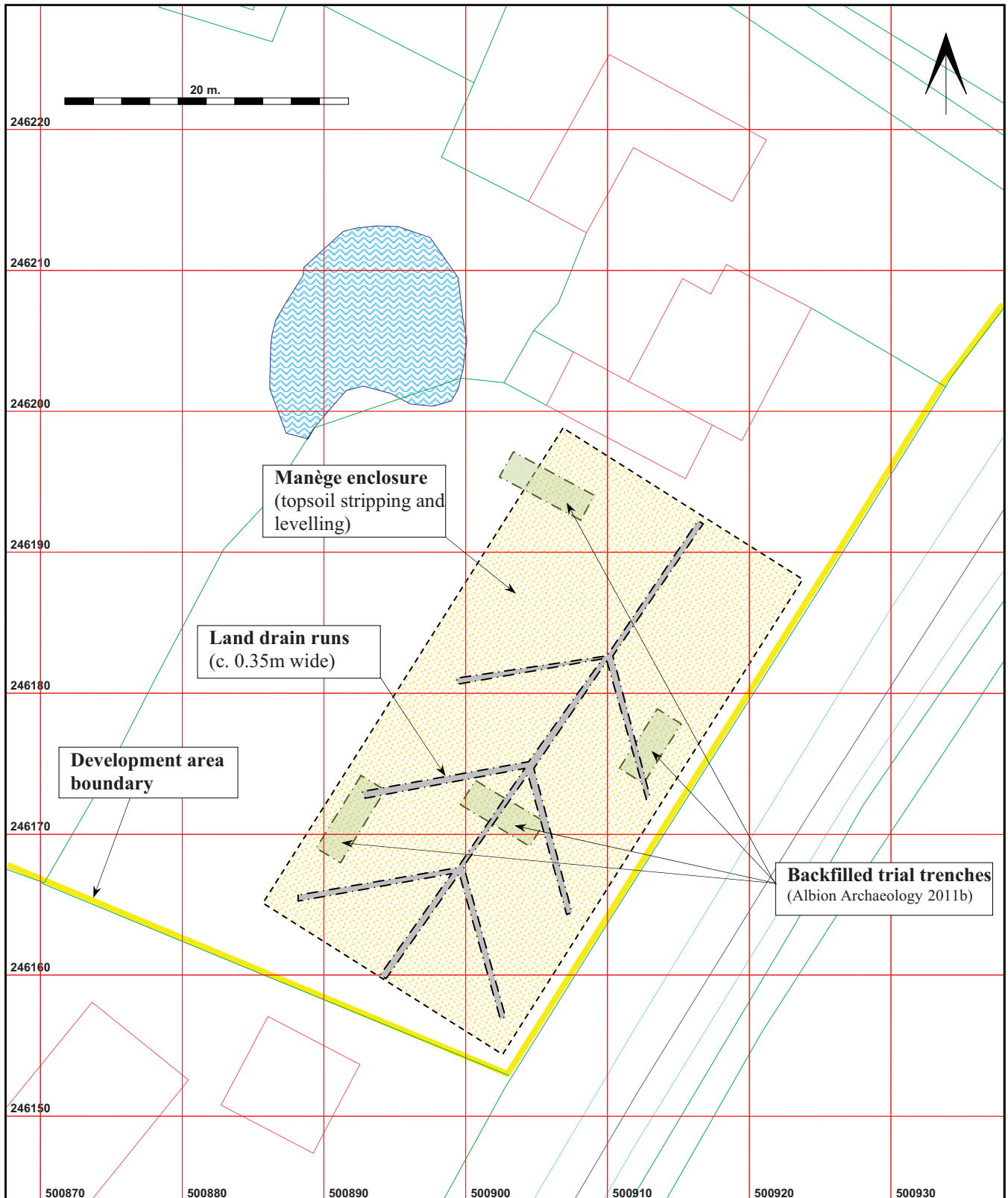


Figure 9: Location of works to the manège

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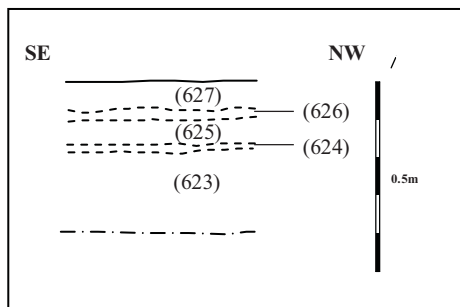


Figure 10: Section (dining room)

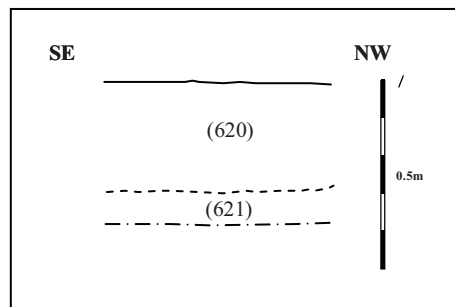


Figure 11: Section (lounge)

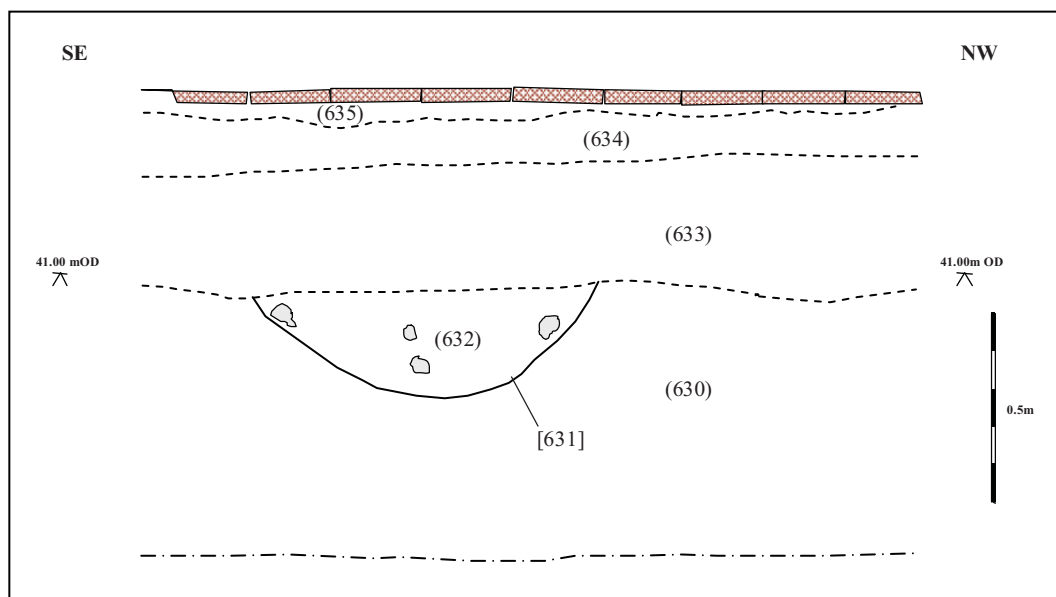


Figure 12: Section (pantry wall foundation trench)

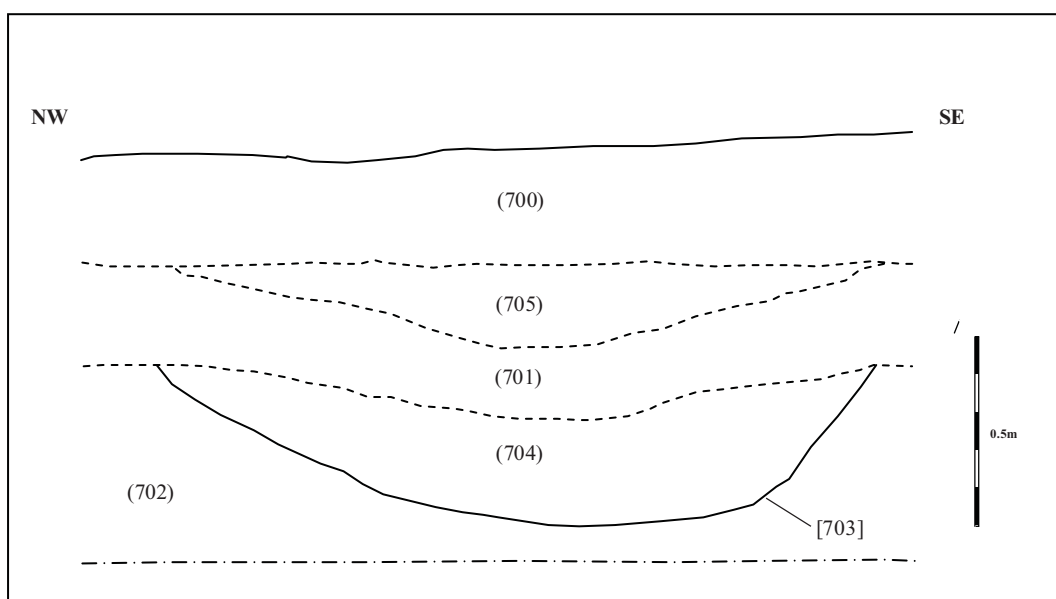


Figure 13: Section (foundation trench for new extension)



Photo 1: Foundations in the 'dining room' of the lobby-entry dwelling



Photo 2: Brickwork in north corner of 'dining room'



Photo 3: Foundations of north-west gable of lobby-entry dwelling



Photo 4: North-west gable of lobby-entry dwelling, exterior view



Photo 5: The 'kitchen' fireplace in the lobby-entry dwelling



Photo 6: Brickwork infilling adjacent to the fireplace in the lobby-entry dwelling



Photo 7: Detail of construction, right-hand pier of the fireplace



Photo 8: Former structural timbers re-used as sleepers beneath the floor boards in the end-stack dwelling

Composite photo created using AutoStitch demo 2.2



Photo 9: Brickwork at the back of the 'kitchen' fireplace



Photo 10: Foundations of the north-east wall in the 'kitchen' of the lobby-entry dwelling



Photo 11: Foundations of the south-east end of the lobby-entry dwelling visible from inside the end-stack dwelling (Photo digitally altered to remove obscene Graffiti)



Photo 12: Foundations, dwarf wall within the end-stack dwelling

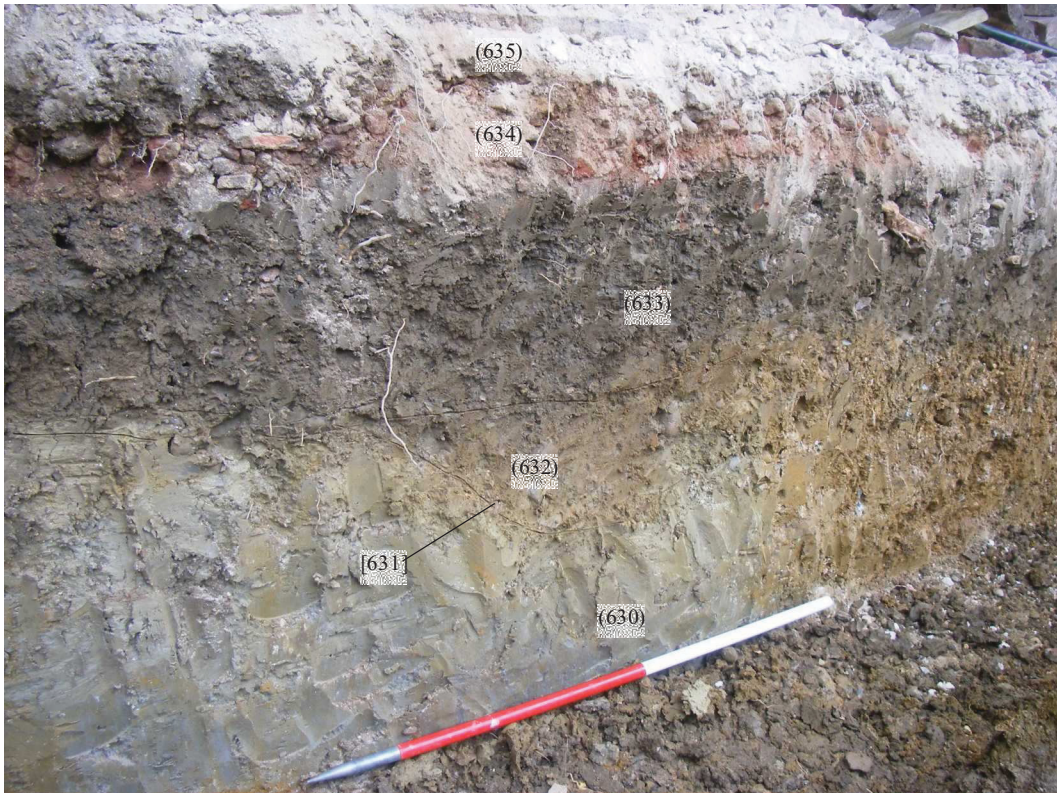


Photo 13: Small pit in the south-west side of the pantry wall foundation trench



Photo 14: 'Ash chute' collection box (608) with final use deposit (609) still *in situ*



Photo 15: Foundations and ‘ash chute’ collection box within the ‘pantry’ extension
(Several phases are visible in the walls behind.)

Composite photo created using AutoStitch demo 2.2



Photo 16: 'Ash chute' collection box (608) with fill removed
(Note the bricked-up void beneath the timber sill.)



Photo 17: Features observed in the foundation trench for the new build extension



Photo 18: Former opposing door of lobby-entry dwelling that was later blocked by the addition of the fireplace (The recess was converted into a cupboard)



Photo 19: The manège under construction.



Photo 20: The manège, showing main axial land-drain trench.

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