

**A FOUNTAIN PIPE TRENCH AT
WREST PARK GARDENS
SILSOE
BEDFORDSHIRE**

ARCHAEOLOGICAL WATCHING BRIEF

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Preface

Every effort has been made in the preparation of this document to provide as complete a summary as possible within the terms of the method statement. 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 report has been prepared by Wesley Keir (Project Officer). Joan Lightning (CAD Technician) digitised the plans and produced the figures. The finds were analysed by Jackie Wells (Artefacts Officer). The observation and investigation was undertaken by Wesley Keir. The project was managed by Jeremy Oetgen (Project Manager). Drew Shotliff (Operations Manager) was responsible for quality control.

Albion Archaeology is grateful to Alan Abbott of English Heritage for commissioning the project. Albion Archaeology would also like to acknowledge the assistance and co-operation of the following:

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Structure of the Report

After the introductory Section 1, there is a summary of the results of the archaeological watching brief in Section 2, followed by a brief conclusion (Section 3). Section 4 is a bibliography. The subsequent appendices contain summary information on the documents and maps that were consulted and detailed descriptions of the contexts that were contained in each trench.



Key Terms

Throughout this report the following terms or abbreviations are used:

Albion	Albion Archaeology
BCAS	Bedfordshire County Archaeological Service
BCC	Bedfordshire County Council
BLARS	Bedfordshire and Luton Archives and Records Service
Client	English Heritage
HER	Historic Environment Record
IFA	Institute of Field Archaeologists
<i>Procedures Manual</i>	<i>Procedures Manual Volume 1 Fieldwork, 2nd Edition 2001.</i> Bedfordshire County Council



Non-Technical Summary

Between 4th and 6th April 2006 Albion Archaeology undertook an archaeological watching brief on behalf of English Heritage. The work was occasioned by the laying of a replacement pipeline to supply the fountain within the grounds of Wrest Park Gardens. This involved the digging of a trench along the course of the existing pipeline.

Wrest Park was the home of the De Grey family from the 13th century until 1917. The present Wrest Park house was completed by 1834 replacing an earlier manor house that was located further to the south. The formal gardens date to the early 18th century, and were later modified by Capability Brown. Subsequent generations added garden buildings and landscape features but retained the garden established in the 18th century.

Within the pipe trench, demolition layers and a brick culvert were revealed. These were located in the area of the earlier house, as marked on 18th century maps, and the location of the culvert matched that of a previously mapped parch mark that has been tied in with plans of the previous house. A brick cistern or possible ice house was also revealed and is likely to be contemporary with the earlier house. The existing pipeline was likely to be associated with the supply of garden features dating from the late 18th and 19th centuries.

The Watching Brief has increased our knowledge of features associated with the earlier development of Wrest Park. It has also demonstrated the significant potential for the survival of buried archaeological features that may provide evidence for the historical development of the gardens.



1 INTRODUCTION

1.1 *Background*

In April 2006 Albion Archaeology was commissioned by English Heritage to undertake an archaeological watching brief during the laying of a replacement underground pipe supplying a fountain within Wrest Park Gardens. Installation of the new pipe required the excavation of a trench along the course of the existing pipe.

The house and gardens of Wrest Park are a scheduled ancient monument (Bedfordshire monument no. BD48) and the park and surrounding land have been designated as a Conservation Area by Mid Bedfordshire District Council.

The works were undertaken under an SMC6 Licence, issued by the Inspector of Ancient Monuments for Bedfordshire. The terms of the Licence required that:

1. Excavation must be limited to the width and depth of the original pipe trench.
2. Any mechanical excavation could only be carried out with a machine if fitted with a toothless bucket.
3. An archaeologist must be in attendance to record any remains uncovered.

1.2 *Site Location and Description*

Wrest Park is located on the eastern edge of the village of Silsoe in south central Bedfordshire, approximately 15km south of Bedford (Figure 1). It is centred at TL 09100/35100. The new pipe trench was located within the landscaped gardens to the south of the house, which are currently lawns and gravel paths. It feeds the large fountain situated on the main north–south axis of the formal garden.

1.3 *Archaeological Background*

Wrest Park was the home of the De Grey family from the 13th century until 1917. The present Wrest Park house was completed by 1834 and replaced an earlier manor house that was located further to the south. The formal gardens consisting of wooded walks and canals date to the early 18th century, and were later modified by Capability Brown. Subsequent generations added garden buildings, such as the Bath House and Chinese Pavilion, but retained the garden established in the 18th century.

Previous archaeological investigations within the Wrest Park Gardens include a survey of garden features and archaeology (Albion Archaeology 2002) and several excavations and geophysical survey carried out by BCAS between 1988 and 1991, prior to restoration work.



2 RESULTS OF THE WATCHING BRIEF

2.1 Introduction

The watching brief was undertaken between 4th and 6th April 2006. During this period the excavation of the service trench was continuously monitored. The results of the watching brief have been interpreted with reference to historical records and maps which are listed in Appendix 1. Summary descriptions of the archaeological features are given in Appendix 2.

2.2 Methodology

Under the terms of the SMC6 Licence, the contractor was required to excavate within the cut of the original service trench using a machine fitted with a toothless bucket. It was also necessary for an archaeologist to be in attendance to record any remains uncovered.

During the excavation the following were undertaken:-

- 1 Excavation of the service trench was monitored to try to identify *in situ* archaeological deposits.
- 2 All disturbed soil was scanned for artefacts.
- 3 Any excavated features and deposits were fully recorded in accordance with the Albion's *Procedures Manual*.
- 4 All archaeological observations were recorded at a suitable scale on base plans that were tied in to the OS national grid.
- 5 Significant features were photographed using a digital camera.

Throughout the project the standards set out in the following documents were also adhered to:

- IFA's *Codes of Conduct and Standards and Guidance for Archaeological Watching Brief* and draft *Standard and Guidance for Archaeological Finds Work* (2000);
- English Heritage's *Management of Archaeological Projects* (1991);
- Albion Archaeology's *Procedures Manual: Volume 1 Fieldwork*, (2nd edn, 2001);
- *Preparing Archaeological Archives for Deposition with Registered Museums in Bedfordshire* (1998), and the Society of Museum Archaeologists' *Preparation of Archaeological Archives: Selection Retention and Dispersal of Archaeological Collections* (1993).

To aid the recording of any archaeological features or deposits, the excavations were identified as follows (see Figure 2):

- Trench 1: the arm of the pipe trench running south from stopcock 4 to stopcock 2
- Trench 2: the arm of the pipe trench running east from stopcock 2 to the fountain
- Trench 3: a small trench positioned *c.* 6m to the south of Trench 2 to determine whether a water pipe existed in this location

All deposits were recorded using a unique number sequence commencing at 100 for Trench 1, 200 for Trench 2 *etc.*



2.3 General Deposit Model

In Trench 1, a friable, dark grey-brown, silty-clay topsoil (100), *c.* 0.2m thick, overlay the backfill deposit (101) filling the original service trench. A late 18th- or 19th-century clay pipe was contained within the latter. A firm, brownish-yellow sandy clay (103) was revealed at a depth of *c.* 0.5m. This was interpreted as a natural stratum within Trench 1. It was not visible in Trenches 2 or 3.

In Trench 2, the metalling of the existing gravel path (201) overlay make-up layer (200), which in turn overlay the backfill deposit (204) of the original service trench. The service trench had been cut through a thick demolition layer (see Section 2.4, below).

In Trench 3, the existing gravel path (301) and make-up layer (300) directly overlay a demolition layer similar to that in Trench 2. Trench 3 was only dug as far as was necessary to determine that there was no water pipe in this location. The natural stratum (103) was revealed at a depth of *c.* 0.5m within Trench 1, but was not visible in Trenches 2 or 3. It comprised a firm, brown-yellow sandy clay.

2.4 Demolition Layer

A probable demolition layer measuring up to 0.4m thick and consisting of a firm mid-brown clay-silt (202) and (302) was present within Trenches 2 and 3 (see location on Figure 2). The layer had been cut through by the original service trench in Trench 2 and was sealed by the path make-up layer in Trench 3. Layer (202) contained a substantial amount of modern brick and tile fragments and pottery sherds. A 17th- or 18th-century pottery sherd was recovered from layer (302).

The layer is likely to be associated with the demolition of the previous manor house, which is marked in this location on a 1719 estate map¹ and Roque's plan of 1735². The manor house was demolished by 1834.

2.5 Brick-Lined Cistern

A subterranean, brick-lined cistern (105) was revealed within Trench 1 (see Figures 2 and 3). Only a small part was visible within the service trench, but it was possible to peer into the interior, which appeared to be circular in plan and bottle-shaped in section. The visible 'neck' measured 1m across. Two wooden beams were visible, spanning the interior of the 'body' of the cistern. The opening had been capped by a sandstone slab (104) and then sealed by a dumped layer of silty sand (106) that was possibly associated with the levelling of the ground.

Its location and nature of the brickwork suggests it may be associated with the earlier house, though the limited view of the structure means that its function

¹ 'Rest Park in Bedfordshire the Seat of His Grace the Duke of Kent', (c. 1719), in atlas of the Wrest Park Estate (BLARS Ref: L33/286/folio 3)

² 'Plan and View of the Buildings & Garden at Rest' by John Rocque, dated 1735 (BLARS Ref. X95/230)



is uncertain. The only structures shown in this location on any of the historical maps are on Kip's drawing³ of c.1705 (see Figure 4). This depicts a group of substantial outbuildings and it is possible that the cistern was part of one of these. The buildings appear to have been demolished by 1719, as indicated in plans in the *Historical Survey of Wrest Park* (Land Use Consultants 1993).

The function of the cistern may have been associated with the supply of water features within the gardens or, alternatively, its ornate construction and 'bottle' shape may indicate the possibility that it was used as an ice house or for some other storage purpose. There are references to an ice house at Wrest as far back as 1673 (BCC 1967, 23). An icehouse belonging to Wrest Park House is located in the grounds of Home Farm (otherwise known as Wrest Park Farm) and is thought to date to the early 19th century (BCC1967, 23; HER7325). Though smaller, it is possible that structure (105) was a precursor to the Home Farm ice-house, built to service the then Wrest House. No features are marked in this location on the 18th-century estate maps or the 1st edition Ordnance Survey map of 1892.

2.6 **Brick Culvert**

A culvert (303) constructed of mortared red bricks was partially revealed within Trench 3 (Figure 2). It appeared circular or oval in section and measured 0.5m in diameter. It was orientated on a north-south axis and was visible for a distance of 1.6m. It started to open out at its southern end, possibly leading into a soak-away or inspection hole. The culvert was not visible in Trench 2, despite the fact that this was located only 6m to the north.

The location of the culvert and nature of the bricks indicate that it was probably associated with the previous house, which is known to have been located in this area. In support of this, the position of the culvert correlates with a previously mapped location of a parch mark that has been tied in with plans of the earlier house (see Figure 5).

2.7 **Existing Water Pipeline**

The existing water pipe supplying the fountain consisted of a mixture of lead and galvanised iron piping. The lead pipe was present at the north end of Trench 1, but galvanised iron pipe had been used for the remainder of its length. In Trench 1, the pipe had been protected by a conduit comprising a single string of red bricks laid on edge at either side of the pipe and a string of red bricks laid flat over the pipe.

The existing pipe trench in Trench 2 had not been dug in a straight line to its connection with the pipe in Trench 1 and, as a result, the pipe had been bent at a sharp angle to reach the connection. It is possible that the pipe trench had been routed to avoid the demolition material and culvert associated with the earlier house.

Brick-lined stopcock chambers (marked '1'-'3' on Figure 2) were present along the course of Trench 1, linking the sections of pipe. Courses of probable

³ Kip's drawing of c.1705 (BLARS Ref. L33/143)



‘Arlesey white’ or ‘Bedford yellow’ bricks appear to largely have been used. These were then topped by more recent, frogged bricks. The stopcock at the north end of Trench 1 (marked ‘4’ on Figure 2) had been repaired relatively recently as it was protected by a plastic surround.

The existing pipeline supplies a marble fountain that is a Victorian addition to the garden. However, it is clear that the pipeline has been subject to periodic updating and replacement over the years, so it is likely that the pipe was originally laid to supply fountains and other garden features that were added in the later 18th and 19th centuries.



3 CONCLUSIONS

3.1 *Synthesis*

The archaeological watching brief associated with the replacement of the water pipeline, revealed features and deposits associated with the earlier manor house and grounds.

The demolition layers (202) and (302), together with brick culvert (303) are likely to have been associated with the earlier house that was demolished before 1834. These layers and the culvert correlate with the location of the earlier house as marked on the 18th-century estate maps. Also, the location of the culvert matches a previously mapped location of a parch mark that has been tied in with plans of the earlier house (Figure 5 and BCAS 1990).

The location of the brick cistern (105), revealed in Trench 1, suggests that it too was associated with the earlier phase of Wrest Park. It may be associated with buildings that are shown in this location on Kip's drawing of c. 1705. Due to the fact that only a small amount of the structure was visible within the trench, its function is uncertain. It may have been used to contain water to supply the gardens and associated water features. Alternatively, the shape of the structure indicates the possibility that it was used as an ice house or for some other storage purpose.

The existing water pipe is likely to be associated with the supply of later 18th - and 19th-century garden features.

3.2 *Significance of Results*

Despite the limited area available for archaeological investigation, the monitoring of these works has increased our knowledge of features associated with the earlier phases of the Wrest Park Gardens. In particular, the watching brief corroborated the evidence for the location of the earlier manor house and revealed a previously unrecorded brick cistern or similar structure. The latter could not be recorded in detail, and further investigation would be required in order to confirm its function.

The watching brief also demonstrated the significant potential for the survival of buried archaeological features associated with the history of Wrest Park Gardens.



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5 APPENDIX 1 – DOCUMENTS/MAPS CONSULTED

The following maps and documents held within the Bedfordshire and Luton Archives and Records Services were consulted:

DATE	DOCUMENT	REFERENCE
c. 1705	Kip's drawing of Wrest Park	L33/143
c. 1719	'Rest Park in Bedfordshire the Seat of His Grace the Duke of Kent' in atlas of the Wrest Park Estate	L33/286/f3
1735	'Plan and View of the Buildings & Garden at Rest' by John Rocque	X95/230
1818	Design for building of new Wrest Park house; plan superimposed over plan of the old house	L33/146
After 1824	'The House at Wrest park, as altered by the Marchioness Grey'. Ground floor plan.	L33/149
1834	'Plan showing the relative positions of the old and new houses at Wrest'	L33/150
1902	OS 6 inch map	
1917	Sale Catalogue for the Wrest Park Estate in Silsoe, Gravenhurst and Clophill	Z155/18
1966	Plan and section of the ice house at Wrest Park in the grounds of Home Farm	Z196/60
1993	<i>Historical Survey of Wrest Park</i> by Land Use Consultants. Contains copies of various historical maps, illustrating the development of the Gardens	Z821/2



6 APPENDIX 2 – CONTEXT SUMMARY



Trench: 1

Max Dimensions: Length: 133.00 m. Width: 0.50 m. Depth to Archaeology Min: 0.35 m. Max: m.

Co-ordinates: OS Grid Ref.: TL0904535498

OS Grid Ref.: TL0905935364

Reason: North-south orientated section of trench dug to contain replacement water pipe to fountain.

Context:	Type:	Description:	Excavated:	Finds Present:
100	Topsoil	Friable dark grey brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
102	Service Trench	Linear N-S profile: vertical base: flat dimensions: min breadth 0.4m, min depth 0.3m The service trench contained a lead pipe (1.5 inch external diameter) for approximately 55m, where after a galvanised pipe (1.25m external diameter) was used. The pipe was protected by a single string of red bricks laid on edge either side of the pipe and a string of red bricks laid flat over the pipe.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
101	Backfill	Friable mid brown clay silt occasional small-medium stones Contained occasional brick fragments.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
103	Natural	Firm mid brown yellow clay	<input type="checkbox"/>	<input type="checkbox"/>
104	Stone Setting	Sandstone slab capping brick well (105). Only partially visible in trench. Measured 1.05m across and 0.05m thick.	<input type="checkbox"/>	<input type="checkbox"/>
105	Well	Brick lined probable well or cistern. Only partially visible. Probably circular, measuring approximately 1m across and 'bottle' shaped in section. Two timber 'slats' are visible mid way down spanning the interior of the cistern.	<input type="checkbox"/>	<input type="checkbox"/>
106	Levelling layer	Loose mid brown yellow silty sand	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Trench: 2

Max Dimensions: Length: 48.00 m. Width: 0.50 m. Depth to Archaeology Min: 0.25 m. Max: m.

Co-ordinates: OS Grid Ref.: TL0905935364

OS Grid Ref.: TL0910435376

Reason: East-west orientated section of trench dug to contain replacement water pipe to fountain.

Context:	Type:	Description:	Excavated:	Finds Present:
200	Make up layer	Friable mid grey brown clay silt moderate small-medium stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
201	Pathway	Loose gravel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
202	Demolition layer	Firm mid brown clay silt Contained moderate amounts of brick and tile fragments and pottery sherds.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
204	Service Trench	Linear E-W profile: vertical base: flat dimensions: min breadth 0.4m, min depth 0.25m The service trench contained a galvanised pipe (1.25m external diameter and 1 inch external diameter was used).	<input checked="" type="checkbox"/>	<input type="checkbox"/>
203	Backfill	Loose mid brown clay silt	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Trench: 3

Max Dimensions: Length: 1.80 m. Width: 0.70 m. Depth to Archaeology Min: 0.2 m. Max: m.

Co-ordinates: OS Grid Ref.: TL0909335369

OS Grid Ref.: TL0909335367

Reason: Search for possible location of previous water pipe.

Context:	Type:	Description:	Excavated:	Finds Present:
300	Make up layer	Friable yellow brown silty sand moderate small stones	<input checked="" type="checkbox"/>	<input type="checkbox"/>
301	Pathway	Loose gravel	<input checked="" type="checkbox"/>	<input type="checkbox"/>
302	Demolition layer	Firm mid brown silty clay	<input checked="" type="checkbox"/>	<input type="checkbox"/>
303	Culvert	Culvert constructed of mortared red bricks. Circular in section, measuring 0.5m in diameter and at least 1.6m long. Orientated north-south. It appears to start to open out at its southern end, possibly about to lead into a soakaway or inspection hole.	<input type="checkbox"/>	<input checked="" type="checkbox"/>

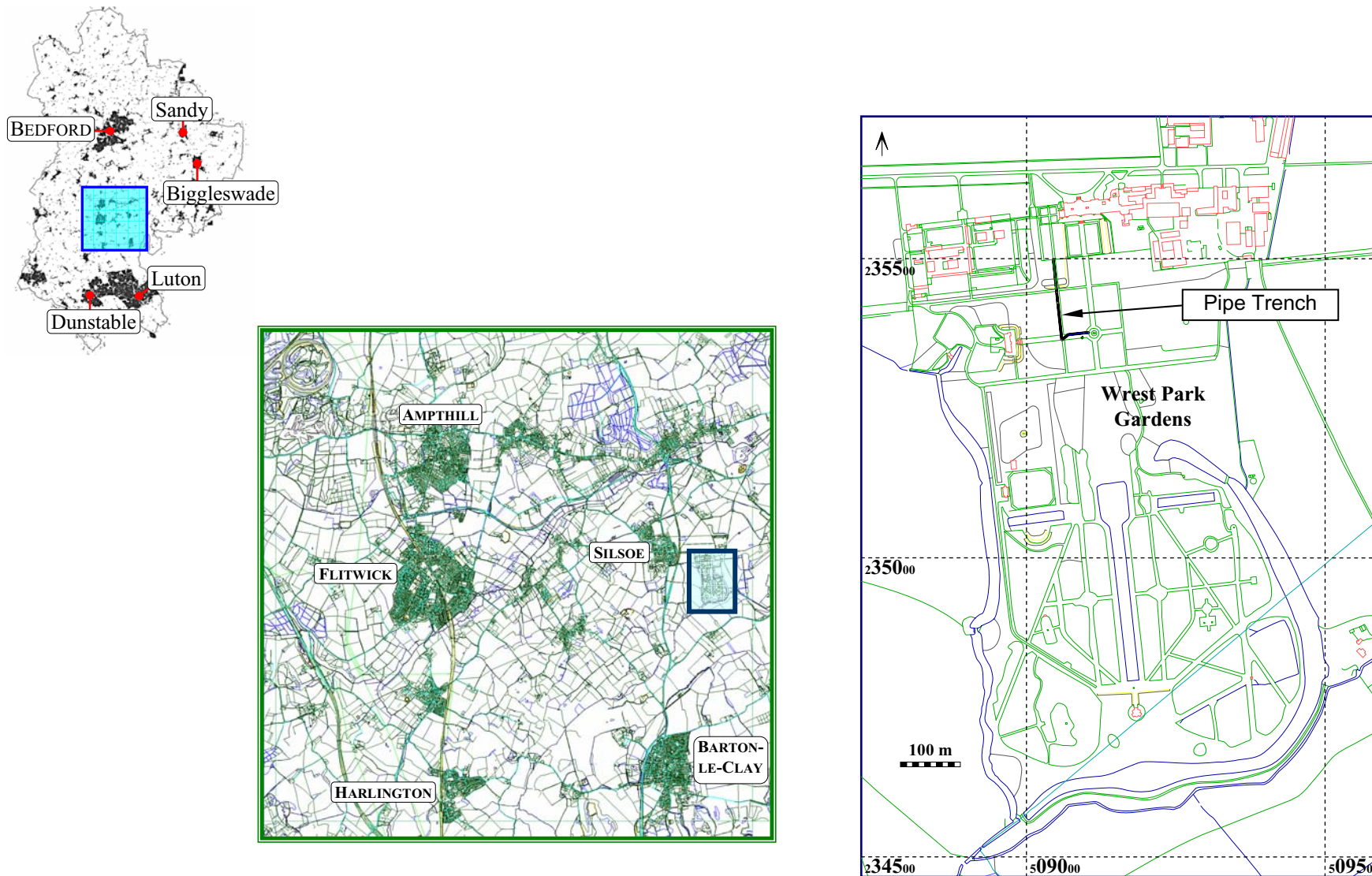


Figure 1: Site location map

Base map reproduced from the Ordnance Survey Land-line Map (2004), with the permission of the Controller of Her Majesty's Stationery Office, by Bedfordshire County Council, County Hall, Bedford. OS Licence No. 076465(LA). © Crown Copyright.

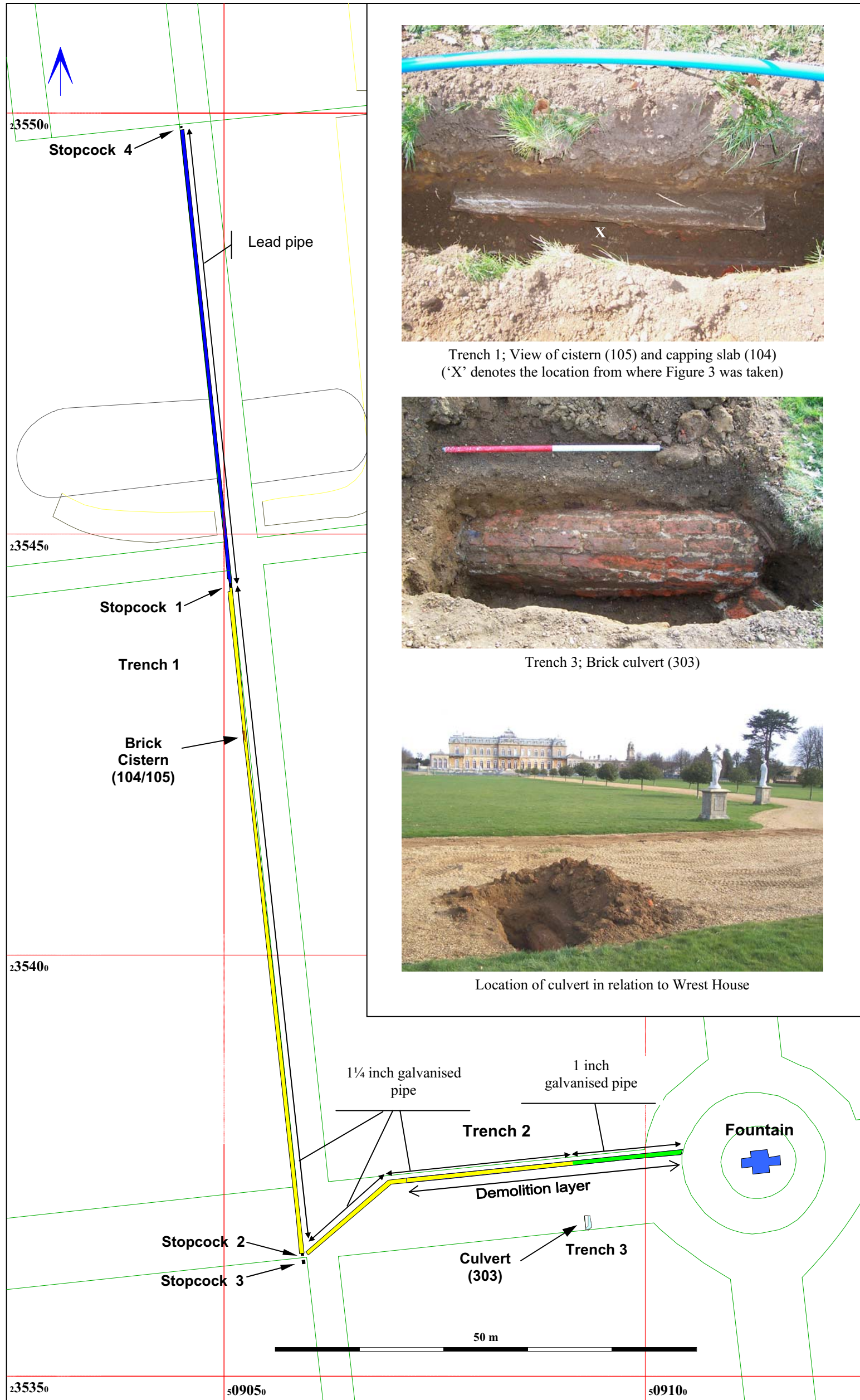


Figure 2: Location of features

Base map reproduced from the Ordnance Survey Land-line Map (2004), with the permission of the Controller of Her Majesty's Stationery Office, by Bedfordshire County Council, County Hall, Bedford. OS Licence No. 076465(LA). © Crown Copyright.

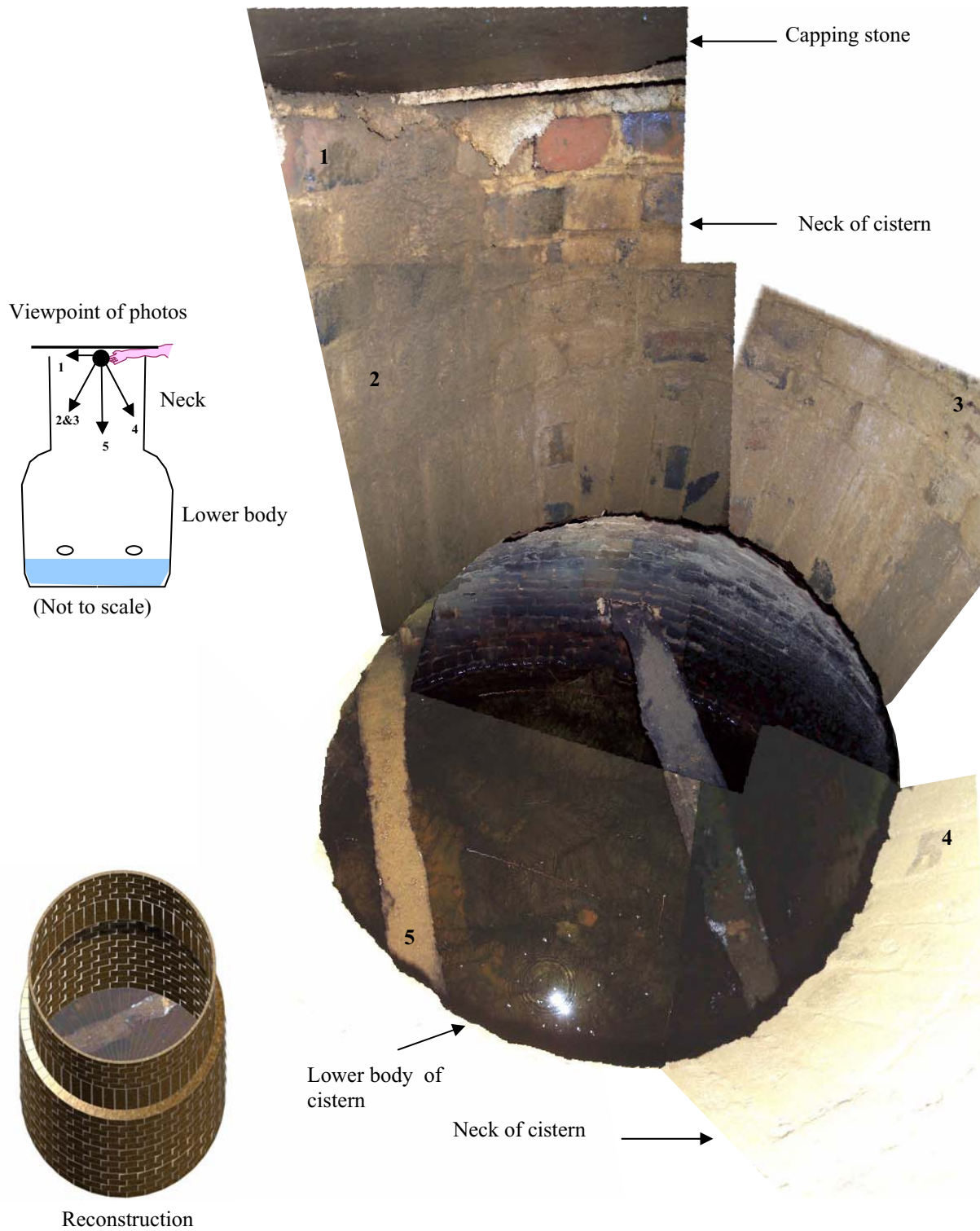


Figure 3: Composite interior view of cistern (105) in Trench 1
(photographed through gap below capping stone as marked on photograph on Figure 2)

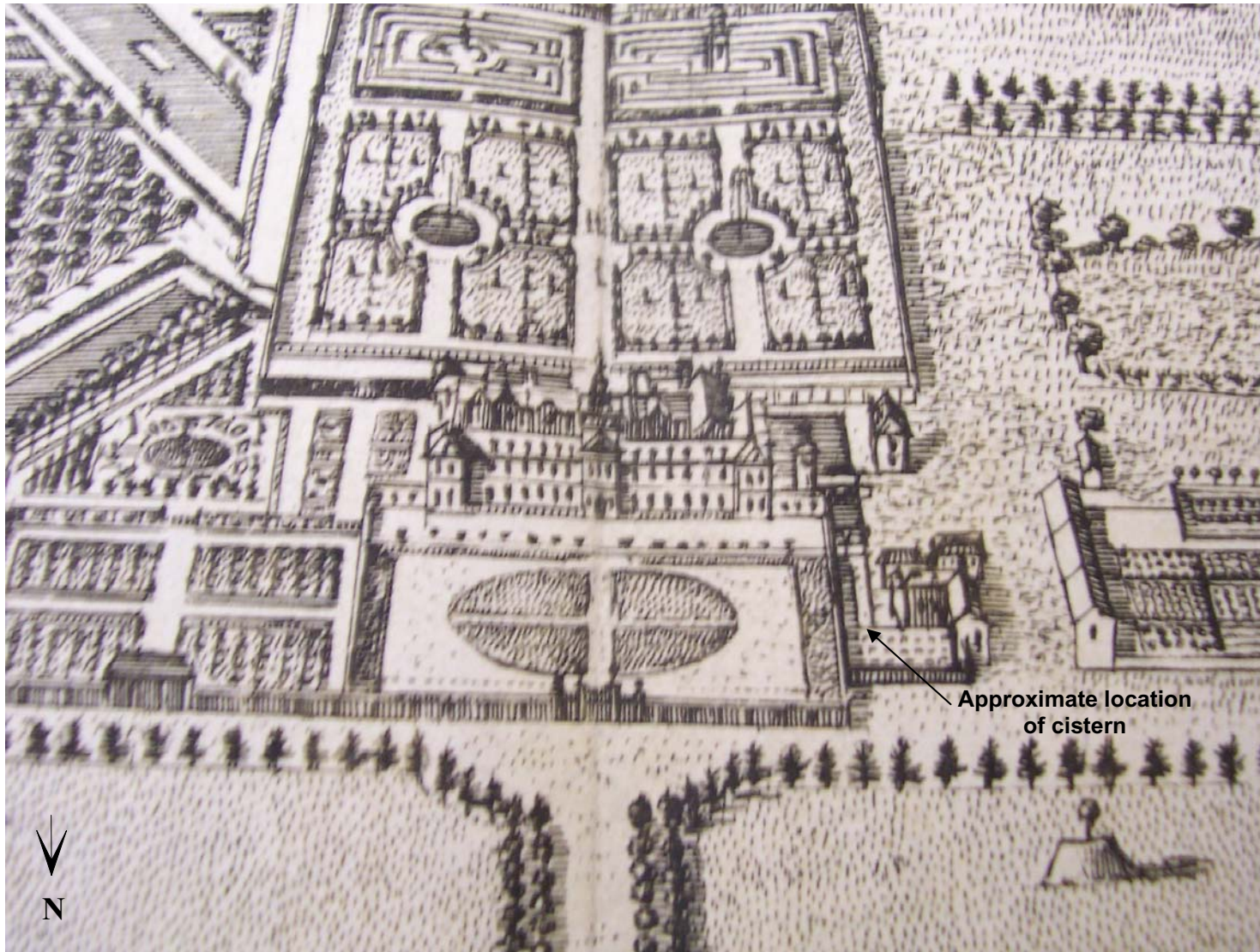


Figure 4: Extract of Kip's drawing (c. 1705), showing approximate location of cistern (104/105)
(Reproduced by permission of BLARS)



Figure 5: Parch mark plot showing outline of earlier house and respective location of culvert (303)
(Reproduced from BCAS 1990)