



ENGLISH HERITAGE

WIMPOLE PARK,
Wimpole, Cambridgeshire

Medieval settlement,
post-medieval park and gardens

Paul Pattison and Louise Barker

SURVEY REPORT

ARCHAEOLOGICAL INVESTIGATION SERIES

15/2003





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5.	RCHME survey plan showing part of the south park, at 1:1000 scale
6.	RCHME survey plan showing part of the north park, at 1:1000 scale
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1. INTRODUCTION

Between January 1998 and August 2000, the Royal Commission on the Historical Monuments of England and English Heritage undertook archaeological survey at Wimpole in Cambridgeshire. This work, funded jointly by the RCHME/EH and the National Trust, is designed to map the visible archaeological features in the core area of the landscape park and at two other locations where earthworks survive; Cobb's Wood and Thornberry Hill Farm. It comprises an overall survey at 1:2500, undertaken by air photographic transcription and by subsequent enhancement in the field, and selected areas of detailed ground survey at 1:1000 scale. This new work, which will contribute significantly towards the process of understanding and managing the landscape at Wimpole, is the responsibility of staff of the Archaeological Investigation Office in Cambridge, in close liaison with the National Trust Regional Archaeologist.

Wimpole Park lies 8 miles south-west of Cambridge, situated in the angle formed between two Roman roads, the present A603 and A1198 respectively (Fig 1). The southern part of the park lies on flattish ground over Gault clay, rising only gently from the River Rhee towards Wimpole Hall. North of the hall, the land rises more steeply into a low but locally dominant ridge of Lower Chalk which, at the northern edges of the park is capped by Boulder Clay. The ridge is cut by the valley of a small stream, flowing from west to east, which supplies ornamental lakes in the park (Fig 2). Settlement at Wimpole is situated towards the base of the chalk, close to spring lines, and the hall itself exploits the long southward view towards the hills in north Hertfordshire.

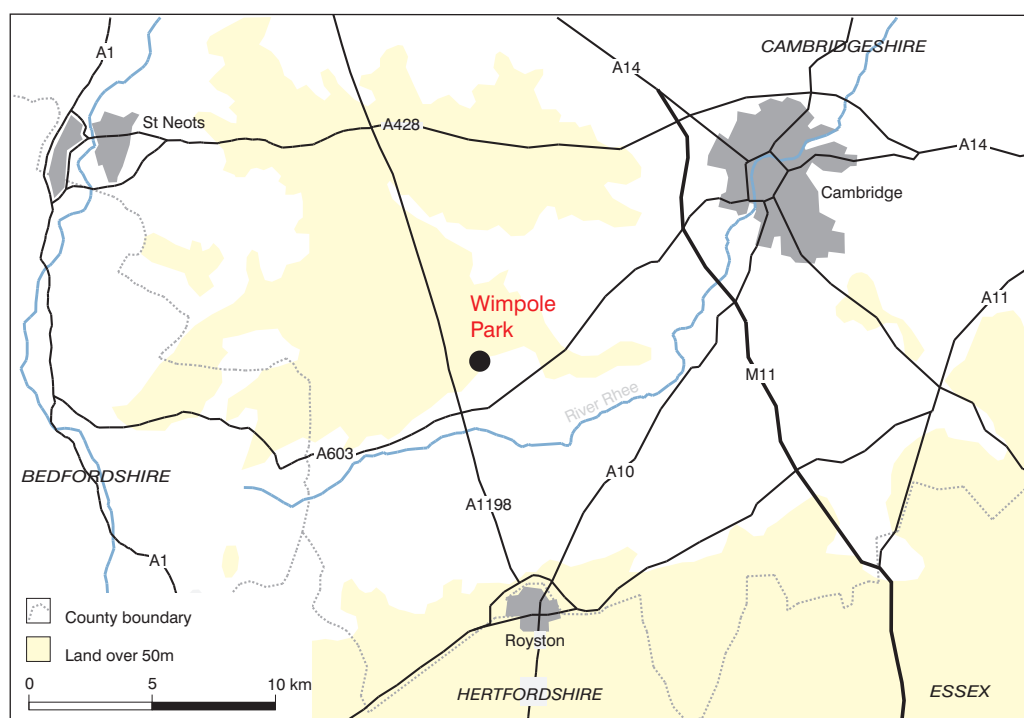


Figure 1
Location map

2. PREVIOUS ARCHAEOLOGICAL STUDY

The first systematic account of archaeological work at Wimpole was published in the RCHME inventory of West Cambridgeshire. This included a sketch transcription of the central section of the park, indicating large areas of relict ridge and furrow cultivation together with the earthworks of several deserted settlements and various garden and parkland features (RCHME 1968, 214-299, plan 226-27).

In 1980, John Phibbs produced an overall analysis of the parkland history and made several significant observations about the archaeology (Phibbs 1980). Subsequently, in 1984, the sites of three deserted settlements were surveyed in detail by the RCHME, at 1:1000 scale, identifying most of their principal elements. Two of these were known in 1638 as *Bennall End* and *Thresham End* respectively, the third not named (Fig 3, hereafter the 1638 map). In addition, earthwork remains of the 17th- and 18th-century formal gardens were recorded to the south of the hall, as was a windmill mound on high ground to the north-west (NMR nos TL 35 SW 6, 7, 8 and 38; Everson 1991, 17-18). In 1984-5 and 1998, Cobbs Wood moated site was surveyed by Cambridge Archaeological Field Group and in 1991-2 the National Trust conducted a small excavation on the lawn north of the hall prior to re-creation of a Victorian parterre. The extent of all RCHME/EH work, including the present survey, is shown in Fig 2.

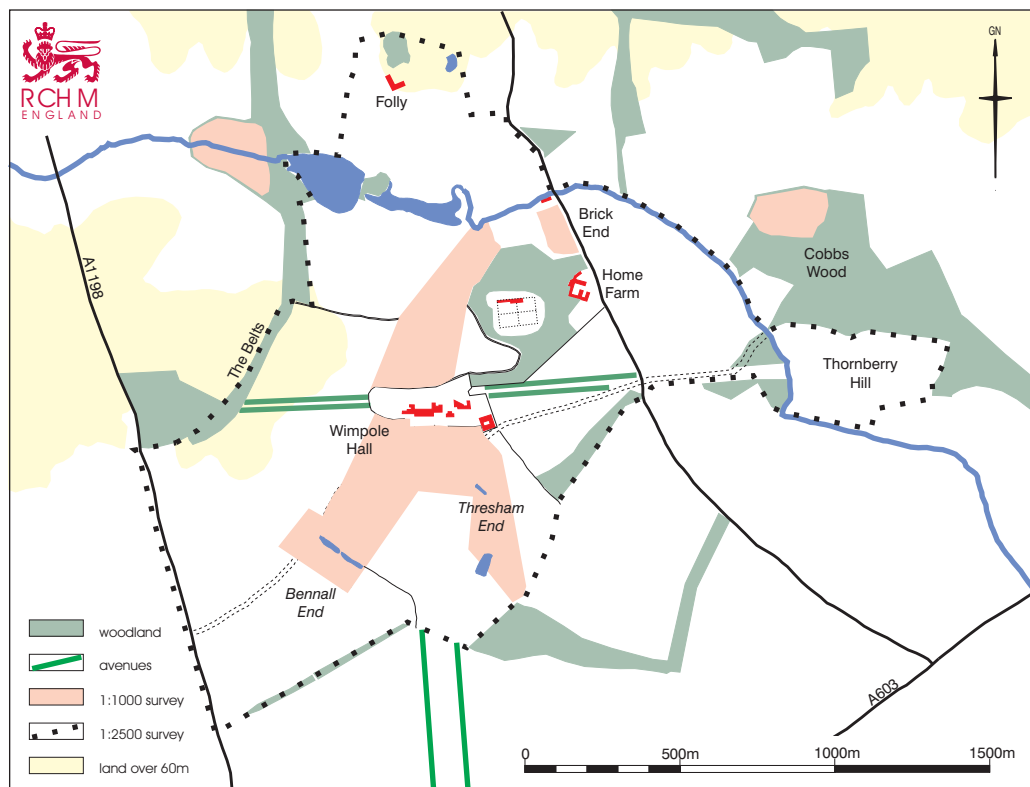


Figure 2
*Wimpole Park, showing
areas of survey work*

3. A SUMMARY OF THE DEVELOPMENT OF WIMPOLE PARK

Although the history of Wimpole is adequately documented in general outline, the following short summary will provide essential background for the detailed survey information that follows in section 4 (RCHME 1968; Phibbs 1980; Souden 1991).

Wimpole emerged from the medieval period as a significant manor house at the centre of a substantial estate owned by the Chicheley family. This estate is depicted on a map of 1638, drawn up for Thomas Chicheley, following his inheritance (Fig 3). As we discovered during the course of survey and investigation, this map is in general terms a reliable record of the contemporary landscape, drawn up as part of an accurate assessment of the Chicheley estate prior to rebuilding of the hall and major change to the landscape around it.

The map shows a nucleus comprising the manor house, the church of St John and the Rectory, with the ordinary settlement dispersed around the parish in several small hamlets strung out along roads leading from the centre. The map further reveals a parish in transition, with substantial areas farmed in common strips, while there had also been much engrossment of land into hedged fields. The manor house was surrounded by a square moat, north of which lay a small garden containing a summerhouse, the garden itself partially defined by another, curved moat. Around the garden, a small park had been created, possibly to reflect the rising wealth and status of the Chicheley family, and perhaps in the 16th or 17th century. The park included tree-lined avenues, some along former roads and boundaries, and a copse in *Rook Grove* to the north, the intention being in the planting to screen the house and its garden from nearby hamlets at *Bennall End*, *Thresham End* and south of the present Brick End. The creation of the park also involved the diversion of a section of the Arrington-Brick End road, passing north-west of the house between two fields known as *High Parke* and *Low Parke*. The disused section became an ornamental avenue shown on the 1638 survey, eventually called the Walnut Avenue.

In the middle of the 17th century, Thomas Chicheley built a new house to the south-east of the old one. The new house had formal gardens, of which little is known except that they were accommodated within the existing parkland and included two tree-lined avenues (the South Avenue and the South-West Avenue) which crossed *Bayley Mead* to the south. A new stable block was built to the south of the church.

Between the late 17th and mid-18th centuries, the house was remodelled on several occasions, while the gardens were redesigned, the park extended and lakes established. Following the acquisition of the estate in 1684 by Sir John Cutler, most of the hamlets were removed to provide land for the park, while the common fields were extinguished and the parish divided into farms with enclosed fields. In 1693, the estate was bought by

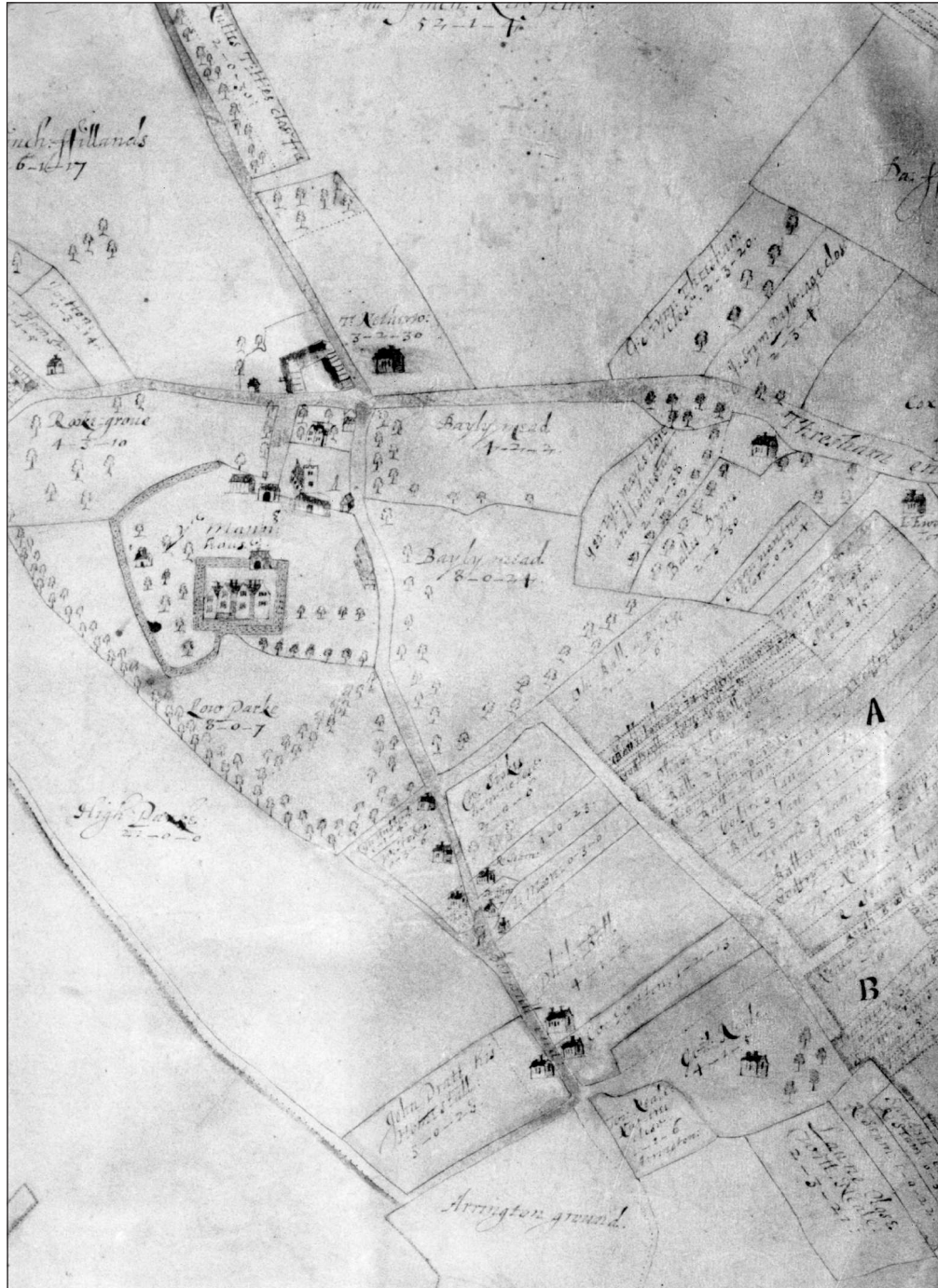


Figure 3
Wimpole in 1638: detail
from an estate map by
Benjamin Hare: north
is approximately to the
left of the page (by kind
permission of
Cambridge County
Record Office; CRO
R77/1)

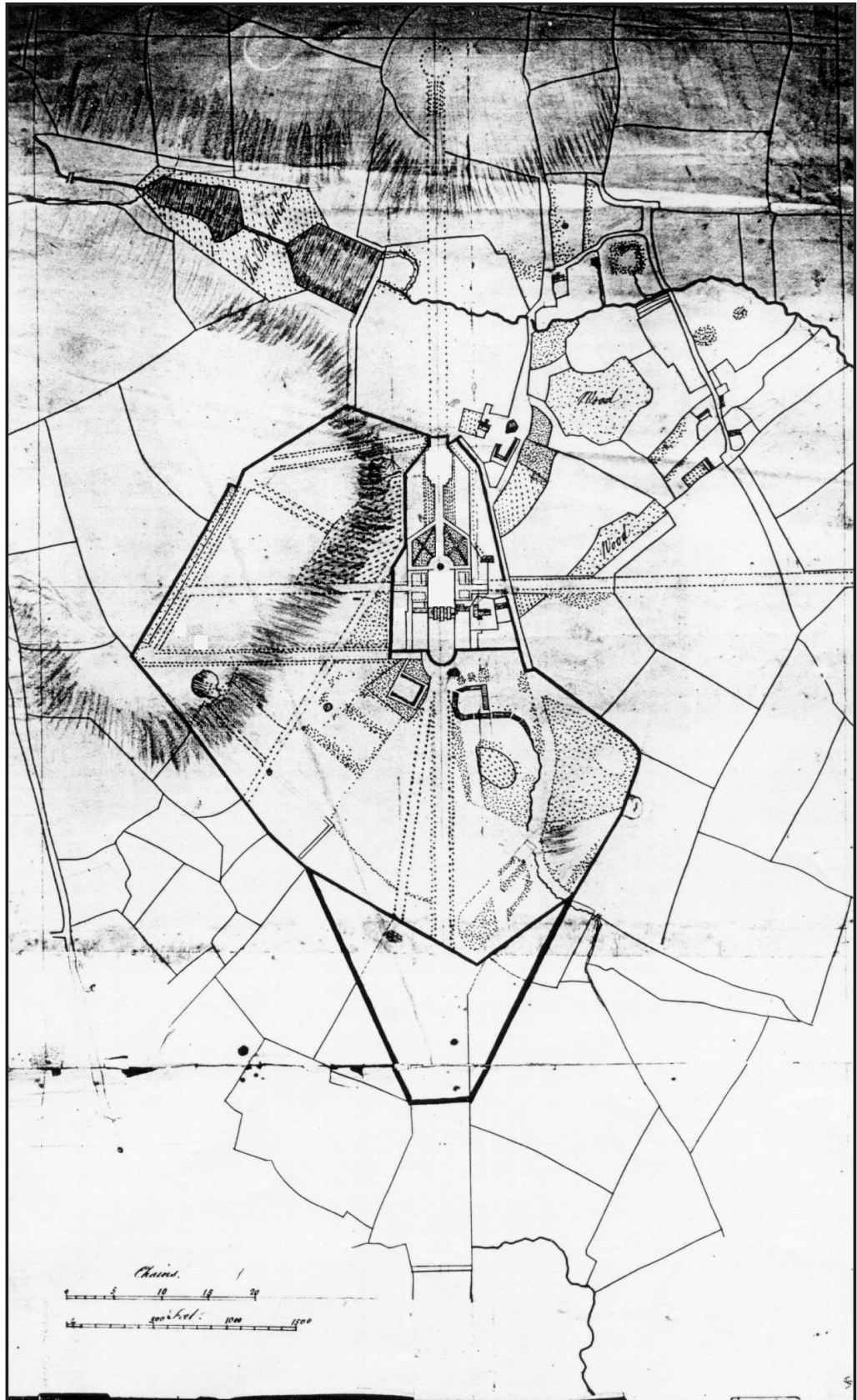


Figure 4
Plan of Wimpole Park
 by Charles Bridgeman
 c 1720 (Bodleian MS
 Gough Drawings A4
 Folio 69)

Charles Robartes, 2nd Earl of Radnor, who spent heavily on the estate, not least the park and gardens. By the early 18th century, Wimpole was a truly great house and garden, revealed to us on an engraving by Knyff and Kip (frontispiece). Although not correct in every detail, it shows an extended house with elaborate gardens including parterres, fountains, pavilions and tree-lined avenues extending into the surrounding landscape.

From 1713, Lord Harley commissioned Charles Bridgeman to remake the gardens and to extend the park, a project that lasted into the 1720s. This resulted in greater integration of the house within a designed landscape which extended far into the surrounding country, most impressively via the enormous South Avenue, a broad tree-lined vista cutting a swathe almost three miles across agricultural land (Fig 4). These were the most elaborate gardens to be made at Wimpole and they survived, with further alteration and fashionable refinements into the 1750s. At this time, Robert Greening softened the formal gardens with the introduction of sinuous paths and the planting of shrubs and trees in more ‘natural’ clumps.

In the 1770s, the park was extended on the north and west. This larger park received the attention of Lancelot Brown, who completely changed the outlook from the house by removing the formal gardens and much of the formality of the park (though some of the great avenues were left untouched). His work resulted in a landscape park which came right up to the house, a park with softer, more ‘natural’ lines created by such methods as tree planting in small clumps and the redefinition of the lakes so that they followed the natural contour of the shallow valley. New vistas were contrived to appear as natural openings into the surrounding land, notably to the north terminating in a spectacular sham ruin on Johnson’s Hill and on the south-east towards the spire of Whaddon church.

The landscaping of the park was continued into the 1790s by William Eames and in the early 19th century by Humphry Repton, who completed the privacy of the park by planting the great perimeter belts which survive today. Since then, with the exception of the removal of the old stable block and the building of a new one in the 1860s and the creation of a new small formal garden around the house, little has happened to radically alter the appearance of the landscape park.



Figure 5a Extract of figure 5, showing earthworks at the former hamlet of Bennall End (1:2000 scale, reduced from original at 1:1000)

4. ARCHAEOLOGICAL DESCRIPTION AND INTERPRETATION

This report is primarily an archaeological description which offers some analysis of individual features, but which does not attempt a synthetic assessment of the whole Wimpole landscape: much more work is required on the documentary side for the latter task. Some sections of the following text incorporate modified parts of the 1984 reports; where this occurs it is made clear.

In the following account, archaeological features are named or assigned letters, shown in **bold**, which also appear on the Figure indicated at the beginning of that particular section. Figures 5,6 and 9 are contained in the wallet at the end of the report, though annotated extracts are positioned within the text.

A) MEDIEVAL AND POST-MEDIEVAL SETTLEMENT

Bennall End (Fig 5a)

Bennall End stood on either side of the main through road between Arrington and Wimpole Church. Little is known about the settlement, although pottery finds indicate that it was in existence by the 13th century (NMR No: TL 35 SW 7). By the end of the 17th century it had been cleared as a result of emparkment. Hare's map of 1638 provides an invaluable representation of the village just prior to destruction, its shrunk remains comprising twelve plots, ten of which contained buildings (Fig 3).

The settlement covers an area roughly 200m north-east to south-west by 100m and overlies a single furlong of ridge and furrow. The Arrington to Wimpole road (**a**), which also formed the settlement's main street, is reduced to a fragmentary hollow-way of varying width and depth, now largely obscured by the later park road and landscaping. The road divides into two, one branch (**b**) curving east towards the church, the other (**c**) continuing to the settlement sites north of Wimpole Hall. The north-western branch is the older, originally serving the common fields and its settlements but made redundant by emparkment; only a short section of it survived to be depicted on the 1638 map, the remainder incorporated into a boundary separating *High Parke* and *Lowe Parke*. In turn, this was to become the line of the Walnut Avenue in the later 17th century (see below). The eastern branch formed the main street of the settlement in 1638. Not only does it cut across the block of ridge and furrow but also the northern corner of the settlement, leaving a very small triangle of land within which the 1638 map depicts three buildings. This realignment probably followed emparkment.

The long south-eastern boundary of the settlement is formed by a headland (**d**) and a hollow way (**e**). This joins another hollow way, (**f**), which formed the north-eastern boundary, and in 1638 representing the division between agricultural land and the Park. Both of these hollow ways originated as field roads. Something of the structure of the settlement, in terms of property boundaries and building platforms, survive as slight earthworks, generally no more than 0.2m high.

There is some correlation between these earthworks and the 1638 plan. Particularly clear is the plot of John Pratt, cut into a second furlong of ridge and furrow on the western side of the main street, the only plot outside the original settlement envelope. Its construction, therefore, relates either to a phase of maximum growth in the village when expansion spilled over the previously defined boundary, or to a relocation resulting from emparkment. The site of the *home stall* or smallholding is defined by a bank enclosing a rectangular area some 46m by 27m. Entranceways through the north-eastern and south-eastern sides lead into a yard area where there are a several undiagnostic scarps, together with a sub triangular platform (**g**), 14m by 12m, probably the site of the cottage. To the south-west, a low sub-circular platform (**h**), 14m in diameter, is of unknown origin.

In 1638, there were three buildings in the small triangular plot at the junction of roads (**b**) and (**c**). Within this area today, the only clear feature is a series of very slight scarps representing a short section of hollow way (**f**). However, to the south-east are four low mounds (**j**) and a larger mound (**k**), all on or close to the cottages and small buildings shown along the south side of the main street on the 1638 map. However, the disturbance caused by the creation of Chicheley's South-West Avenue (see below) throws some uncertainty on their interpretation and it is possible that they are of later date.

On the eastern side of the main street, eight plots and six cottages are represented on the 1638 map. Their correlation with the field remains is not clear-cut and the slight linear earthworks in this area indicate a fuller, more complex settlement pattern than the shrunken remains of 1638. However, at the southern end, the remains closely relate to the two plots of 1638 vintage: the smaller, *Nut Tree Close*, belonged to *Tom Neal* of Arrington and has no diagnostic features, with no visible evidence of any buildings. However, the larger plot contained the cottage or house of *George Neale*. Although its north-eastern boundary is fragmentary and the south-eastern boundary is lost beneath later ponds, the perimeter ditch (**m**) can be seen on the remaining two sides, some 5.0m-9.0m wide and up to 0.5m deep. The enclosed area, c 1.6 ha (4 a), is partially

affected by debris deposited here following demolition of the adjacent Second World War Hospital. Despite this, there is a small ditched enclosure (**n**), of which 3 sides remain, with a low mound or bank inside it: this is the site of George Neale's dwelling. Its large size and its position, set back from the main street, suggests a house of some small pretension.

Another clear correlation between the 1638 map and the earthwork remains is the northernmost plot, belonging to a person with the surname *Stokes*. The plot is bounded on three sides by former roads, though there is only ridge and furrow within. The location of Stokes' cottage and the other part of his plot in the little triangle on the other (west) side of the main street on the 1638 map lends support to the idea that the street cuts across part of the original village area.

The remaining area of the settlement contains slight earthworks defining other plots and their internal subdivisions which cannot be directly correlated with the 1638 map. There are two building platforms, (**o**) and (**p**), the former with a sub-rectangular plan some 20m by 25m, within which a separate sub-circular mound 7m in diameter may represent a building. The sub-rectangular platform (**p**), 23m by 18m, contains a smaller hollow 12m by 10m, possibly the site of a robbed building.

Three further house plots can be suggested. One, (**q**), some 38m by 11m, is detached from the main area of buildings on the south-eastern boundary of the settlement. A second covers an area of 20m by 33m, with a low mound (**r**) in the northern corner, possibly a building platform. The third, covering an area some 27m square, contains a rectangular hollow (**s**), 15m square and 0.4m deep, which may mark the position of another building.

Settlement remains in the north garden and in north park (Fig 6, 6a and 6b)

In this area, investigation has revealed a similar wealth of slight earthworks, generally no greater than 0.5m high or deep, relating to both medieval and post medieval-settlement.

Fig 6a

On the 1638 map, in the north-eastern angle of a crossroads to the east of the church, a large three-sided building range probably comprised farm or service buildings. There was also an isolated structure to the north of the main range (Fig 3). Although this area is now occupied mainly by a walled garden, a low squarish mound (**a**), 16.0m across and

0.5m high, and associated earthworks may be part of that complex. Nearby, formerly on the other side of the road and now just within the enclosed garden of the Hall, a low squarish mound (b), possibly marks the western end of the large barn depicted on the 1638 map. The barn is shown also on the Kip engraving and it survived until the later 18th century (frontispiece; Fig 3). The northward route from the crossroads survived until Capability Brown's changes in the mid 1760s but prior to this, by the early part of the 18th century, and possibly late in the 17th, it had been straightened to run outside and along the eastern edge of the hall's formal gardens (Fig 4). The line of this late version of the road is just visible on the present enclosed lawn north-east of the hall as a much-degraded scarp (c), with a slight hollow along its eastern side.

Figure 6a
Extract of Fig 6,
showing earthworks
inside the present hall
garden (reduced from
original at 1:1000
scale)

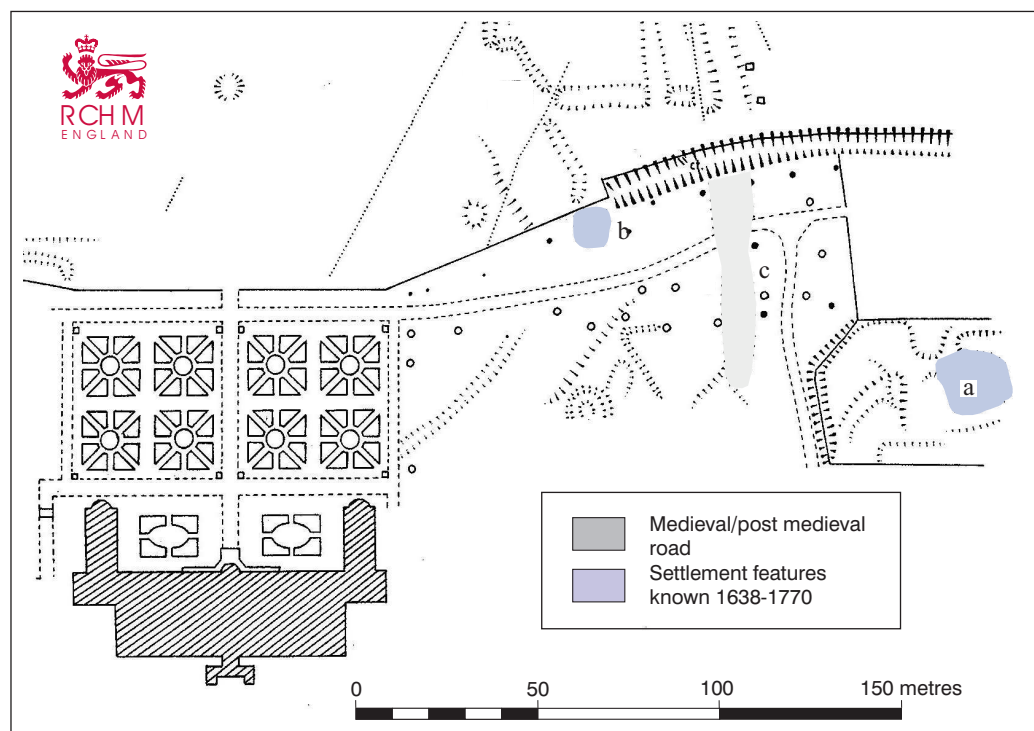


Fig 6b

Beyond the present Hall garden, the road (c) follows a straight course, its carriageway between 5.0m and 7.0m wide, contained between flanking ditches 4.0m - 5.0m wide and averaging 0.3m deep. After some 110m the road turns sharply to the north-east and at this point in 1638, a branch road also diverged across fields to the north-west; a cottage stood in the angle (Fig 7). The branch is now lost under later garden earthworks but the main course of the road can still be traced downhill to the deep ha-ha built in the later 18th century.

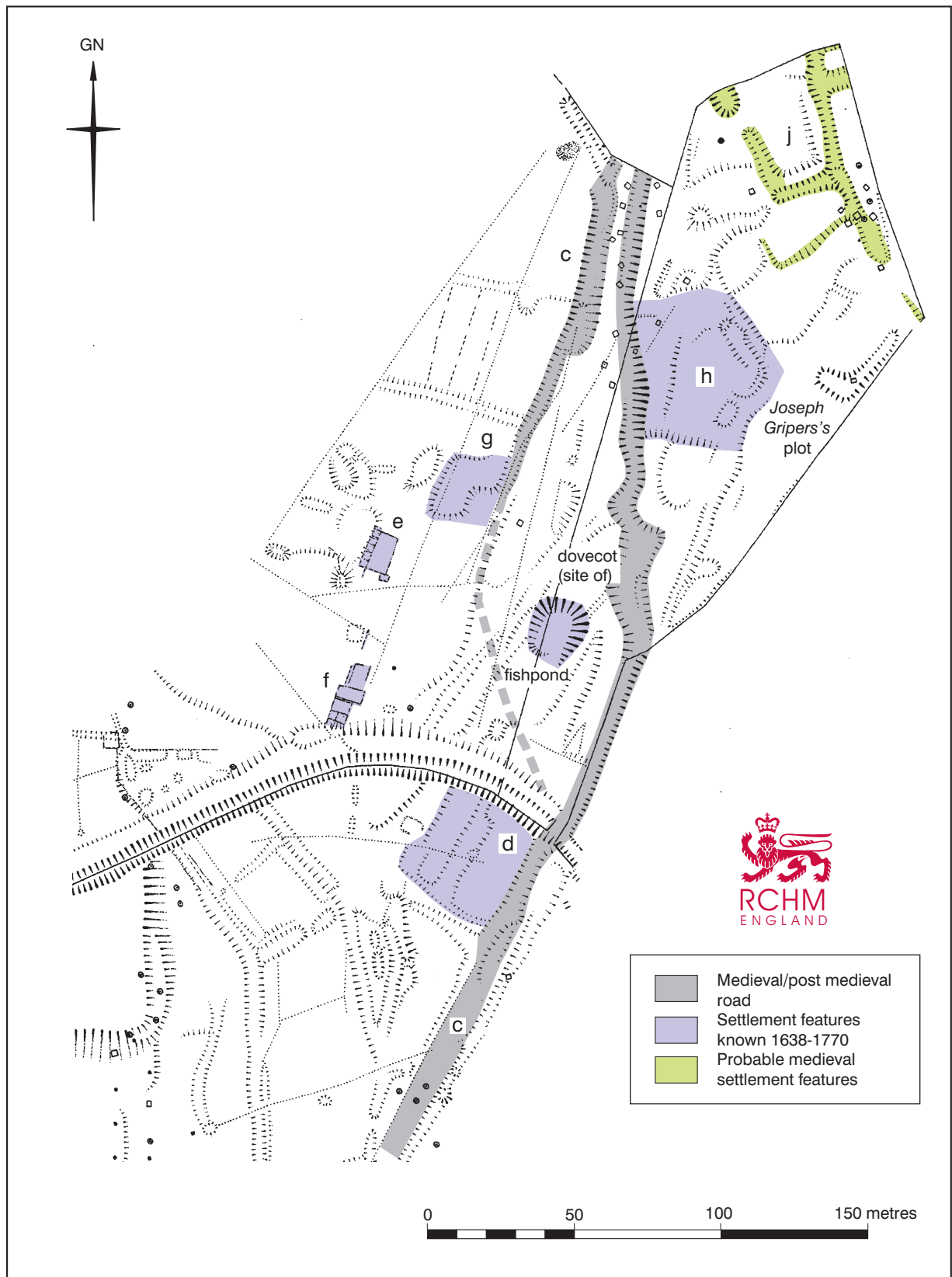


Figure 6b:
Extract of Fig 6, showing earthworks of former settlement in north park (1:2000 scale, reduced from original at 1:1000)

North of the ha-ha the road (c) is recut as a field ditch for some 60m, before emerging to follow an original, unformalised and sinuous course through degraded settlement earthworks down the slope towards the eastern end of the lower lake. Along this last stretch its varying dimensions are the result of partial infilling but where best preserved it averages 10.0m wide and 1.0m deep. In 1638, the road skirted the eastern side of an open area resembling a small 'green', referred to as a *pound*, around which were only three cottages. Probably by c 1700, during the creation of more extensive formal gardens, this 'green' and its cottages had been largely eclipsed and partially remodelled as a yard around which several farm buildings were concentrated, shown clearly on Bridgeman's plan of c 1720 immediately outside the north garden wall, and surviving until Brown's alterations of the 1760s (Figs 7 and 8). By that time probably a reasonably prosperous tenant farm, the group was neatly described as:

Zach Moul's farmhouse, the cart-horse stable, a dovehouse, a fishpond and an assemblage of buildings which are the cart shed, the carpenters workshop, tenant Moul's farmhouse and barn and a storehouse for plow and cart timber etc.

(WH (a)).

Today, earthworks can be closely equated with elements on the 1638 and 18th-century plans. A rectangular feature shown in 1638 equates to a **fishpond**, with a **dovecote** immediately to the north, depicted on the late 18th-century plan. The site of the fishpond survives, a subrectangular depression some 23.0m by 20.0m and up to 1.5m deep, along with a prominent platform marking the site of the dovecote (Figs 4, 7 and 8).

The sites of several structures, particularly those of the 18th-century farm, can be discerned on both sides of the ha-ha which eventually truncated it. To the south of the ha-ha, several slight linear scarps form two parallel platforms (d), with a central slight depression: the overall plan is rectangular. This is the site of a building comprising three ranges open to the north-east.

To the north of the ha-ha, parchmarks observed in dry conditions in July 1996 marked the walls of two buried structures (e and f), the one rectangular comprising a larger single cell with a range of five small cells along its western side, and looking very much like an animal pen; the other a more complex range of at least six rooms, probably a dwelling. Several low mounds and a shallow depression to the north represent the locations of further buildings or heaps of rubble from demolished structures and there are significant amounts of crushed brick in this area, in bare soil exposed by cattle wear. A squarish

Figure 7
Wimpole Park in 1638:
detail from an estate map
by Benjamin Hare (turned
so that north is at the top
of the page)(by kind
permission of Cambridge
County Record Office;
CRO R77/1)



Figure 8
Detail from a late
18th-century map,
showing Zach Moul's
farm in part of the north
park, before Capability
Brown's changes of the
1760s
(by kind permission of the
National Trust)



depression and mound (g) may represent one of the two cottages shown on the 1638 map, while the other mounds and parchmarks probably equate to the 18th-century farm group.

The remaining earthworks, north-east of the *pound*, can also be comfortably interpreted despite considerable recent disturbance to the ground surface. A pentagonal enclosure (h), can be discerned as a slight terrace east of road (c) defining the croft of *Joseph Gripers* as it was in 1638. North of it are older earthworks representing settlement which had been abandoned before 1638, associated with medieval pottery and an absebee of brick rubble wherever there is soil exposed. The remains here comprise banks and ditches (j), extending down to the stream on a north-west to south-east alignment, with cross-axial scarps dividing the areas between them. They may form part of two adjacent medieval plots and there were possibly more in the field to the east towards Brick End; here are several scarps adopting a similar alignment but now much degraded by ploughing (Fig 9). This evidence suggests that there were originally medieval properties along the southern side of the stream matching those shown in 1638 on the opposite bank.

Settlement south of Brick End (Fig 10)

There are settlement earthworks in two paddocks immediately south of the cottages at Brick End. The principal feature is a broad ditch (a), 7.0m wide and 0.8m deep, aligned north-west to south-east. It is parallel with the modern road some 45m to the east. Although it is not visible to the south, the ditch extends northward to the stream, interrupted once by a large shallow depression (b), possibly the site of a later pond.

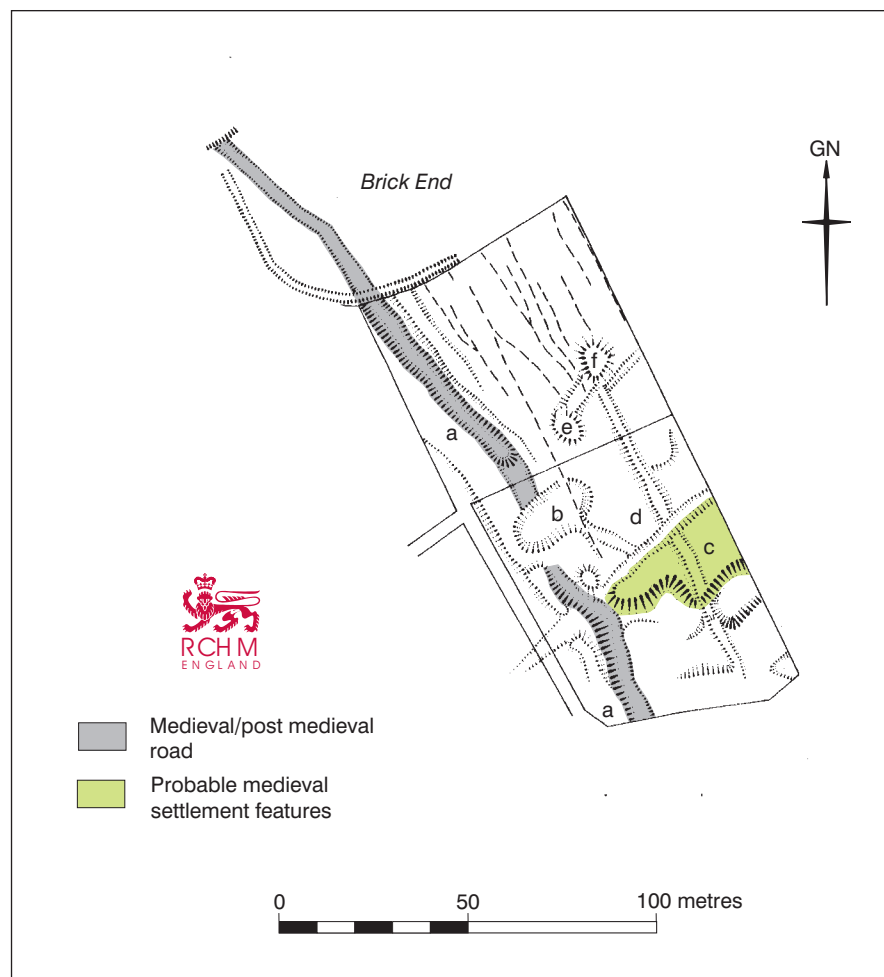
East of the ditch, a well-defined scarp defines the southern side of a platform (c), which has a broad, shallow depression on its southern side: both of these are crossed by a denuded bank (d), barely visible, itself parallel to the modern road. Other features include two small mounds of unknown significance (e and f).

This area supported settlement in 1638, with several cottages alongside the road. The platform (c) may have supported one of these or a predecessor; the hollow way defines the back edge of the properties attached to these cottages and it may be a back lane.

Thresham End (Fig 11)

Earthworks to the south-east of the hall mark the site of the small settlement of *Thresham End*. In 1638 a road headed south from the crossroads near the church and through the tiny hamlet (Fig 3). It can be traced still, as a broad, shallow hollow way with the slight earthworks of the settlement to either side, smoothed by surface landscaping in the 18th

Figure 10
 RCHME survey
 plan of
 earthworks south
 of Brick End
 (reduced from
 original at
 1:1000 scale)



century. Alongside the hollow way, despite disturbance caused by several ponds associated with the later gardens and parkland (see below), there are slight earthworks indicating the remains of a settlement of double row plan, of which only a shrunken remnant is depicted on the 1638 map.

Emerging south of the present stables, the road is reasonably straight, up to 25.0m wide and 0.5m deep, with two hollowed tracks at the margins and a slightly raised central spine: the eastern track was re-used as a major drain, for the Hall and Park in the 18th century (SMD6 S1 I18). In the central part of the settlement, the two tracks further divide leaving an elongated 'island' rather like the *pound* in the settlement north of the hall, and is shown with trees in 1638 (see above). Beyond it the tracks re-unite into a single road, curving away to the south-east; the eastern side marked by a prominent scarp up to 1.0m high. In 1638 the road continued to join *Wimble Way*, a short distance further on.

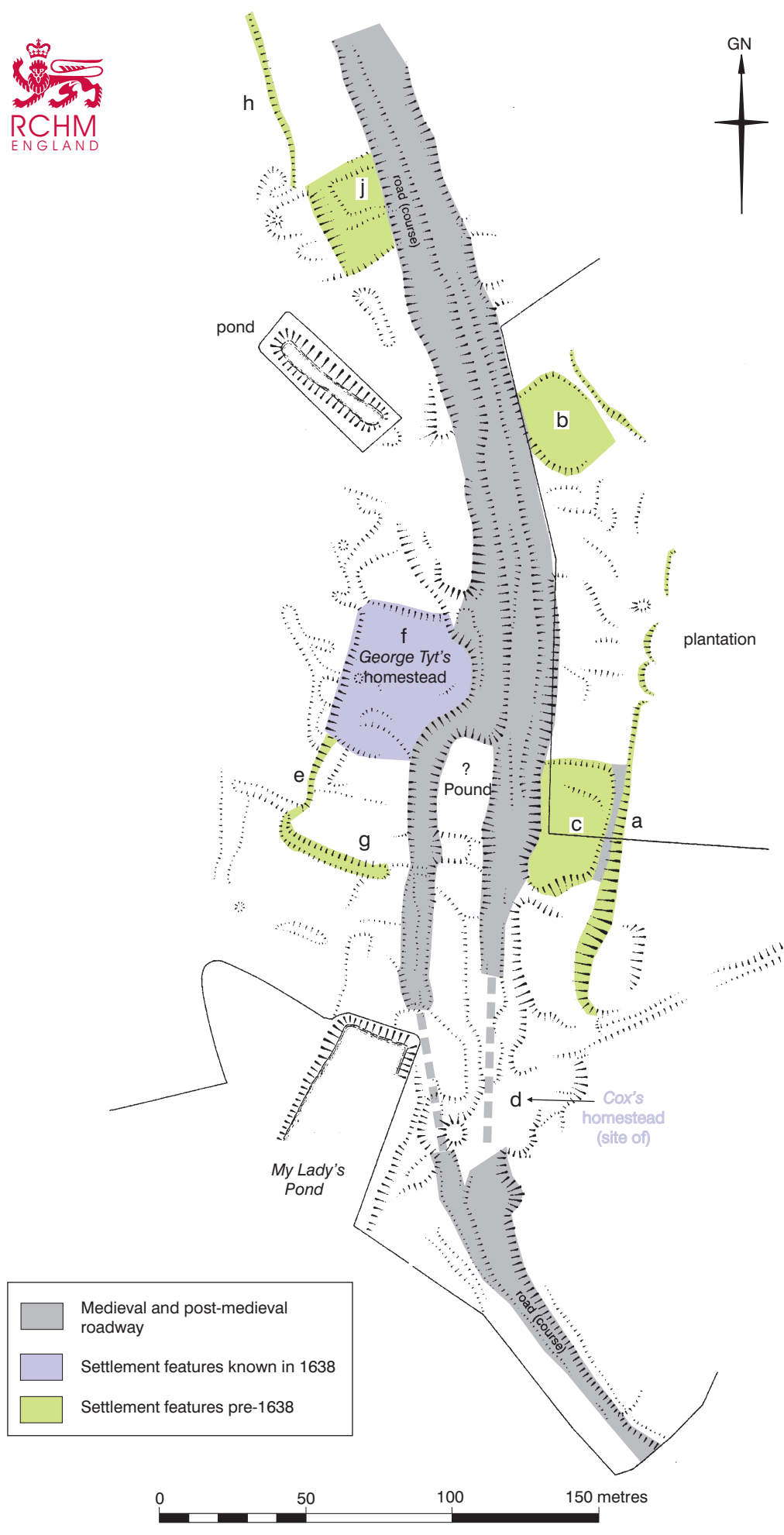


Figure 11
Survey plan showing
earthworks of the
former settlement of
Thresham End (reduced from
original at 1:1000 scale)

East of the road, the boundary of the settlement is clearly defined by a straight scarp (**a**), 0.4m high, broadly parallel to the road and 30m from it. Two probable house plots can be identified (**b** and **c**), the latter apparently with a back lane. Between them are several slight scarps, probably the remains of other subdivisions into properties, but the vegetation here is too long to enable clear interpretation. Three such property boundaries remained in use in 1638, extending up the hill to the east but only one habitation remained, in a plot towards the southern end belonging to someone with the surname *Cox*; its position, not marked by an obvious earthwork today, is at (**d**).

On the western side of the road, the back edge of a corresponding line of house plots (**e**), can be identified between two later ponds. The slightly irregular shape of one (**f**), which supported the homestead of *George Tyt* in 1638, is clear because it includes a prominent eastward bulge in the line of the road. Another house plot, just to the south, is defined by a low bank (**g**). *My Lady's Pond* (see below) appears to have cut into, or covered with spoil, the sites of two more cottages belonging to *J Stym* and *L Ewort* in 1638: their associated property boundaries can be seen as slight earthworks leading off to the south-west (Figs 3 and 9). The pond appears to have been fitted neatly into *L Ewort's* plot.

North of the other pond, a slight scarp (**h**), only 0.2 - 0.4m high, may be a continuation to the line of house plots: At its southern end two slight platforms (**j**), form a rectangle of some 30m by 40m, possibly the site of another individual property.

B) THE FORMAL GARDENS

The north garden (Figs 6 and 6c)

These formal gardens were established in the later 17th century and underwent several changes until they were radically altered by Robert Greening in the 1750s and finally removed by Capability Brown probably in the late 1760s: the outline and some of the internal features of several phases of the garden remain as slight earthworks.

The western boundary of the garden survives as a long degraded scarp (**k**), up to 1.5m high with a slight ditch along its base: the latter is an infilled ha-ha established to a design by Robert Greening c 1752 (Fig 13). It can be seen both within the present Hall garden and for some 75m beyond, aligned north-east to south-west, but thereafter it deviates by 45 degrees towards due north. Prior to this change of angle, the boundary had adopted the line of an old arable headland and the ends of the furrows approaching it are still visible, just, in low-angled light. North of the angle, the boundary cut across and destroyed the headland, continuing to the present ha-ha and resuming, beyond, as a shallow ditch on a

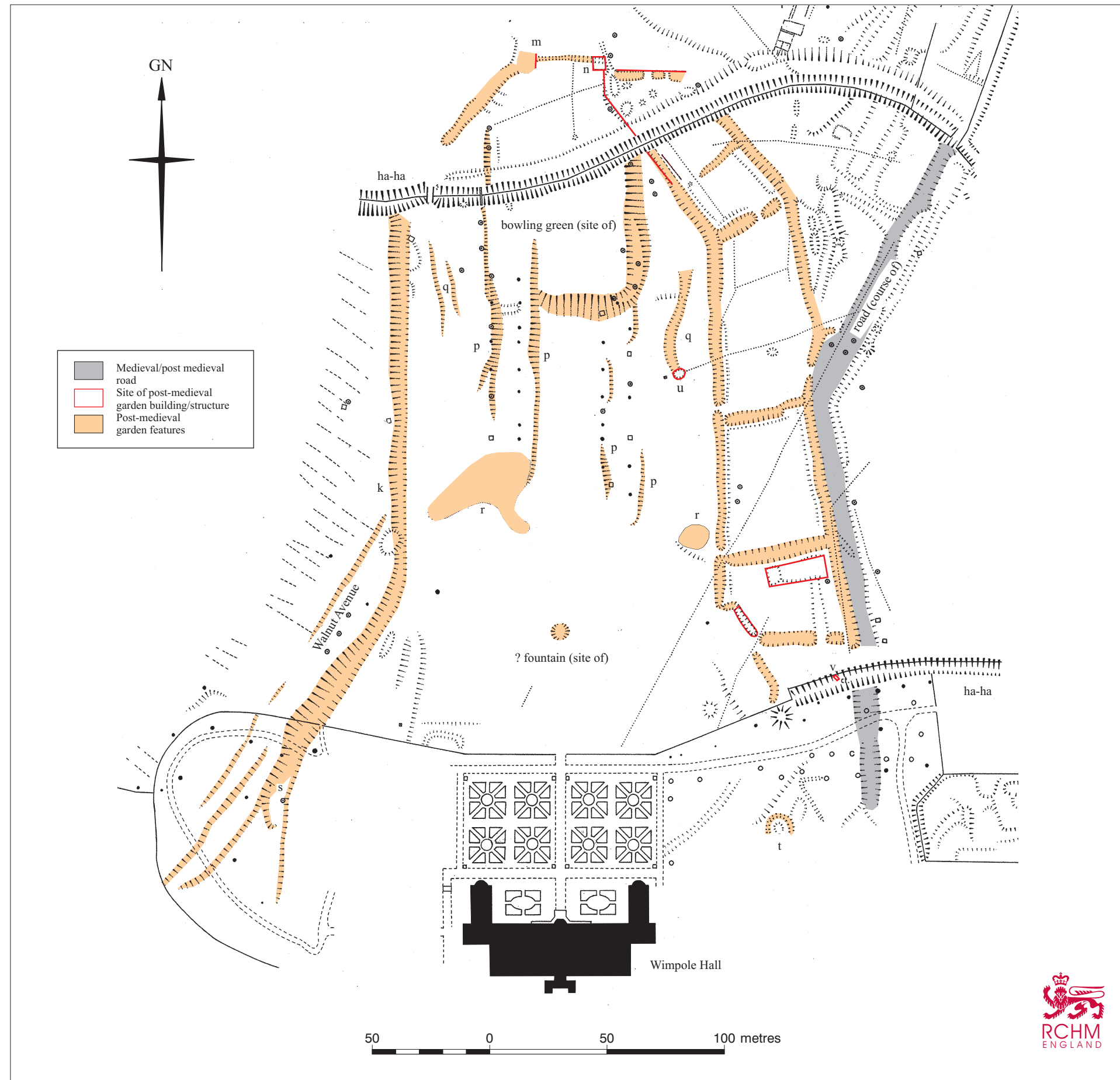


Figure 6c
RCHME survey plan of the north
gardens (original at 1:1000 scale)

north-east to south-west alignment as far as a shallow subrectangular hollow (**m**). This feature marks the western of two small summerhouses which stood at the extreme northern end of the garden for much of the 18th century: the foundation of its eastern partner (**n**) survives below ground because it was revealed as a parchmark in July 1996. The two are connected by a shallow trench, the robbed course of the garden end wall.

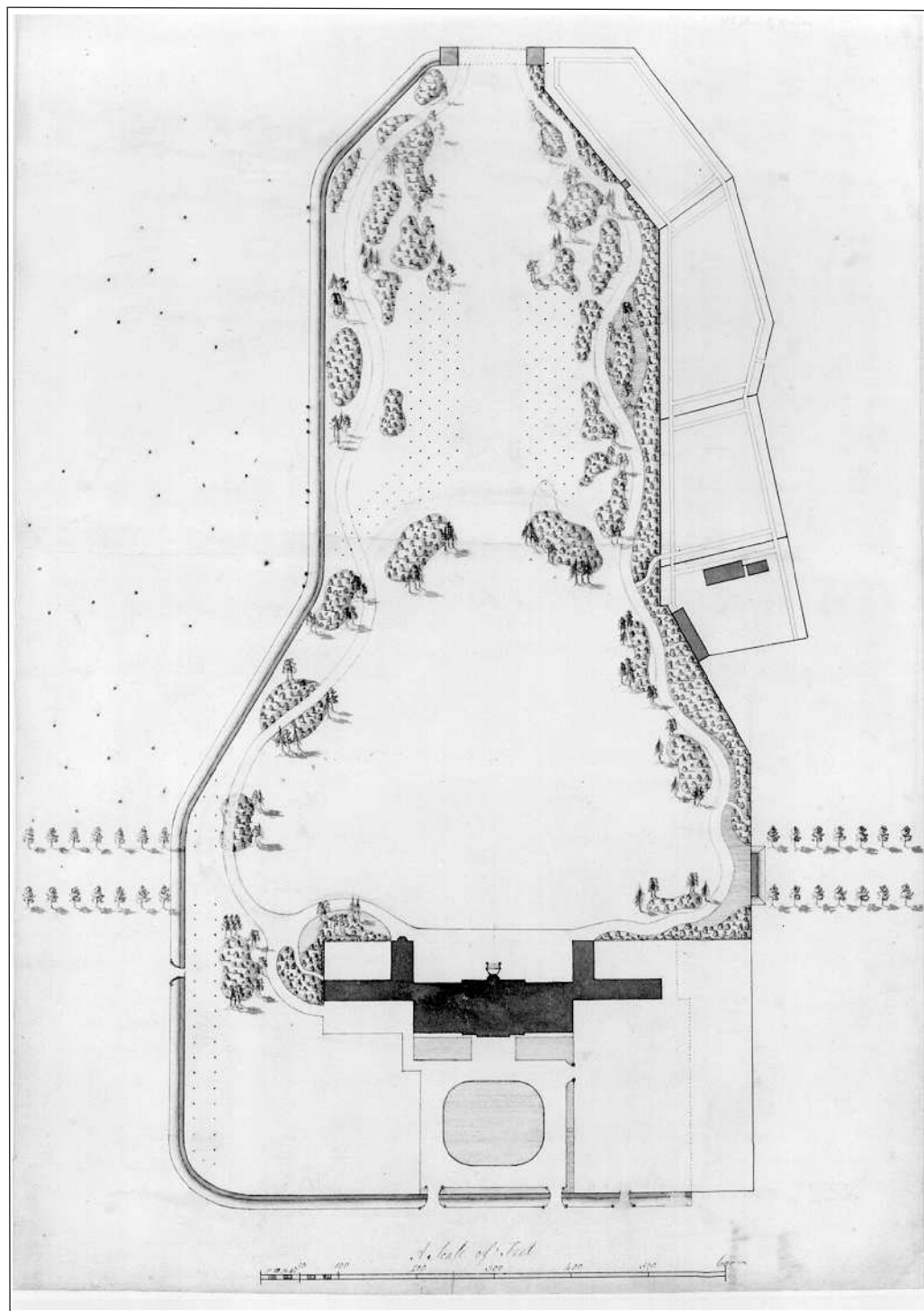
Parallel to the western boundary, just upslope, a very slight scarp marks the upper terrace earthwork for the **Walnut Avenue**. Below it, three small and aligned circular hollows, and a large oval mound, mark the former positions of several of its trees. There was an avenue here in 1638 and one is depicted on the Kip engraving of 1707, although apparently a little further to the north-west. The line of the surviving earthwork is as depicted by Bridgeman and it is replanted south-west of the Hall as a double avenue of walnut trees (frontispiece; Figs 3 and 4).

Several features survive from the interior of the former garden, including a small circular depression which may be the site of a **fountain**. Beyond it, there are four parallel earthworks (**p**) representing the basic shaping and cutting of the hill slope to enable the northward vista from the hall and to provide flat areas for planting. Several avenue trees are aligned along them. The site of the **bowling green**, as extended under Charles Bridgeman around 1720, is truncated by the later ha-ha but a prominent earthwork defines its southern end and eastern side.

Robert Greening's design of *c* 1752, for an informal garden within the old formal boundary, shows a serpentine perimeter path and clump planting (Fig 12). Some trace remains: parts of the perimeter path are visible as slight terraces or depressions (**q**) which exactly match his design as do areas of very pitted ground (**r**) where there were clumps.

Earthworks on the eastern side of the formal garden are equally clear, principally the framework of a compartmented fruit garden designed *c* 1752, also by Greening (Fig 13). Because it had to fit in the narrow strip between the road and the formal garden, an unusual shape was proposed: the result was a series of five compartments of irregular form. The earthworks are shallow trenches 5.0m to 7.0m wide and 0.3m deep, the result of thorough dismantling and robbing of the garden walls and foundations later in the 18th century. In several places, there are very slight 'banks' on the inside of the robber trenches, perhaps composed simply of spoil but possibly remains of paths or borders. The earthworks, although cut across at the northern and southern ends by the present ha-ha,

Figure 12
Robert Greening's
design for the north
garden
 c 1752 (by kind
 permission of the
 National Trust)



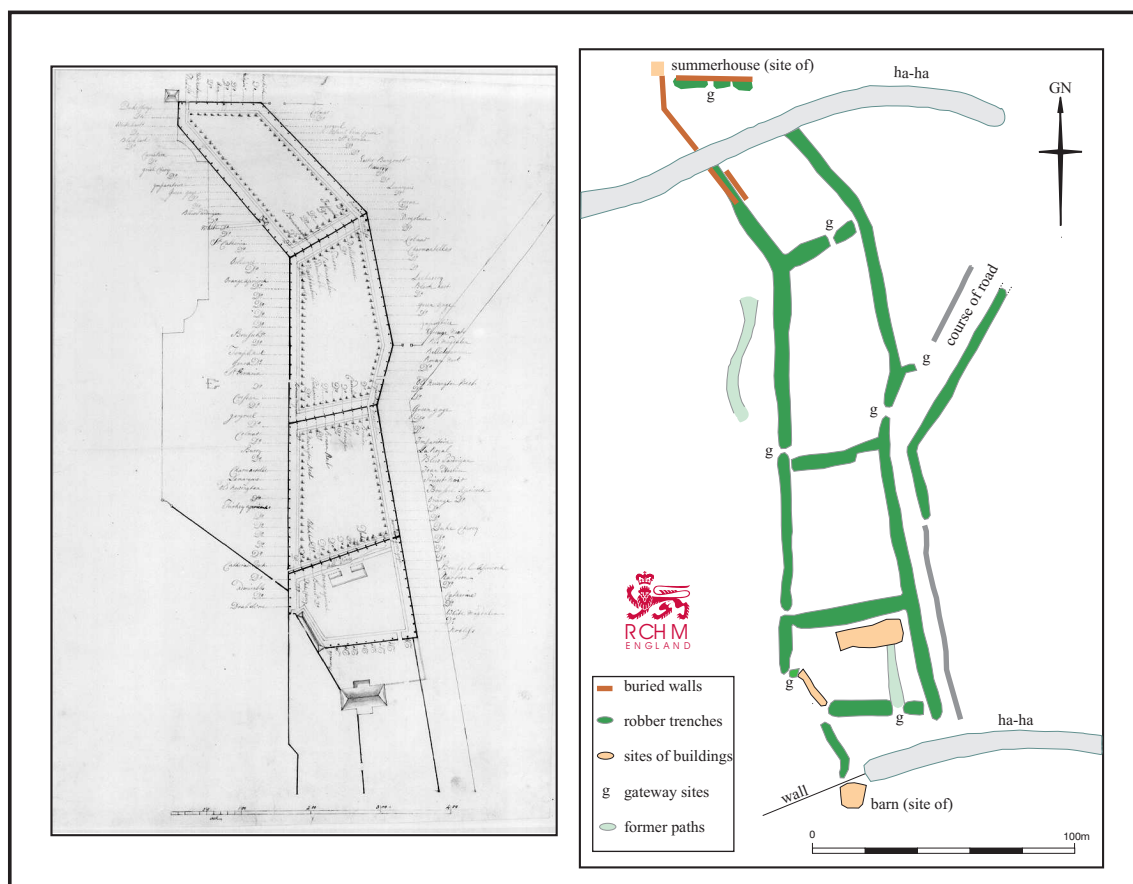
match Greening's design very closely, even to the positions of entrances which show as 'causeways' on the ground, where there were no walls to rob. Furthermore, Greening's plan shows three buildings within the walled garden, one in the north compartment over

an entrance and two in the southern compartment, possibly greenhouses. The latter are marked respectively by a shallow depression and a slight trench where robbing has taken place: the northern building has left no surface trace.

The present Hall garden is of early 19th-century origin but here too there are traces of the earlier formal garden: on the west side the divergence of two slight earthworks (**s**) possibly represents a subdivision, visible on the Kip engraving, between the formal garden and a kitchen garden; it certainly marks the line of Greening's ha-ha of the 1750s. Also, the eroded terrace for the **Walnut Avenue** passes through. Further to the east, a small ring bank (**t**) 12.0m in diameter and only 0.2m high, with a small central mound 4.0m across, is truncated by the modern shrubbery. This is possibly the foundation of the *Castello del Aqua*, Sir John Soane's late 18th-century water cistern for the Hall.

Several low banks and slight trenches cut across the north garden on various alignments. Most are infilled trenches, aligned north-east to south-west, and carry drainage pipes installed in recent years. However, the formal gardens required both a good water supply

Figure 13
Left: Robert Greening's design for a walled fruit and kitchen garden c 1752 (by kind permission of the National Trust); **Right:** RCHME interpretation plan showing earthwork remains of Greening's works



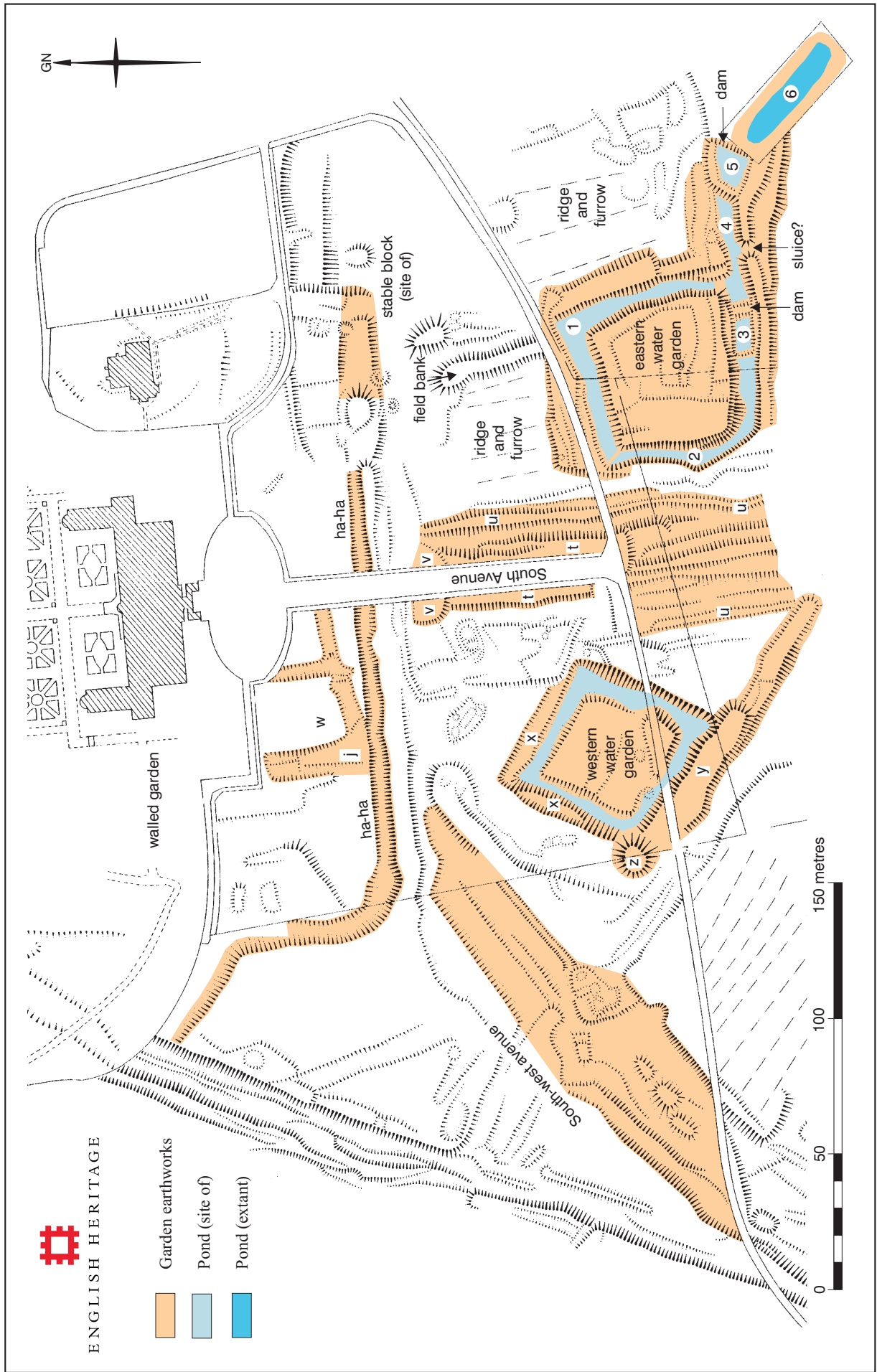


Figure 5b Extract of Fig 5, showing survey plan of earthworks of the South Garden (reduced from original at 1:1000 scale)

and effective drainage. One east-west trench has a sub-circular depression (**u**) at its western end, which is marked as a drain terminal on Greening's walled garden design. A brick-arched culvert, (**v**) in the base of the present ha-ha may be of similar date.

The south garden (Fig 5b)

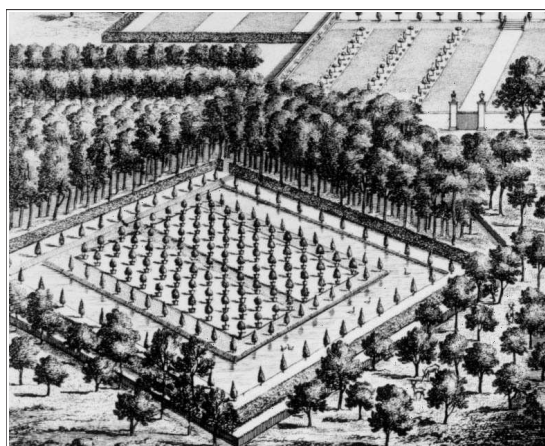
The complex and subtle earthworks south of the Hall reflect several phases of formal gardens spanning the later 17th and earlier 18th centuries. They include the course of Thomas Chicheley's later 17th-century **south** and **south-west avenues**, two ornamental **water gardens**, both probably made under Lord Radnor between 1693 and 1707 and the site of the **stables** which stood from the mid-17th century until the mid- 19th.

The original **south avenue** comprised three cambered walks; a broad open central approach (some 28m wide) flanked by smaller shaded tree-lined walks (each 9m wide). The planting of the outer walks comprised double rows of trees 6m apart, with 6m between each tree in a row, and each row offset to form an overall pattern known as a quincunx. The site of these walks is marked by several linear earthworks aligned on the Hall. Those scarps (**t**) forming the camber of the central walk, though only 0.3m high, are clearly visible on each side of the present gravel drive. Further south, beyond the Arrington drive, the central walk is topped by a low bank running along its axis, probably associated with the insertion of a more recent drain. The earthworks of the two outer walks (**u**) are more fragmentary, the eastern example being the best preserved.

A curving scarp (**v**), 0.2m high, is placed symmetrically at the northern end of the south avenue, though partly obscured by the present gravel drive. This may have formed an ornamental gravelled semi-circle outside the main gates to the formal garden; a plan by Charles Bridgeman, *c* 1720, shows a clear semicircle in this position.

By 1747, although the southern boundary of the formal garden remained on the same line as shown on the Knyff and Kip engraving, the wall had been replaced by a ha-ha, depicted clearly on a plan by Robert Greening *c*1752 (Fig 12). The remains of this **ha-ha** survive today as a marked earthwork ditch, some 6m wide and 0.3m deep, following a straight east-to-west line parallel to the house and defining the former southern extent of the formal garden. The western end curves smoothly to the north as shown by Greening, while on the east it ends against the earthworks of the former stables. The area between the ha-ha and the present walled garden formerly lay within the formal garden but has

Figure 14
Detail of a view by
Leonard Knyff and
Johannes Kip, dated
1707, showing a formal
water garden (detail
from NMR: BB97/3123)



been in the parkland since the 1770s; slight linear scarps (w) in the western half probably represent internal garden subdivisions of 18th-century date.

To the west of the South Avenue, very slight scarps, no more than 0.2m high, represent the remains of Chicheley's **south-west avenue**.

These scarps extend across the north-eastern extremity of *Bennall End* in a broad corridor some 37m wide, with traces of a terrace along the north-western side, clearly interrupting the earthworks of *Bennall End* while adopting the alignment of its former main street.

Knyff and Kip's engraving of 1707 shows that there was at least one formal feature in the parkland south of the walled formal garden, and archaeology has revealed a second. These appear to have been detached water gardens established in the later 17th century, neatly employing the springs which issued in the locality. The western of the two is shown by Knyff and Kip as a diamond-shaped pleasure garden in the Dutch style, with a canal on three sides (Fig 14). Inside the canal was a symmetrical arrangement of shrubs and small trees, some in tubs, with dividing paths, in the form of a *bosquet*. The garden is shown surrounded by a grove of trees in 1707 and on Charles Bridgeman's plan of *c* 1720 but was probably not maintained for much longer. Stukeley's view of the south avenue in 1747 shows the trees of the surrounding grove and a plan of Wimpole dating to *c* 1775 suggests that an informal water feature survived. The last traces were probably removed by Lancelot Brown in the late 1770s.

The earthworks of the **western water garden** are well preserved, with the ditch of the perimeter canal surviving up to 10m wide and 1m deep. Moreover, the ditch extends around all four sides, creating an island, not three as shown on Knyff and Kip's engraving. Each length of the ditch measures *c* 70m externally and each side of the central island *c* 50m. Parts of external walkways (x), 3m wide, are visible on the north-east and north-west. Moreover, a low bank (y) extends along the south-western side and beyond as far as the south avenue. At its north-west end, a low circular mound (z), 17m in diameter and 0.4m high, is located precisely at the eastern corner of the garden. It seems likely that this feature is a linear mount from which the water garden

could be viewed; the circular mound may have supported a summerhouse or arbour. Around the garden are several tree-throws, some of which may have formed part of the surrounding grove.

There appears to have been another water garden, situated on the eastern side of the south avenue in a matching though not symmetrical position. It does not appear on the the Knyff and Kip engraving but is shown on the Bridgeman plan of 1720 as a group of six closely associated ponds (1-6), made into an approximate square with an arm leading off to the east, finally draining into a stream heading south-east (Fig 4). After the entire formal garden was removed in the 1760s, some of the ponds were kept as parkland features; three are depicted on Humphry Repton's plan of 1805 and two on Robert Withers' plan of 1815 (WH (e) and (g)). The south-eastern pond survives today.

Most of this eastern water garden can be seen in the surviving earthworks. The largest pond (1) was an L-shape utilising the north and eastern sides of the enclosure, each side around 60m long. The second (2) was similar, on the west and part of the south side; with pond 3, some 18m long and 10m wide, utilising the remaining part of the south side. Pond (4) in the sequence lay directly to the east and measured around 40m in length and 10m in width, with the adjacent pond (5) a small square of some 15m. Pond 6 adopts a different alignment to the south-east; it survives and is some 40m in length.

There is some evidence of dams, at best 0.2m high, between the ponds, and a retaining bank runs along the southern side with the exception of a small gap which may have held a sluice.

The site of Thomas Chicheley's **stable block** is marked by a concentration of undiagnostic earthworks, possibly formed following its demolition in 1850. Knyff and Kip's engraving (frontispiece) depicts a building aligned north to south, in the south-eastern corner of the walled garden. The addition of an extra building is indicated on both Repton's 1801 and Withers' 1815 maps (WH (e) and (g); Fig 18).

Of many other slight earthworks only a few can be comfortably interpreted among the numerous tree throws and other minor disturbances. One is a north-south **field bank**, apparently part of a 17th-century boundary separating two fields, both with the name *Bayley Mead* in 1638.

C) THE PARK (Fig 9)

Roads and tracks

There was a well-developed road and track network serving the settlements and fields in 1638, of which several examples survive, some noted above. The crossroads near the church was a significant junction at the focus of the Wimpole settlement. In 1638 roads ran towards adjacent parishes from it. That heading east formed another crossroads on the present road south-east of Home Farm; it is largely lost under later landscaping and planting but short denuded earthworks reveal its course near the present public car park and in pasture immediately south of Home Farm.

Particularly well-developed is a road on the hill south-west of the hall, formerly dividing two furlongs, and later the two enclosed fields of *High Parke* and *Mill Field*. It occurs under the crest of the hill and comprises a terrace with a massive scarp above it, in places several metres high. The headlands of the adjacent furlongs lie above the scarp and below the terrace and have at some time developed independently of the road while respecting it. However, the great size of the scarp might be explained by its earlier development as a lynchet resulting from arable cultivation. It has also been suggested that it is a bank to contain deer in a small park around the hall (Phibbs 1980, 5). While it might have supported a deer barrier at some time, this function is not apparent in the earthwork, and it is certainly not its origin. In 1638 it was a field road, from *Bennall End* going around *High Parke* to join the road leading north from the Wimpole Hall.

Smaller field roads are now slight ditches or scarps among the ridge and furrow, such as those leading south-west and south-east from *Bennall End* (the latter called *Rush Brooke Way* in 1638), or that now just traceable in the North Park leading from the ha-ha towards the upper lake.

A road of 18th-century date was recorded on Thornberry Hill, on the line of the great eastern avenue established by Charles Bridgeman. To enable this vista, a shallow level cutting, 6.5m wide and 0.6m deep, was made in the hillside, disturbing a furlong of ridge and furrow. Small circular hollows, and a few surviving trees, are remnants of the flanking avenues.

Ridge and furrow cultivation remains (Fig 9)

Ridge and furrow visible on available aerial photographs was mapped initially by computer-aided transcription, the intention being to infill gaps by ground survey. Two

small areas were surveyed on the ground as a control, revealing that the inaccuracies inherent in the various photographs were too great to enable air-ground correlation to the accuracy required. Consequently, all ridge and furrow originally recorded by air transcription, where it survived, was re-surveyed on the ground.

A large part of the landscape park contains ridge and furrow, in various states of preservation (Fig 15). The 1638 map shows that, although much of the parish remained as subdivided arable, tilled communally, there had been some enclosure, mainly in hedged fields around the manor house and the tenants' cottages but also alongside streams. This included nearly all of the area of the present landscape park; only one block of communal arable remained, between *Bennall End* and *Thresham End* (Fig 3).

For the most part the ridge and furrow is tightly organised into large rectangular blocks or furlongs. Where there is a natural slope, the individual ridges (hereafter called *lands*) are aligned with it to facilitate drainage, slope being generally gradual or moderate. This kind of alignment has generally precluded lynchets formation, an exception being the hill and coombe at the western end of the park near the A1198, where there are moderate lynchets on the steeper hillside.



Figure 15
*Ridge and furrow in
High Parke, from the
north-west (NMR
AA96/3000)*

Much of the ridge and furrow shows a clear curvature, either the classic 'reversed-S' or a simple shallow curve, the latter occurring only in the shorter furlongs. There are no truly straight furlongs and all the ridge and furrow in the park was probably no longer tilled for arable crops by the late 17th or early 18th century.

Amplitude is most pronounced on the slope and summit of the hill west of the hall, the *Mill Field* and *High Parke* of the 1638 map. Elsewhere the lands are not so well-defined and it is the furrows which can be more easily traced. In this case the generally slight amplitude may be due to several factors: post-enclosure agriculture may have flattened the lands (but note that Hall (1993, 11-12) has shown that ridge and furrow of low amplitude is generally of early date); varying soil type on the higher and lower ground; and some ridge and furrow beside the lakes was damaged by ploughing in recent years. Note also that the ground surface of a large area on the western side of the park was completely obliterated or severely broken up by the construction of a military hospital during the Second World War, and its subsequent demolition.

The length of individual furlongs varies but a common length is around 160m (175yds), notably most of those surviving on sloping ground; there are longer furlongs on the flat ground of 280m (305yds) and 360m (394yds). Width varies but there is no apparent pattern; 6m (6.5yds) to 12m (13yds) is the range, 8m (8.75yds) is an average. These figures provide an average land of one third of an acre, with longer lands of one half and three-quarters of an acre respectively. Occasionally, there are narrower lands, including a furlong in the south-western part of the park where the range is 4m to 8m.

Heads and headlands occur at Wimpole; the former are less common, being the slight mounds at the ends of lands where soil from the plough has accumulated. There is a clear example south-east of the windmill mound where heads are visible lapping over the first land of the adjacent furlong. More often, the heads have built up on the first land of the next furlong to form a more prominent land, the headland where plough teams turned around.

An area of ridge and furrow cultivation on Johnson' Hill, no longer visible on the ground, was recorded by aerial transcription.



Figure 16
RCHME survey
plan of the windmill
mound, surveyed in
1984 (reduced from
original at 1:1000
scale)

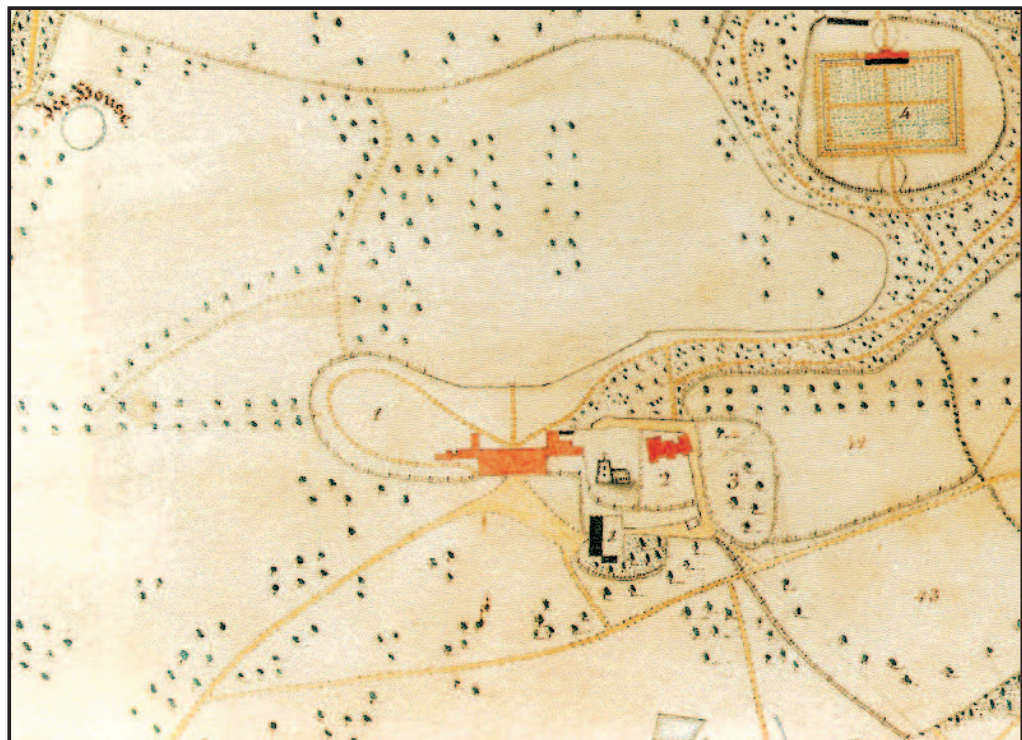


Figure 17
Extract of a map of
Wimpole Park and
Plantations by
Robert Withers,
1825, showing, at
top left, the site of
an ice house (by
kind permission of
the National Trust)

The windmill mound (Fig 16)

This mound was surveyed in 1984 and the following account builds on the original report. The mound sits in the park on the hill north-west of Wimpole Hall, at the northern end of a flat-topped spur. It is a prominent circular feature, 26.0m in diameter, up to 1.2m high with a top 19.0m across. It is encircled by a broad ditch, averaging 5.0m across its flat bottom, and up to 0.9m deep: this presumably is the source of material for raising the mound. The ditch is crossed by a well-defined causeway, 3.0m to 4.0m wide, in the north-western quarter. A rough hollow 6.0m north-east to south-west by 5.0m and 0.7m deep lies roughly central to the mound.

The windmill was placed at the junction of three former arable furlongs, but more specifically in the corner of one of them: it impinges slightly on two headlands which would nevertheless have provided access to it, and overlies several lands. The surrounding arable could have remained in cultivation after its construction.

On the 1638 map, a four-sailed wooden post-mill is depicted, standing on a large mound. Its relationship to the arable furlongs and headlands confirm its origin and function as a mill mound, and it is extremely unlikely to have been a small motte supporting a timber castle, as once suggested (RCHME 1968, 225): in form and scale it is entirely in line with other examples of small mill mounds in the East Midlands, as at Legsby and West Rasen in Lincolnshire (Everson *et al* 1991, 51, 126-7, 216).

The post-mill probably ceased to operate as a manorial corn mill in the later 17th or early 18th century when the land was no longer farmed in common and the park was developing. Subsequently, the mound became a convenient site for an estate icehouse. It is depicted as such on Robert Greening's design for the North Park, *c* 1752, and may date from this time, a typically circular chamber with short access tunnel reached from the surviving causeway across the ditch, and is specifically labelled on Robert Withers' map of the Wimpole estate, of *c*1815 (WH (e); Figure 17). The central hollow in the mound is therefore, not the result of the removal of the post-mill cross-trees, but followed dismantling of a brick-lined ice chamber. Like many icehouses its semi-remote location is not unusual, in this case overlooking the source of ice in the lakes at Wimpole a few hundred metres away.

A final use for this mound was purely as an ornamental tree clump and it remains as such today.

Figure 18
 Earl Radnor's
 upper fishpond
 (marked by the
 left-hand 'A')
 prior to
 Capability
 Brown's changes
 (by kind
 permission of the
 National Trust)



The upper lake (Fig 19)

Horse Common Plantation, now recently replanted woodland, contains earthworks associated with a former large fishpond/upper lake which featured in several phases of the parkland design. The upper lake occupied the valley floor at around 45m above O.D., close to the interface between Lower Chalk and Boulder Clay, and was the upper of three lakes created at Wimpole. The feeder stream runs axially through the site of the upper lake but is now little more than a drainage channel with small flanking banks of spoil: its course is straight and relatively modern.

The upper lake, situated immediately west of the two surviving examples, seems to have originated as the upper of two ornamental fishponds *c*1700, probably as part of the garden works instigated by the 2nd Earl of Radnor (Fig 18). It was re-shaped in the later 18th century, probably during the parkland changes of Capability Brown. However, by 1810, it had dried up and was used only as a reed bed (Phibbs 1980, 11).

The present survey clearly identified remains of two phases of the upper lake. For the most part, the scarps associated with all of the phases are eroded and gradual, never more than a metre high. This suggests that, even allowing for silting, the lakes were always shallow.

An inner series of scarps (**a**), represents the first phase, Earl Radnor's upper fishpond, and the full extent of its angular shape can be traced still: it is 220m long and between 50m and 110m wide. At its eastern end, the scarps rise to form a substantial bank (**b**) 13.0 - 24.0m wide and 1.8m high, constructed in two straight lengths which form a salient angle: this is the former dam. The stream flowed through the dam at this angle but the present cut is modern. A roughly circular mound (**d**), 18.0m across and up to 2.0m high, stands on the southern shore and was perhaps an ornamental or functional building beside the fishpond. The outer scarps (**e**) represent a second phase. They are clear on the northern and southern sides, and represent part of a slightly larger lake with a similar but more wavy outline. A well-defined channel (**c**), 13.0m across with steep sides up to 2.0m deep, leads out of the south-east corner of the fishpond, running eastward down the valley for some 120m: this appears to be a spillway. This second phase (and its spillway) would fit best as the work of Capability Brown, as the lake appears on a survey plan dated to the 1770's, together with two lower lakes which were created by adapting and extending Lord Radnor's lower fishpond (Fig 20; WH (h)).

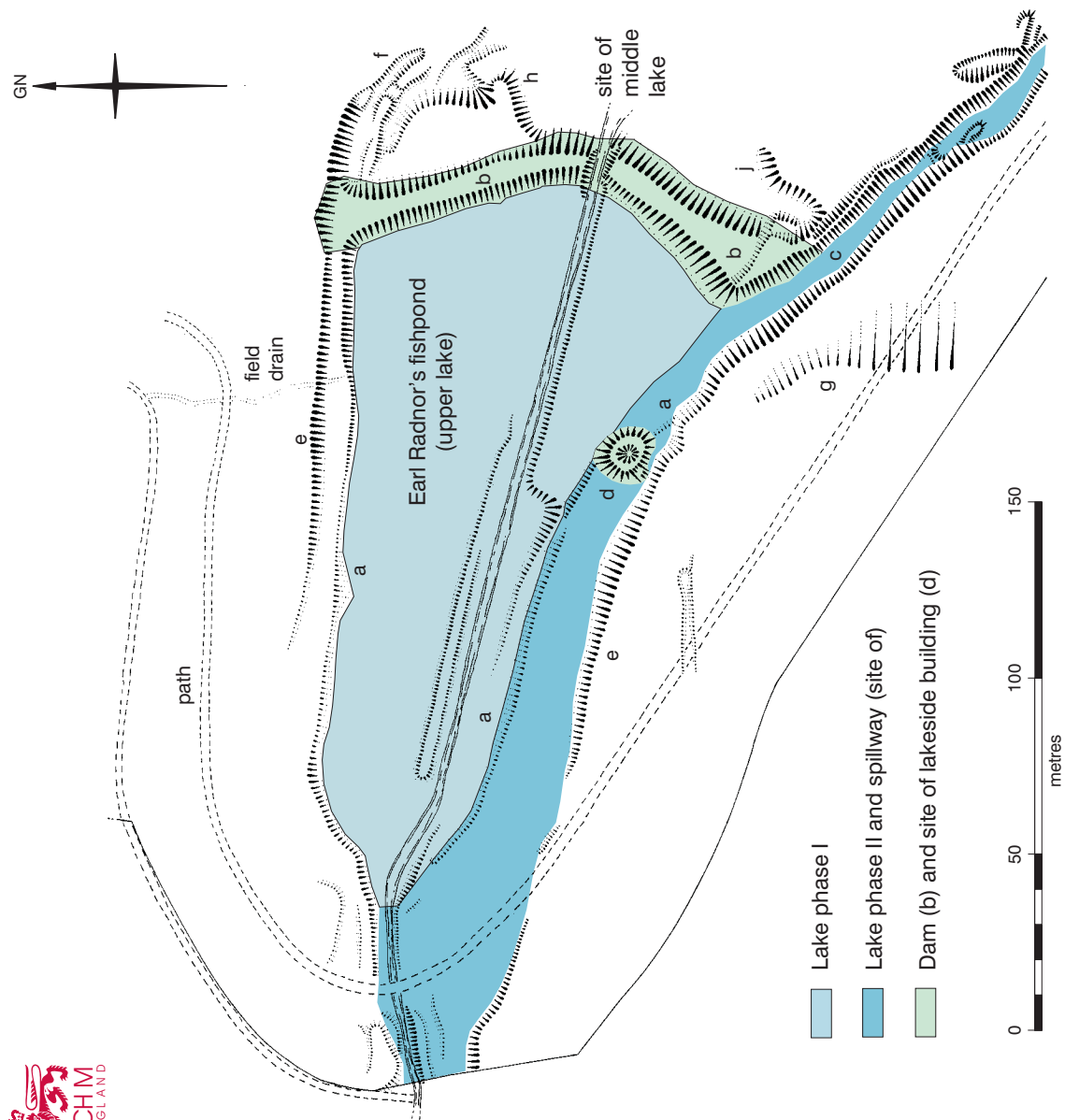


Figure 19
RCHME survey
of the upper lake,
incorporating
survey by Brian
Cushion
(reduced from
original at
1:1000 scale)

Other features of note are at (f) where the prominent scarp (e), here up to 1.2m high, has a channel along its base, apparently fading into a marshy area. It is probably an overflow channel into the middle lake, the end of which is marked by scarps (h) and (j).

A large but elongated scarp (g) is visible to the south of the site of the upper lake. Its origin is uncertain and although possibly a natural feature, it is aligned across the predominant fall of the land. It might, therefore, be related to a building depicted on the map of north park prior to Brown's changes in the 1760s (Fig 21) but it is also aligned upon the lakeside mound (Fig 22, d) of Earl Radnor's fishpond, and thus may well have been associated with a contrived view of that feature.

From the 1770's onwards, few alterations appear to have been made. Although a plan dated to 1801 suggests that Repton planned to smooth the shape of the lake into a neat triangle, the field evidence shows that this was not carried out (WH (g)). The upper lake became disused in the early 19th century and the middle and lower lakes have remained, much as designed, up to the present day.

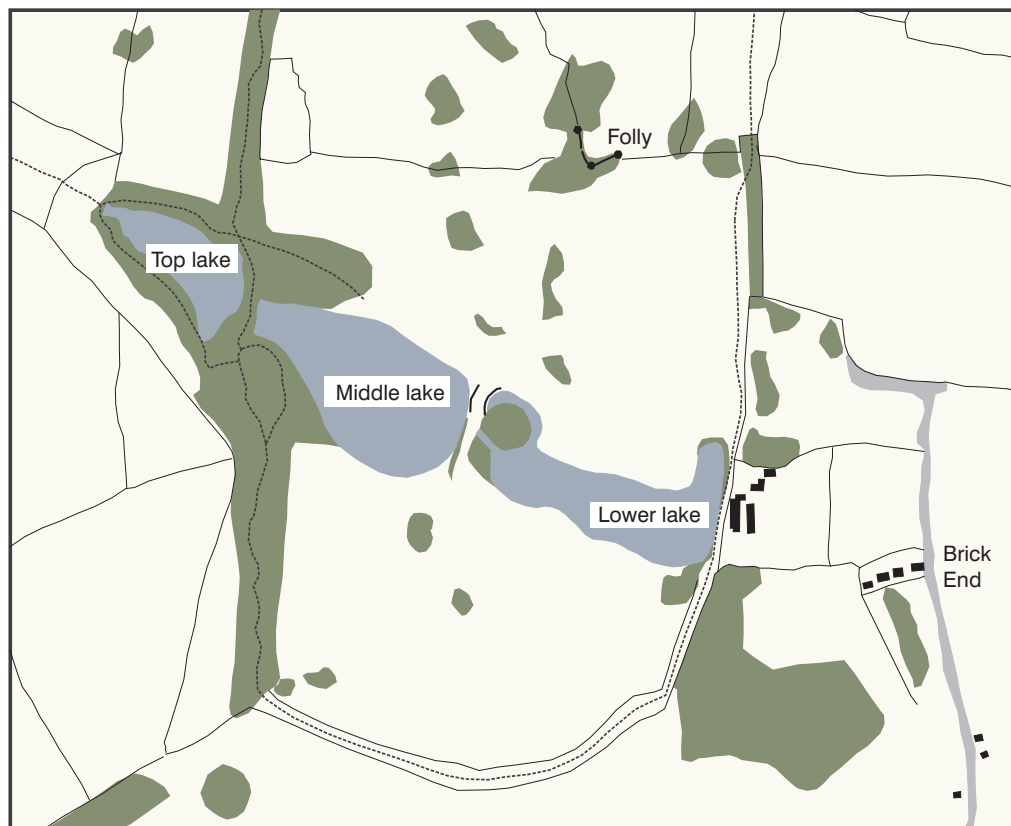


Figure 20
A schematic view of Wimpole North Park in the late 1770's, showing the three lakes probably established by Capability Brown, after a map possibly by Capability Brown, with alterations by William Emes (by kind permission of the National Trust)

Ponds (Fig 9)

The earthworks of two ponds at Bennall End are arranged in an L-shape; two conjoined form the longer arm, 165.0m long, 12.0m wide and up to 2.0m deep: the northern end is cut back into the slope from which water still issues, although the pond does not hold much water now. Water drains along the third pond set out at right angles to the other two, via a channel, 10.0m wide and up to 1.0m deep. The origin of these ponds is uncertain but they certainly appear on Charles Bridgeman's design of *c* 1720 (Fig 4). They are probably ornamental features or fishponds of the late 17th/early 18th century.

At the southern end of the former hamlet of Thresham End, there is a small rectangular pond known as *My Lady's Pond*. It may be the feature shown in outline on Bridgeman's plan of *c* 1720; hence perhaps one of his additions (Fig 4). It was certainly established by the late 18th century (WH (h)).

Plantation mounds (Figs 9 and 16)

A substantial mound lies approximately 120m south-east of the windmill mound. It is ovoid, though slightly irregular, and probably used material derived from shallow pits to the south-east, where there are also two small terraced subcircular platforms. The mound itself supports a small group of trees and overlies ridge and furrow. Most likely, it was deliberately constructed to support an ornamental clump and appears as such on Robert Greening's design for the North Park, of *c* 1752 (WH (d)). It is possibly his work.

To the south-east, some 350m along on the scarp edge, a tiny circular mound enjoys a prospect of the hall: it is likewise planted with trees and may be an ornamental feature of similar date.

Quarries (Fig 9)

There are two former quarries within the area surveyed, situated respectively on the hill north-west and south-west of the hall. Both are small at around 50m in diameter and up to 5m deep. Both quarries interrupt ridge and furrow and do not appear on the 1638 map. They do, however, appear on the Bridgeman plans of the 1720s and on subsequent estate maps (Fig 4; WH (f); WH (g)). They are therefore probably connected with greater exploitation of the estate from the mid-17th century and are either for clunch, chalk rubble or marl (RCHME 1968, 31). Clunch is used locally, including the hall itself and the church.

Miscellaneous features (Fig 9)

A small crater-like circular depression, 10.0m across and 0.7m deep, overlies ridge and furrow just north-west of the windmill mound. It has a slight, irregular rim bank and has been partially infilled. Its significance is unknown but might be a bomb crater; several bombs landed in the Park during the Second World War.

The site of the Hill House (also known as Prospect House), James 'Athenian' Stuart's park building of 1774, is marked by a sharply-defined rectangular depression, representing the robbed-out foundations of a substantial structure.

Immediately south of *Bennall End* is what appears to be part of an earthwork enclosure, shown as an unusually small furlong in 1638. There are signs of ploughed-out headlands or boundaries under present ridge and furrow immediately south-west of this feature and south-west of Home Farm.

A short ha-ha, 30.3m long, survives along a field boundary south of *My Lady's Pond*. It comprises a ditch, 4.9m wide and 0.8m deep, with a bank, 6.3m wide and 0.6m high, along the north side. This feature is associated with the lost *Whaddon Vista*, established by Charles Bridgeman in the early 18th century, and providing a view from the Hall to Whaddon church spire.

D) THORNBERRY HILL (Fig 9)

Two blocks of ridge and furrow were recorded in the fields north of Thornberry Hill Farm. The western block is an almost complete furlong, laid out over the prominent bowl-like form of the hill, with individual lands up to 240m long and 4.5m to 11.0m wide, with an average of 8.0m. The lands are cut by a former trackway, terraced into the slope, which ran along the 18th-century eastern avenue from Wimpole Hall (see below). The eastern block is set at 90 degrees to the western one: it has also been interrupted by the same trackway but its western end is marked by a prominent headland, a scarp up to 1.5m high becoming a bank towards the northern end. The lands of this furlong are of very low amplitude.

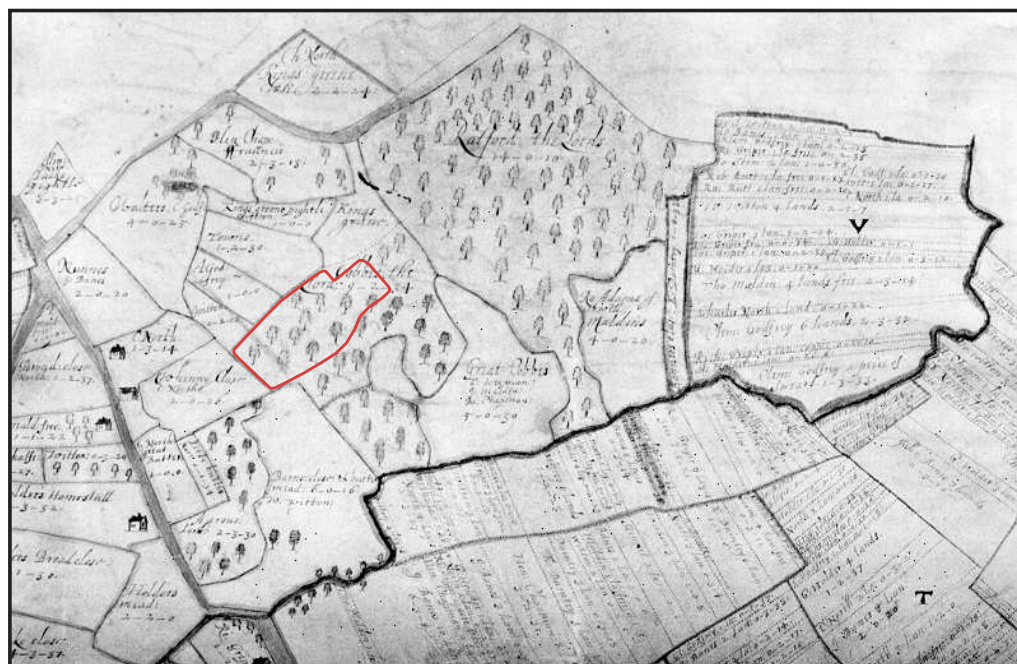
E) COBB'S WOOD MOATED SITE (Fig 22)

Cobb's Wood moat is situated at TL 347 516, at around 50m above OD in the north-western corner of Cobb's Wood. The site occupies a broad shelf which interrupts a gentle hill-slope. It sits on an area of Gault clay, very close to an interface with the Lower Chalk, and it is very likely that this underlying geology played a strong role in determining the location of the site. The water-retaining properties of clay, as opposed to the well-drained chalk, make it an ideal place to situate a moat, while the natural springs often found at the base of chalk could have provided the water source. In fact, it is a typical medieval settlement location for this part of West Cambridgeshire.

Some 9 ha (22 acres) were surveyed in two contiguous areas; the one comprising dense and mixed woodland; the other recently clear-felled and now rough, tussocky pasture.

The site at Cobb's Wood is usually described as a moat of manorial status but the documentary evidence is insufficient to reliably outline an historical context. Nevertheless, it has been suggested as the location of a house owned by the Francis (later Cobb) family, who owned the land hereabouts throughout the 14th century and perhaps beforehand (VCH 1948, 266). In the 1980s, pottery of 11th- to 13th-century date was recovered both inside and outside the moated enclosure (May 1992, 39). The site lay within a coppice in 1638, interestingly called *Cobbes*, though at that time neither buildings nor moat survived (Fig 21). It seems probable that this manor, along with

Figure 21
Cobb's Wood in
1638: detail of an
estate map by
Benjamin Hare (by
kind permission of
the National Trust).
The outline of the
moated site, in red,
is superimposed
from RCHME data



several others, was amalgamated into the Wimpole estate by the Chicheley family at some time during the 15th and 16th centuries.

The moat has also been linked tentatively to the manor of Wrathworth, a Domesday *vill* (RCHME 1968, 225; VCH 1948, 263) whose geographical location is unknown. The land of Wrathworth manor was acquired by the Wimpole estate in 1686 (Souden 1991, 5) but the suggested association with a coppice called *Ratford*, in Cobb's Wood in 1638, is not convincing (VCH 1948, 263).

The site has been in managed woodland since 1638 and earlier.

Summary

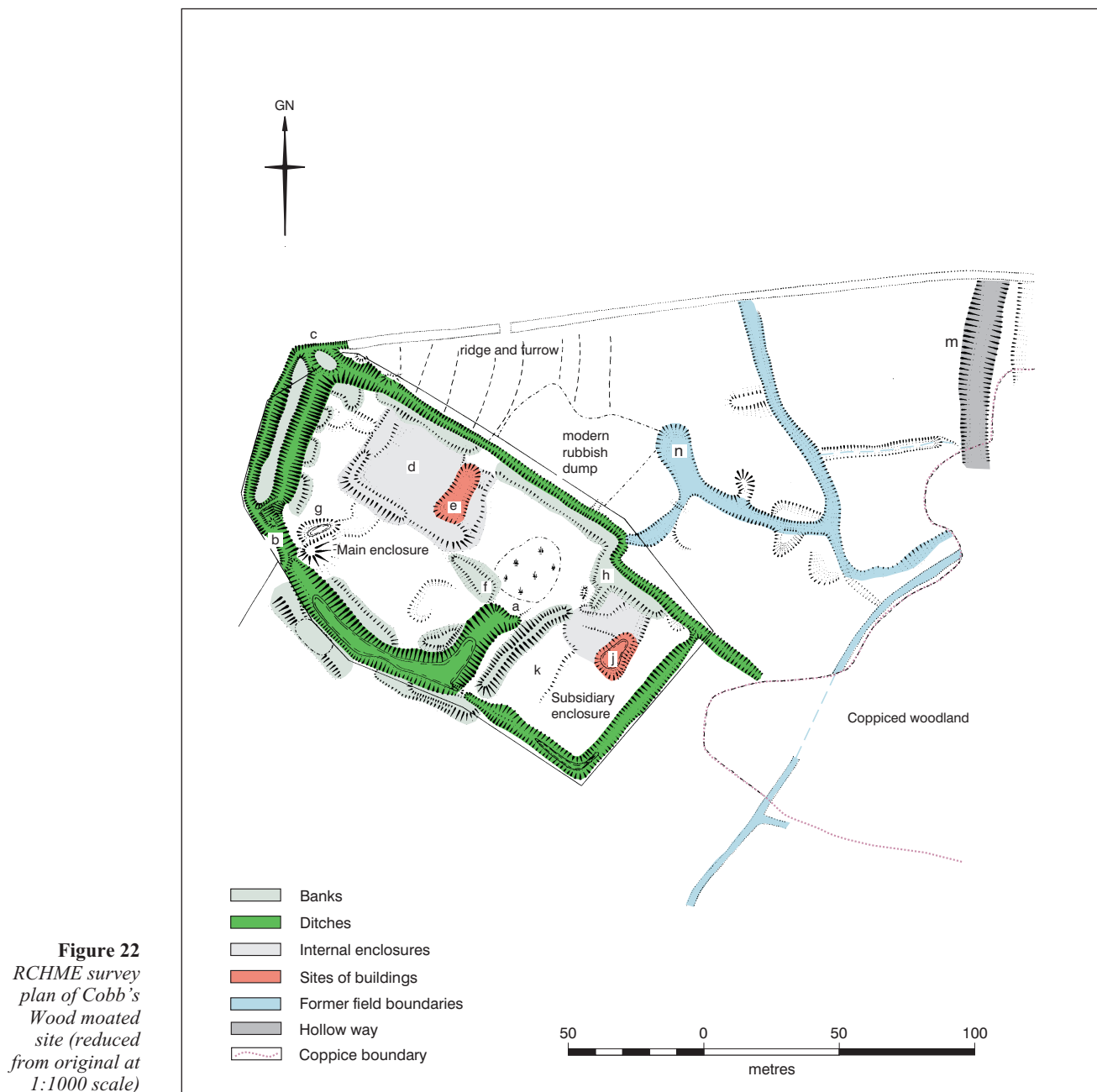
The principal feature on the site is a roughly D-shaped enclosure (henceforth; the main enclosure), defined by a ditch or moat with both internal and external banks, which surrounds an area of 1.5 ha (3.7 acres). Attached to its south-eastern side is a smaller ditched enclosure of just 0.4 ha (1 acre) (henceforth; the subsidiary enclosure). To the north-east of both enclosures, in woodland, is a small fragmentary patch of ridge and furrow cultivation and a series of sinuous ditches; the latter continue eastward into dense woodland beyond the scope of the present survey.

The main enclosure (Fig 22)

This feature is D-shaped and exhibits a complex sequence of alterations including recutting of the ditches and partial infilling. Despite this there is a clear difference between the earthworks forming the curve of the D and the straight north-eastern side. It is possible that this morphological distinction could also be a chronological one. Alternatively, these differences in form could be the result of the functional necessity of retaining water; on the downhill side the moat needed an earthwork of larger proportions.

The earthworks of the D are substantial and, where undisturbed, comprise a deep moat or ditch with both external and internal banks. The ditch is always the strongest feature, between 3.5m and 15.0m wide and 0.5m to 1.8m deep, the banks on all but the south-eastern side being relatively lightly formed. The external bank follows the ditch as a series of segments; these form an angular arc, slightly different to the smooth curve of the ditch. The internal bank, up to 7.0 m wide and 0.6 m high, is discontinuous, perhaps as a result of the later dumping of spoil when the ditches were re-cut. Along the

south-western side the ditch is broadest and still holds some water. The ditch on the south-east extends for only half of the side and although there has been some infilling, at (a), with a marshy patch beyond, there is no real indication that it extended to the eastern corner. The most likely explanation is that the original ditch did extend along the whole south-eastern side but was partially infilled following construction of the subsidiary enclosure (see below).



The straight side of the D has a much slighter ditch than the curving section, averaging 5.0m wide and 0.6m deep, very similar to that of the subsidiary enclosure (see below) with which it is continuous. There is a slight internal bank along its full length but no external bank.

The north-western side has an additional, external ditch which has a very sharply defined and deep V-profile. It forms the modern boundary on the north-western edge of Cobb's Wood and its clean profile is due to continuing maintenance as a drain. Nevertheless, it is unusual that the main enclosure ditch was not adapted for this use and it implies, perhaps, that the main ditch had some other function when the external ditch was dug.

There is no trace of an original entrance, which may in fact have been via a timber bridge, but the enclosure bank is breached at the western corner (**b**) and a causeway formed by depositing spoil in the ditch. Some of the ditch scarp remains, confirming the infilling.

At the northern corner there is another, substantial, dump of soil (**c**) filling the ditch and a smaller one slightly to the east. Both appear to be modern deposits, matching those similar dumps of farm refuse in the woodland 70m to the south east.

The interior is characterised by a surface which undulates gently and is pockmarked by slight depressions, mounds and tree stumps. This irregular surface is the result of successive tree plantings, culminating in clear-felling, grubbing up and burning. Despite this, several features remain, principal among which is a broad bank or scarp forming a small rectangular enclosed yard (**d**) against the straight side of the D. This bank is generally broad and low, averaging 10.0m by 0.5m but the western corner appears to have been raised to form a more substantial feature, 0.8m high. Occupying the full width at the south-eastern end of (**d**), perpendicular to its axis, there is a shallow subrectangular depression (**e**) with maximum dimensions of 22.0m by 11.0m and 0.7m deep. This can plausibly be interpreted as the hollow left by the robbing-out of a building with stone foundations. The remaining area of (**d**), approximately 30m square, may have contained less substantially-built structures.

A slight but broad bank (**f**) extends between the enclosed yard **d** and the truncated ditch of the main enclosure at (**a**), continuing the alignment of the former. It is possibly a denuded internal subdivision, perhaps helping to define another enclosed area in the eastern corner of the main enclosure.

The only other distinct internal feature lies near the breach at the western corner: a small pond-like depression (**g**), still wet, accompanied on the south by a mound of spoil which overlies the enclosure bank. The pond itself appears to disturb the edge of the mound, probably because it was re-cut.

The subsidiary enclosure (Fig 22)

The subsidiary enclosure is relatively simple in comparison to the main one. It is defined by a ditch on three sides, forming a rectangle with the outer bank of the main enclosure and cutting through it at the southern corner, implying that it is an addition. The bank of the main enclosure appears to be enhanced along this side and is pierced by a small gap near its northern end, probably an entrance between the two enclosures.

The ditches are smaller, straighter and, on the north-east, continuous with that of the main enclosure via a marked dog-leg in alignment. At this point, there is a section of internal bank (**h**), which is continuous with that of the main enclosure. Further ditches extend from the southern and eastern corners of the subsidiary enclosure into the adjacent woodland.

The interior, flatter and less pockmarked than the main enclosure, contains several discernible features. The first is a very shallow pear-shaped depression (**j**), which is apparently a pond. However, the very shallow water may simply be filling a convenient hollow on the site of another robbed-out building. Furthermore, it sits comfortably in the southern corner of what may be another small yard, measuring some 30m by 20m, occupying the northern corner of the enclosure.

One final feature is a slight scarp (**k**), defining a raised area to its western side, much of which is covered by exposed soil containing large amounts of burnt clay and charcoal. This may be the product of recent burning of felled trees.

Ridge and furrow cultivation (Fig 22)

North of the main enclosure, the woodland contains a small triangular patch of ridge and furrow. Unfortunately, this area is partially obscured by modern dumping. Although only short stretches survive, it is possible to discern a slight but consistent curve in their course. Because of their abrupt ending against the main enclosure, it is possible that they are at one end of a furlong, in which case the internal bank of the main enclosure may have

originated as a headland. Alternatively, it is possible that the main enclosure has cut through and thus post-dates the cultivation strips. Ridge and furrow in a field to the west of the main enclosure is similarly aligned, a fact which cannot be used to favour either interpretation. Whatever the case, the strips had been extinguished and enclosed fields established over them by the time Benjamin Hare made his map in 1638.

Field boundaries (Fig 22)

North-east of the subsidiary enclosure and adjacent to the ridge and furrow lie several broad and shallow ditches which, in most cases, run sinuously into each other. The fact that they join is important and allows them to be treated as a single entity: most of them are boundaries to a series of enclosed fields and coppices shown on the Hare plan. A single exception is a large deep ditch (**m**) with a broad shallow bank to one side. This is a former trackway, also shown by Hare, leading ultimately to the former settlement of *Little End* (now under barns at Cobb's Wood Farm). The ditches have been affected by infilling and dumping; several slight depressions and mounds can be seen against their edges. One ditch (**n**) is now completely truncated.

Discussion (Fig 22)

Perhaps the most important point to emerge from this survey is that the Cobb's Wood site is a complex one and not simply a double-moated enclosure. Although some of the surviving remains are difficult to interpret, several clear elements to the site can be observed.

The focus is obviously the main, or D-shaped enclosure, which may be seen as a medieval moated site. The double-banked construction is fairly unusual for a Cambridgeshire moated site but not unknown (RCHME 1968, 61). However, its unusual morphology might suggest that the medieval phase re-used an earlier, perhaps prehistoric earthwork, although at present this notion is totally unsubstantiated. As a medieval moat, the large enclosing ditch offered a measure of protection but may equally have formed a continuous ornamental pond, perhaps serving also the practical function of holding fish.

Inside the main enclosure stood a substantial building contained in its own small enclosed court or yard, perhaps with other, less substantial structures which have not left surface traces. The subsidiary enclosure, clearly an adjunct to the main one, has a very different appearance. Such additional enclosures to moats are often smaller and slighter (RCHME 1968, 61), perhaps indicative of lower status; built to accommodate new farm buildings

or a garden or an orchard. It is possible that the ditch of the main enclosure was infilled at the same time as the construction of the subsidiary enclosure, extra space being made available in both old and new. The result may have been a series of three internal enclosures along the north-eastern side of the site as a whole, with open space along the south-west.

Such an arrangement makes it very likely that Cobb's Wood is indeed the site of a manor house, which stood in the 13th and 14th centuries but had gone out of use by the early 16th century. The cluster of cottages evident at Little End on the 1638 map lend some support to this assertion, as it is likely that a small settlement would have grown up in association with such a house. Pottery found nearby supports the date range put forward here (RCHME 1968, 228). These suggestions must, however, remain tentative, due to the lack of any clear documentary or excavated evidence.

5. CONCLUDING REMARKS

The RCHME survey is an attempt to provide a thorough record of the visible archaeological features preserved in the landscape of Wimpole, and to locate them in an accurate survey framework. However, new discoveries will always be made and the present work should be seen as a baseline to which future survey and other information can be added.

The survey plans, derived from a combination of transcribing aerial photographs and surveying on the ground, reveal the complexity and extent of surface features - despite the rapid changes which have occurred over the past 400 years, including landscape design on a very large scale. This earthwork evidence, pertaining to many periods, is both subtle and complex. The analysis given above has revealed that even ephemeral features occasionally survive, such as those revealing the imprint of Robert Greening's compartmented kitchen garden. This is important not only *per se* but it also bodes very well for archaeological survival below the ground. Moreover, it demonstrates that 18th-century landscaping at Wimpole - and no doubt in other parks - did not always involve massive earth-moving. At Wimpole, there is evidence that, where possible, earlier features were adapted and incorporated into later designs and redundant features removed only where absolutely necessary: many formed earthworks which were incorporated in new designs or which blended into the park but which provided an air of antiquity and authority, a clear link with the past. The re-use of ploughing headlands for avenues and vistas is particularly striking at Wimpole.

The deserted settlements in the park show that, by around 1600, Wimpole was a polyfocal settlement comprising small groups of cottages. There were several scattered groups along roads leading to and from the main focus of the parish, that is, the hall and church. The origins of this pattern have not been systematically explored but its ribbon-like character is significant, with habitations appearing to be secondary to the road network and the field system, the latter assuming prime importance in the landscape as a whole. Also, the closes at *Bennall End* were laid out over former arable land.

By comparing the RCHME earthwork surveys with the 1638 plan it is obvious that the groups of cottages then present were the survivors of once larger and more orderly settlements; the number of cottages in 1638 is small compared to the number of surviving house sites. The contraction of the medieval settlements may have been a gradual process

in which enclosure and emparkment played major roles; the 1638 map is, in effect, a snapshot of Wimpole during this transition. Another possibility is that the core of the medieval settlement is hidden beneath the later hall and gardens, and that what we are seeing is a combination of the outlying parts of that settlement and later growth out from the centre to make way for the lord's requirements. This might explain why the cottages cling to the roads and occupy former arable land.

In 1638 *Bennall End* was essentially a single-row settlement, laid out over a single block of ridge and furrow. However, a solitary cottage stood on the other side of the road, also cut sharply into a furlong. The 1638 plan is of a shrunken settlement with only a few cottages left from a significantly larger number. Nevertheless, emparkment had not progressed to such a degree so as to entirely exclude settlement.

In *Thresham End* the settlement appears to have been of double-row plan. By 1638 it had contracted considerably to leave barely a handful of cottages and closes. Its former regularity is clear both in the earthworks and on the 1638 plan.

In the park north of the Hall, several cottages are shown on the 1638 plan. By the early 18th century, the settlement had clearly become a single economic unit, a farm, with a pond and dovecote and a small green area.

A final observation concerns the documentary evidence. It has proved possible to link the archaeological and cartographic/topographic evidence very closely, confirming the reliability of the sources; this is true for both settlement and garden features: of particular note is the close correlation in north park where Robert Greening's influence can be seen clearly in the earthworks marking the robbed-out walls of his unusual kitchen garden, confirming his design almost exactly. Equally surprising are the remains of his ornamental garden: the earthwork (a ha-ha) along its western side, the slight traces of serpentine paths shown on his design, and disturbed ground over the site of shrubberies. His other design for the north park shows elaborate shrubberies and serpentine paths around a garden pavilion north-west of the house: this was not executed but part of the proposal included extending the ha-ha back southwards to end on Bridgeman's west avenue: a seat for prospect, shown sited on a prominent earthwork, does actually exist in the field remains, including the brick foundation of the seat (Fig 9): clearly elements of this work were also carried out.

6. SURVEY AND RESEARCH METHODS

The survey of Wimpole Park was carried out principally by Paul Pattison, Moraig Brown, Louise Barker, David McOmish and Simon Crutchley, assisted by Alastair Oswald, Trevor Pearson, Anwen Cooper, Duncan Garrow, Daphne Thissen and Angus Wainwright. This report incorporates some survey work carried out by Brian Cushion.

Simon Crutchley undertook the air photo transcription to a scale of 1:2500, using mainly CUCAP photographs loaned by the National Trust, supplemented by RAF and other photographs from the RCHME's own collections. The aim of this part of the survey was to produce an accurate control framework, including the parkland trees, together with all visible archaeological features. This was achieved using a Digicart stereo photogrammetric plotter and the CUCAP photographs, supplemented by archaeological detail from the other photographic sources transcribed using the AERIAL program. Overall survey errors are generally less than 1m.

For the 1:2500 field survey, control points were established and detail recorded using a Wild TC1610 Electronic Theodolite with integral EDM, data being captured on a Wild GRM 10 Rec Module and plotted via computer on a Hewlett Packard plotter: these field data enhanced and corrected that from the air photo transcription. For the 1:1000 surveys, detail was supplied by graphical methods employing taped measurement from the established control points, enabling an accuracy of less than 0.3m.

This report was written by Paul Pattison, with Louise Barker, Moraig Brown and Duncan Garrow, incorporating ideas from Angus Wainwright: the figures were prepared by Paul Pattison, Louise Barker, Moraig Brown, Anwen Cooper and Duncan Garrow, in part using AutoCad and CorelDraw7 software, and the report was assembled by Moraig Brown using Corel Ventura software. Photography was by Steve Cole and Alun Bull.

We are grateful to Angus Wainwright, Graham Damant and the staff of the National Trust at Wimpole for their help and encouragement throughout the project. Thanks are due also to Brian Cushion for allowing us to use his unpublished survey data.

The site archive and a copy of this report have been deposited in the archive of the RCHME at the National Monuments Record, Kemble Drive, Swindon SN2 2GZ (under record nos TL 35 SW 7, 8 and 38), to where further enquiries should be directed).

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7. BIBLIOGRAPHY AND SOURCES

PUBLISHED SOURCES

British Geological Survey 1949 Sheet 204 *Biggleswade* (Drift edition)

Everson P 1991 'Field Survey and Garden Earthworks' in A E Brown (ed) *Garden Archaeology* CBA Research Report **78**, 6-19

Everson P L, Taylor C C and Dunn C J 1991 *Change and Continuity: rural settlement in NW Lincolnshire* HMSO London

Hall D 1993 *The Open Fields of Northamptonshire: The Case for the Preservation of Ridge and furrow* Northamptonshire County Council

May SC 1982 'Three earthwork surveys' *Proceedings of the Cambridge Antiquarian Society* Vol **LXXXI**, 39-49

Phibbs J L 1980 *Wimpole Park, Cambridgeshire* The National Trust

RCHME 1968 An Inventory of the Historical Monuments in the County of Cambridgeshire Vol **1** *West Cambridgeshire* (HMSO, London)

Souden D 1991 *Wimpole Hall, Cambridgeshire* The National Trust

VCH 1948 *The Victoria History of the County of Cambridge and the Isle of Ely* Vol **2** Oxford University Press

UNPUBLISHED SOURCES

A) Bodleian Library, Oxford

Ms Gough drawings A4 Folio 69, the last of several design drawings by Charles Bridgeman

B) Cambridge Record Office (CRO)

R77/1: *A Description of the Mannour of Wimple in the Countie of Cambridge, being part of the possessions of the right Worshipfull Thomas Chicheley Esquire, Anno Dom 1638*, by Benjamin Hare

C) Soane Museum (SM)

D6 S1 I18 A Plan of the Water Pipes and Drains at Wimple with the House, Offices, Church etc., 1749

D) National Monuments Record (NMR)

Record nos TL 35 SW 6, 7, 8 and 38

E) Wimpole Hall, document room (WH)

- (a) Late 18th-century map showing the north park before and after Capability Brown's proposed alterations, dated 1767
- (b) A design for the north garden by Robert Greening *c* 1752
- (c) A design for a fruit garden by Robert Greening *c* 1752
- (d) A design for the north park by Robert Greening *c* 1752
- (e) A map of Wimpole Park and Plantations by Robert Withers *c*1815 (original in Cambridge Central Library)
- (f) A Plan of the Park and Demesne Lands at Wimple by William Emes 1790 (original in British Library, BM Add MSS 36278G)
- (g) Map of Wimpole Park and Farm by Humphry Repton, dated 1801
- (h) Map of Wimpole Park, undated but probably late 1770's. Possibly by Capability Brown with alterations by William Emes

8. LIST OF PHOTOGRAPHS TAKEN DURING THE SURVEY

A) From the map room at Wimpole Hall

BB97/3112 Map of the north park c 1767 showing area before and after Capability Brown's proposed changes

BB97/3113 As 3112, but in colour

BB97/3114 Map of the north park c 1767, detail 1, showing area after Capability Brown's proposed changes

BB97/3115 As 3114, but in colour

BB97/3116 Map of the north park c 1767, detail 2, showing area before Capability Brown's proposed changes

BB97/3117 As 3116, but in colour

BB97/3118 Design for a walled fruit garden by Robert Greening c 1752

BB97/3119 Design for the north park by Robert Greening c 1752

BB97/3120 Design for the north garden by Robert Greening c 1752

BB97/3121 Wimpole Hall and gardens attributed to Charles Bridgeman c 1720

BB97/3122 Design for the north park by Capability Brown c 1767

BB97/3123 Engraving of Wimpole Hall and gardens by Johannes Kip 1707

BB97/3124 Map of Wimpole Park and Farm by Robert Withers c1815

BB97/3125 As 3124, but in colour

BB97/3126 Detail of map of Wimpole Park and Farm by Robert Withers c1815

BB97/3127 As 3126, but in colour

BB97/3128 Detail of map of Wimpole Park and Farm by Humphry Repton 1801

BB97/3129 Map of Wimpole Park and Farm by Humphry Repton 1801 (colour)

B) From Cambridge County Record Office

Map of Wimpole by Benjamin Hare 1638:

BB97/6172	Detail 1
BB97/6173	Detail 2
BB97/6174	Detail 3
BB97/6175	Detail 3 (colour)
BB97/6176	Detail 4
BB97/6177	Detail 4 (colour)
BB97/6178	Detail 5
BB97/6179	Detail 5 (colour)
BB97/6180	Detail 6
BB97/6181	Detail 7
BB97/6182	Detail 7 (colour)

WIMPOLE PARK
Cambridgeshire
Figure 9 (North)

KEY

- GENERAL**
- Tree canopy/woodland edge
 - Tree stump/tree hole
 - Tree guard
 - Hedge
 - Public and made roads
 - Unmade track or path
 - Fence
 - Wall
 - Extant building
- GARDEN and PARK**
- Ditch, ha-ha, trench, path, hollow, scarp, bank or mound
 - Garden building (earthwork)
 - Lake pond or other water feature
- SETTLEMENT**
- Hollow-way, road or track
 - Ditch or hollow, scarp, bank, boundary or mound
 - House platform
- LANDSCAPE**
- Ridge and furrow (earthwork)
 - Ridge and furrow (from air photograph)
 - Headland, lynchet, bank, scarp or ditch
 - Quarries and miscellaneous features
 - Parchmark
 - Drain

Field survey and air photo transcription,
Jan 1997 to Jan 1999

Scale = 1:2500
RCHME, Crown copyright 1999

