

A brief introduction to the archaeology of Wrest Park, Bedfordshire

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SUMMARY

Restoration of the main water bodies, paths and rides in Wrest Park was assisted between 1988 and 1991 by archaeological excavations and geophysical survey. The work enabled much of the garden's underlying drainage to be mapped and confirmed the orientation and layout of several lost features. The present garden was also shown to result largely from 19th century landscaping which obscures the formality of the Great Garden created in the early 1700's with its regular subdivisions marked by yellow sand paths, wrought iron fencing and low brick walls.

INTRODUCTION

Archaeological techniques have been used to investigate gardens since the 1930s, but until the mid 1980s garden archaeology was largely restricted to ground and earthwork survey, supplemented by aerial photography and documentary research (Taylor 1991). However, in the middle of the 1980s a series of excavations at Audley End, 1985-7 (Cunningham 1988), Kirby Hall, 1987-91 (Dix 1991), and Castle Bromwich, 1989-90 (Currie, Locoock 1991) established a role for excavation in the investigation of garden history. At the same time geophysical survey was added to the list of techniques applied to garden research. Despite these advances the expense of large scale archaeological investigation has limited the application of such techniques to gardens of historical significance and generally to those in the care of the state. Wrest Park was such a garden.

This report is intended as an introduction to the archaeological investigations carried out at Wrest Park between 1988 and 1991 by Bedfordshire County Archaeology Service (BCAS). The archaeology in this report is, of course, only one of many contributions to the garden's history, it has nevertheless contributed both to the management of the gardens (Land Use Consultants 1993) and in the preparation of a recent Wrest Park guidebook by Nicola Smith (1995).

A brief history of Wrest Park

Wrest Park probably originated with estates held by Heafriht in the late Saxon period (Fowler 1922). By

1658, when a formal garden at Wrest was described as 'new' (BLARS: 228/12), Wrest house had been in the ownership of the de Grey family since the 13th century.

The 'new' garden was constructed by Amabel the second wife of Henry Grey (d1651), her son Antony and his wife, Mary, daughter of Baron Lucas. Using money inherited on the death of Marys' father in 1671 and Amabel's personal wealth the garden was substantially expanded during the period from 1670-80. This episode of development, which lasted until 1702, is regarded as the 'Williamite landscape'. It was recorded by Kip in 1705 (Plate 1) and is generally referred to as the first of the major gardening campaigns (Godber 1963).

In the early 18th century works at Wrest included the construction of a banqueting house by Thomas Archer in 1705, and from 1710-1720 the gardens were extended and altered to designs by Thomas Ackres with influences evident from Hawksmoor, Gibbon and Kent (Plate 2). This period has been described as the first phase of the Great Garden (1702-20s).

In the 1730s a third campaign established the garden in a form which has largely endured to the present day. The designs were recorded by Rocque in two engravings of 1735 and 1737 and these gardens reflect the influence of Batty Langley as well as Thomas Wright the family tutor (Plate 3).

In the latter part of the 18th century the formality of the English garden was being swept away as the Romantic landscape dominated fashion. Lancelot Brown was involved in alterations to the grounds and made a series of visits in 1758-60 and 1778-9. However, Jemima, Marchioness de Grey, out of affection for the old garden limited his influence to alterations to the water bodies surrounding the gardens. By softening the lines of these water bodies and other works Lancelot Brown nevertheless continued the development of the Romantic Landscape which characterised the period from 1740-1797.

From the later 1770s until the end of the Napoleonic wars the garden at Wrest was maintained but not significantly altered. In 1834 Thomas, Earl de Grey, pulled down the old house (Collett-White 1991a & b) and built a new French style mansion house further to the North. Thomas

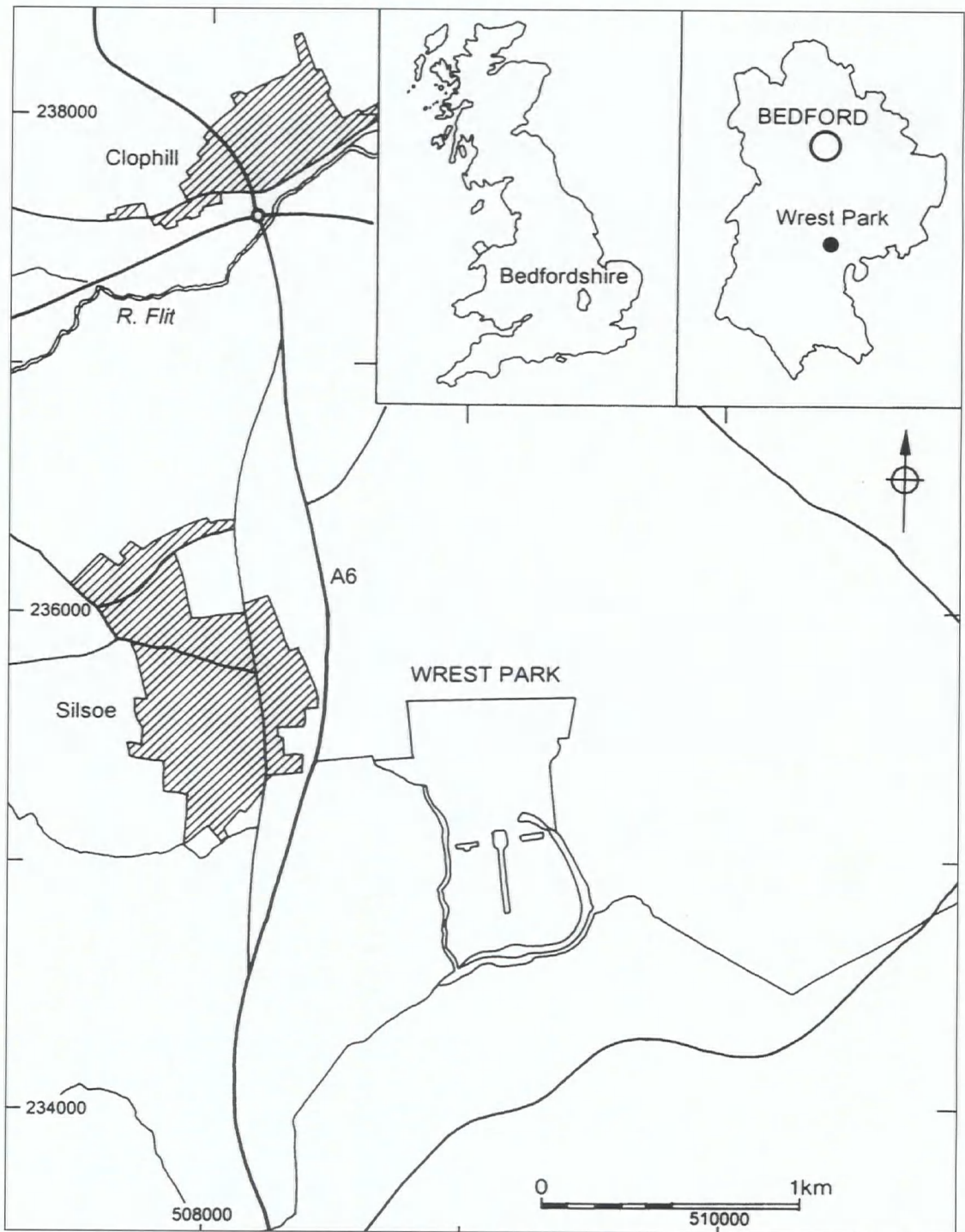


Figure 1 The location of Wrest Park, Bedfordshire

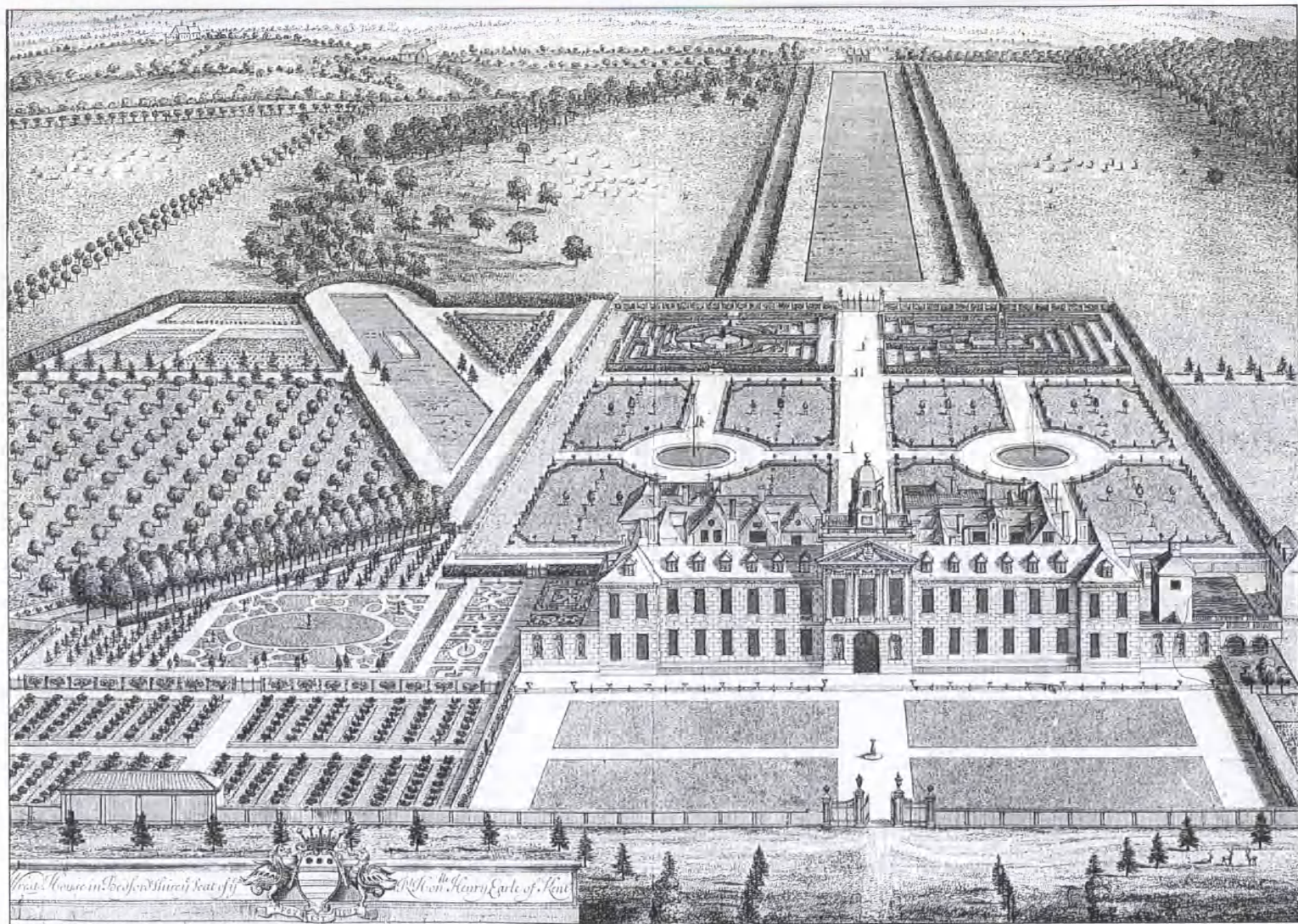


Plate 1 Kip 1705

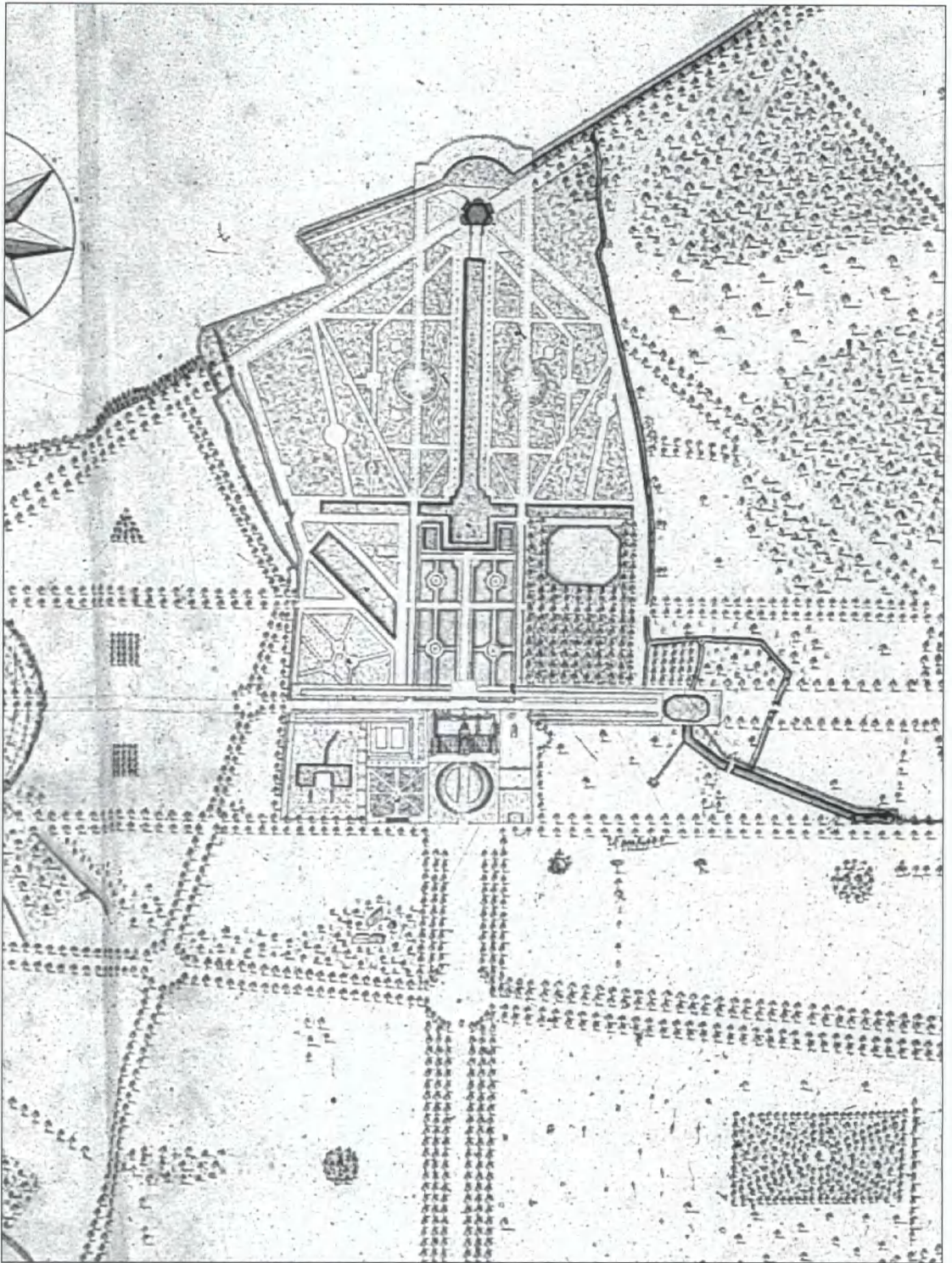


Plate 2 Laurence 1719

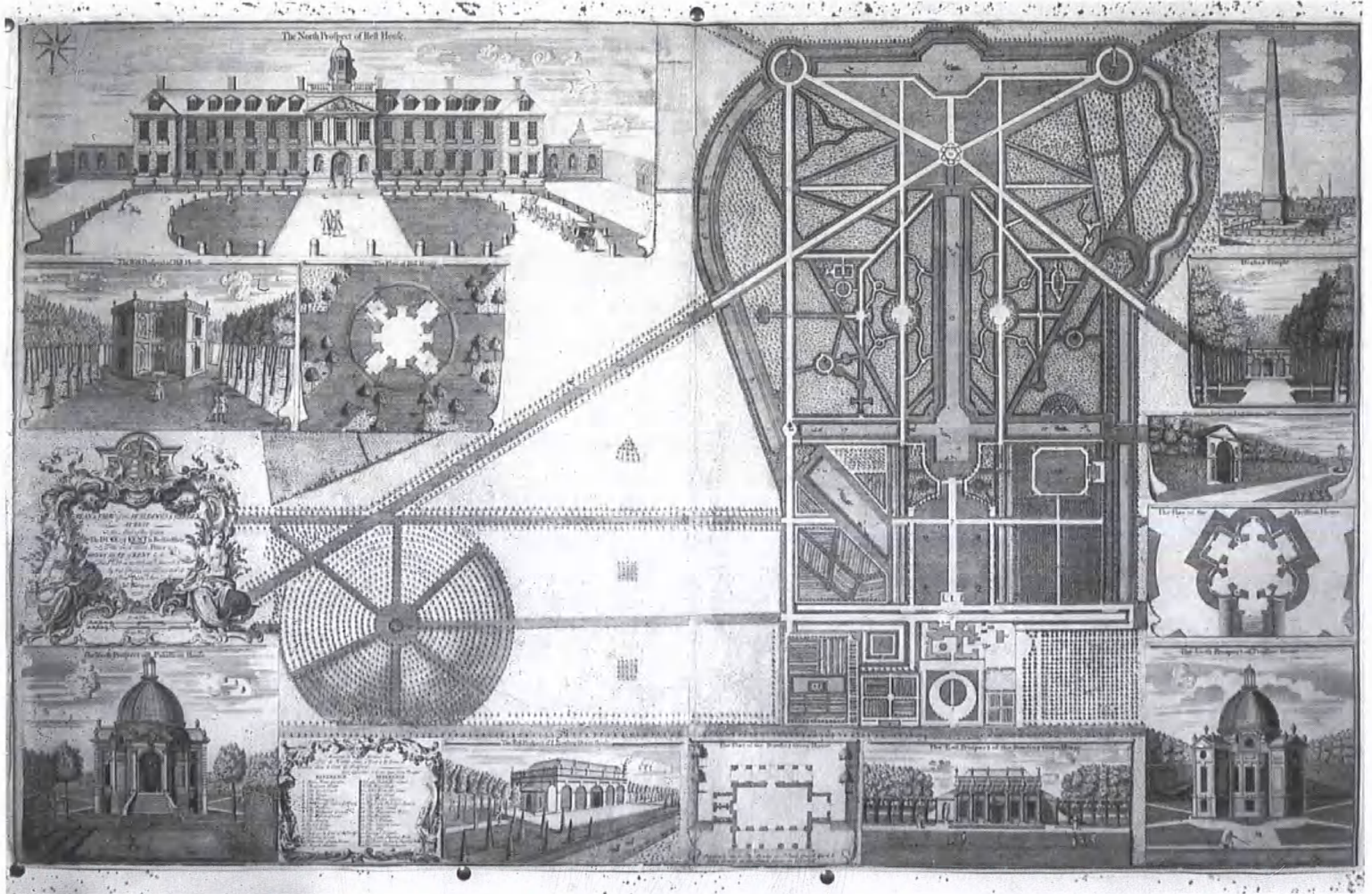


Plate 3 Rocque 1735

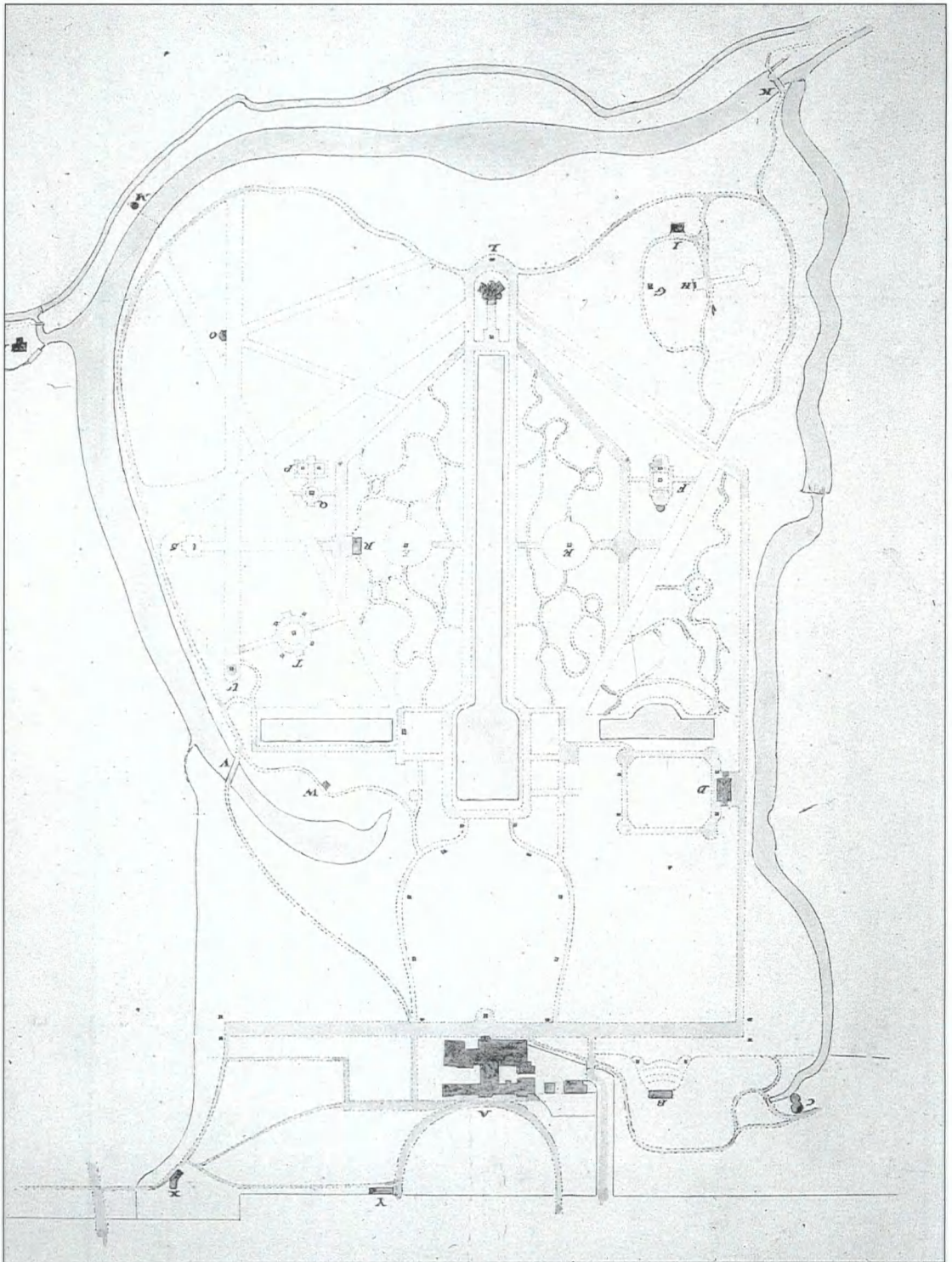


Plate 4 Earl de Grey 1834

kept extensive records of this period and the changing balance of the garden has been captured in a series of water colour sketches (Plate 4). Parterres were created around the new house and in 1835 an orangery was constructed in the development of the French landscape (1797-1839). The remainder of the 19th century was a period when minor changes and additions took place, and by the early 20th century the gardens were at their most magnificent. The 'Victorian garden' (1859-1916) was recorded in 1904 in a series of photographs by Country Life (9th and 16th July).

In 1916 Wrest Park became a military hospital and in 1917 was sold following the death of Lord Lucas in the Royal Flying Corps. Many of the trees were felled and sold. Statuary from the garden was subsequently disposed of in 1934 and the estate purchased by the Essex Timber Co. In 1946 the Ministry of Public Buildings and Works bought the Park but leased it to the National Institute of Agricultural Engineering in 1947. At this time the gardens were neglected and in poor condition. Most of the lakes were silted up and the grand paths overgrown with grass. In 1947, "the Bath House spa was dry the lakes were overgrown with reeds"

From 1947 a series of restorations and ad hoc improvements took place until, in 1983, the Department for Ancient Monuments and Historic Buildings commissioned an historical survey of Wrest and began to develop a management strategy for the continuing restoration of the gardens (LUC 1983, 1993, 57). The management plan identified the periodisation quoted above and the following has provided the framework for the gardens' restoration throughout the 1990s.

- Williamite Landscape 1671 – 1702
- Great Garden First Phase 1702 – 1720
- Great Garden Second Phase 1720 – 1730
- Great Garden Third Phase 1730 – 1740
- The Romantic Landscape 1740 – 1800
- Earl de Grey, The French Landscape 1797 – c.1859
- Victorian Landscape 1859 – 1916

ARCHAEOLOGICAL BACKGROUND

In 1983 Land Use Consultants' report provided a detailed survey of the gardens and recommendations for the management and, where appropriate, restoration of Wrest Park. A reference framework was established in which a numerical sequence identified tree panels and other areas as the basis for planning and management. Following the completion of the

survey a programme of improvement works was initiated. By 1988 restoration of several tree panels had taken place, including replanting, drainage works and re-seeding of rides based on maps and evidence on the ground. This approach reflected the prevailing attitude to garden restoration in the 1980s. However Dominic Cole of LUC had been involved in excavations at Audley End and it was his initiative which led to the inclusion of archaeological techniques in the restoration of Wrest Park.

GEOLOGY AND TOPOGRAPHY

Wrest Park is located on the southern margins of the greensand ridge on a gentle south facing slope. The soil is a calcareous gley type of the Wicken association over gault clay. In most parts of the garden the soil is shallow with tree roots forming extensive, shallow networks. However in the area between tree panels 13 and 14 silt up to 4ft deep, cleared from the lakes in 1948, has made a considerable impact by raising the level of the ride.

ARCHAEOLOGY AT WREST PARK

Archaeological techniques of investigation were introduced to Wrest Park in 1988 after the programme of restoration works had been determined. The archaeological investigations, therefore, had to be integrated with current works: this obviously limited the scope of the archaeology so that the principal objectives became the investigation of features such as path forms, drainage patterns and erosion in the water bodies rather than broader historical issues.

In the 1988 season the restoration included the main water bodies. In this first archaeological season the pattern of drainage and features relating to the 'Williamite' (1705) garden (Plate 1) as well as the amphitheatre on the south bank of the Leg O'Mutton lake (Fig 2, Plates 3 and 4) were investigated (BCAS 1988). In the late summer of the same year the lack of rain resulted in the appearance of parch marks on the parterre south of the fountain, M2, and on the lawns south of the Archer pavilion; this provided an opportunity to map the foundations of the old house and some of the gardens' drainage (Fig 2).

In 1989-90 (BCAS 1990) restoration continued in tree panels 4, 6, and 10, around the Atlas Pond and in the Long Canal (BCAS 1989). In 1990-91 (BCAS 1991) paths in tree panels 6, 11, and 12, and the site of a new woodshed were investigated using a combination of trial trenching and geophysical survey (Fig 2). In both seasons drainage patterns were

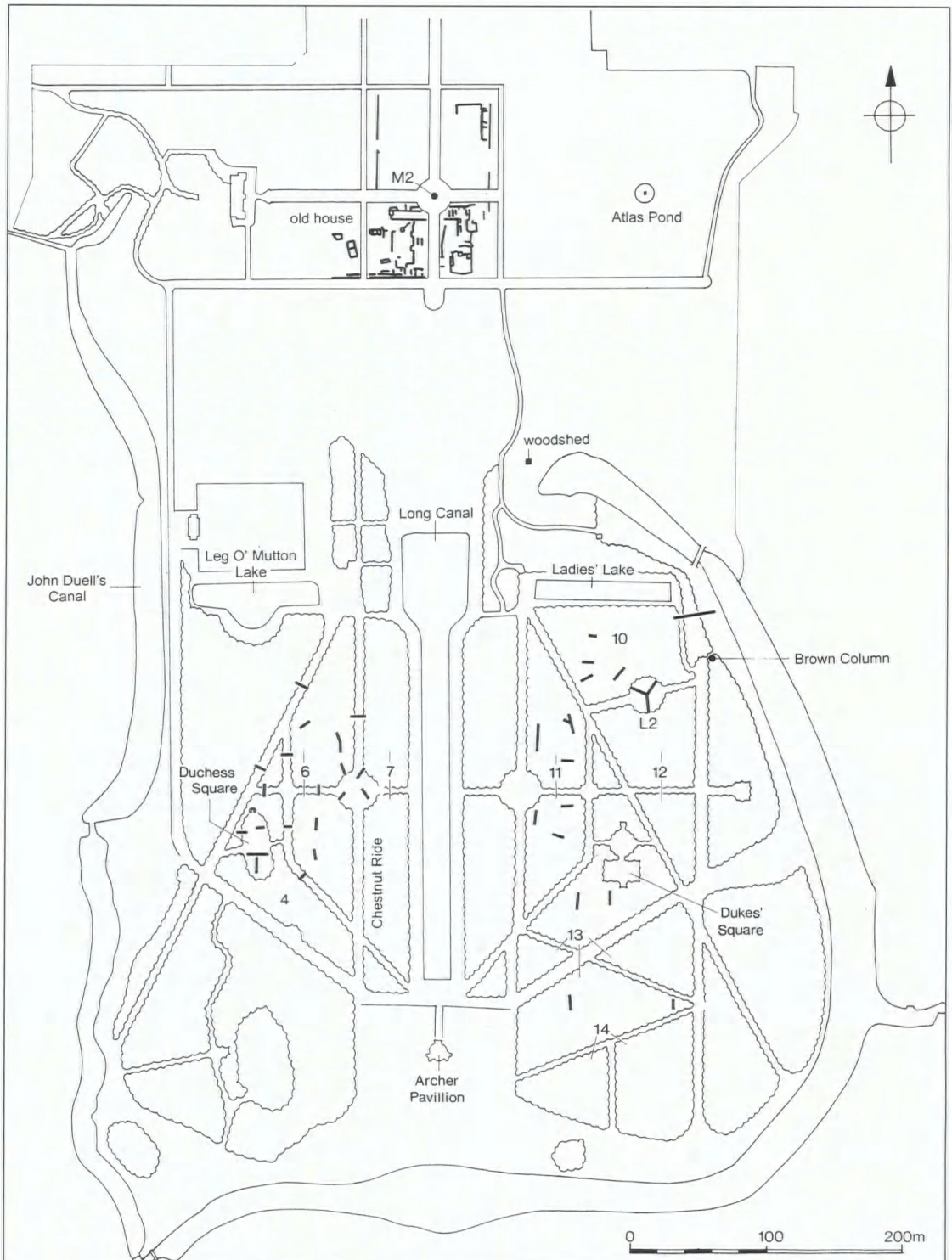


Figure 2 Wrest Park showing areas referred to in the text

recorded as new ditches were dug and during the desilting of the central waterbodies. In the four seasons from 1988 to 1991 39 trenches were excavated and 11,400m² of geophysical survey undertaken (GSOB 1991).

TREE PANELS, PATHS AND RIDES

The overgrown tree panels and paths at Wrest Park provided particular problems for the restoration of paths and rides. Many of the paths were clearly identifiable on the early plans by Rocque and until 1990 their restoration had taken place in three panels on the west and one on the east side of the garden based on the evidence of these maps. The restored rides and pathways had been established with grassed surfaces. However, drainage works which cut through several lateral rides exposed hoggin surfacing which suggested their historical character had not been retained by the restoration.

To investigate the extent of such surfacing a series of shallow hand dug archaeological sections were excavated across the line of paths, rides and walks in the Great Garden. The sections were first targeted on paths still in use in tree panels 4 and 6 but soon included panel 10, where no paths currently exist. The trenches in panels 4 and 6 quickly established that the major rides of the first phase of the Great Garden had been surfaced with sand. The material was a local orange mix with a little sandstone that derived from quarries on the Greensand Ridge less than a mile to the north. The sections in panel 10 were more experimental insofar as they were intended to examine whether paths, shown by Laurence in 1719 and Rocque in 1735 and 1737, had ever been constructed. Geophysical survey was unable to identify any surfaces but trenches across the line of paths suggested that they had been grassed and were flanked by shallow drainage gullies. The gullies had soon silted and gone out of use, although not before some had accumulated small fragments of bricks and tiles. In contrast, however, the round shown by Rocque (Fig 2, L2) on the southern edge of this panel was found to have been covered by sand. Further trenching established that sand had been used to surface paths in panels 11 (Fig 3), but in panels 13 and 14, like panel 10, the paths were predominantly grass.

In addition to the early 18th century original sand surfacing the archaeological sections showed that in panel 6 some path surfaces had been renewed using a finer sand, with no sandstone.

In 1770 a column had been erected on the west side of the garden to commemorate Lancelot

Brown's work in the gardens. This had been later moved to the eastern side of the garden. Today, north of the Brown column, at the east end of the My Lady Duchesses Walk, there is a pinch point at the east end of My Ladies' lake. It was here that the second type of surfacing, a yellow hoggin, was exposed. It was over 300mm thick and attested the presence of several paths which had been here from 1706 onwards. The hoggin, made up of yellow sand and flint gravel, probably derived from river valley quarries, possibly the nearby Flit.

Such surfaces clearly provide a striking contrast with the predominantly green Great Garden of today. Furthermore, investigation of a section through the central path between the old house and the top of the Long Canal, illustrated by Kip in 1705, showed the surface to have been laid with sandstone pavements. Aerial photographs taken in 1990 indicate the continued survival of brick drains that had once flanked this path despite its replacement in 1735. Any more surviving paving beneath the later gardens, however, was probably destroyed when the lawns were ploughed during and after the Second World War.

ROUNDS AND SQUARES

Four rounds or squares were also examined during the course of the recent restoration. Two squares which had been 'recreated' within enclosing beech hedges in the late 1950s, in panels 4 and 13, were subject to geophysical survey and archaeological section (Fig 2). Of particular interest was the Duchess' Square. It no longer reflected the early angular design illustrated by Rocque and had evolved into an eccentric oval shape. In addition the West Half House at the head of this 'square' had suffered from subsidence, whilst a large chestnut tree, that had dominated the southern part of the oval in the early 20th century, now remained as a ground down trunk of approximately 1m across just below the grass surface. Geophysical survey, restricted by the current planting, only hinted at the below ground survival of the earlier plan whilst trenching at least demonstrated the presence of a sand surface. Further migration of garden features in this area was evident from sections across the western chestnut ride. First established by 1710 the rides were still in place in the mid 18th century but no longer existed in 1834 on the Earl de Grey map. These rides had been restored in 1967 but the archaeological sections located the earliest surface and showed the restored ride surface to be half a metre east of the original. Further sections across the round in the centre of this path showed that this too had been dis-

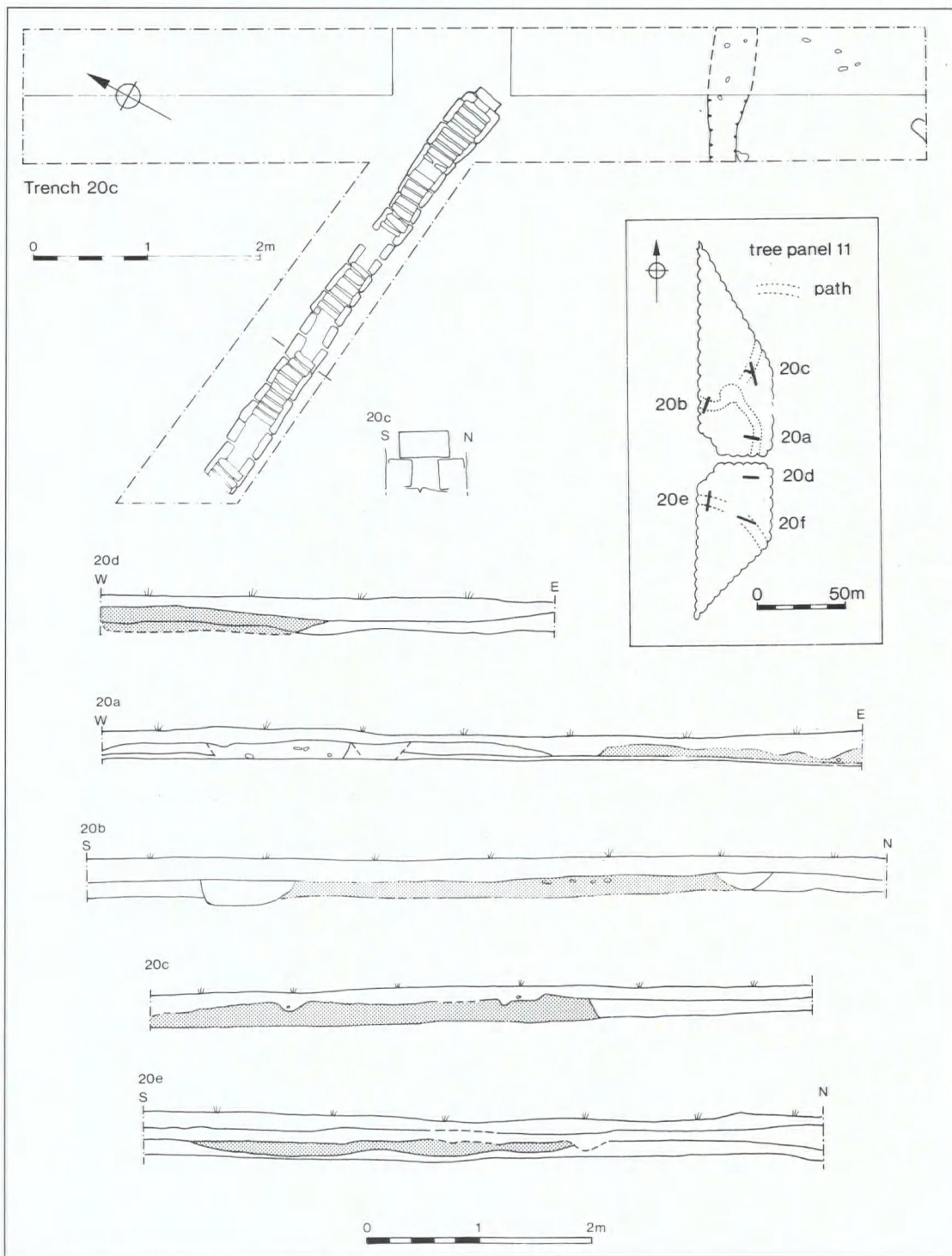


Figure 3 Representative sections through paths in tree panel 11, showing the evidence of sand surfacing (sections 20a-e), and a brick drain where the path crossed a drainage run (20c).

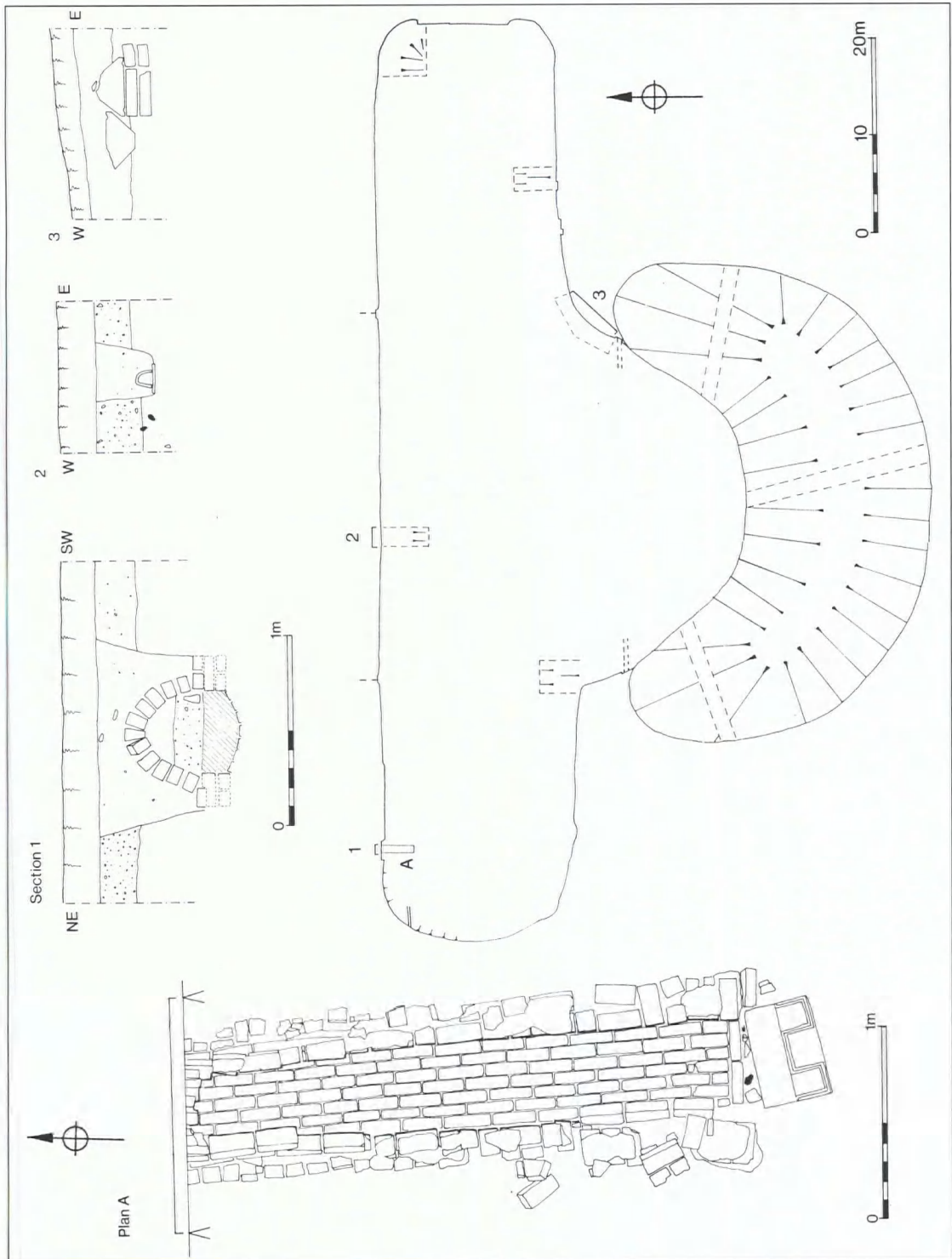


Figure 4 Drainage pattern around the Leg O' Mutton Lake

placed towards the East as well as once having been covered in sand.

Opposite, on the eastern side of the garden, the Dukes' Square seemed to have been less affected by recent restoration although it too had been enclosed by a beech hedge, probably in the 1950s. Here geophysical survey confirmed that not only had it been originally sand covered but was in the same position as today.

WATERBODIES

It was the investigation of the waterbodies that had initiated the archaeological investigations at Wrest Park. By late 1987 the Leg O'Mutton lake had largely silted up and in 1988 a large oak had blown down across the western end. Desilting and tree clearance therefore provided the opportunity not only to investigate further the hydrology of the garden, but also the construction of the amphitheatre and D-shaped extension to the Leg O'Mutton itself.

At the start of the restoration campaign in 1988, it was clear that the lake had also been severely eroded, and was no longer a well-defined rectangle. A section along the banks exposed the variety of drains that flowed into the lake from beneath the bowling green, demonstrating that, locally, the land drainage pattern was predominantly from north to south. Further archaeological sections revealed the extent of drainage (Fig 4). Perhaps the most surprising discovery was a large brick built culvert draining from the north west which may have been used to take rainwater off the Bowling Green House (BLARS: L31/289) in 1705.

Significant damage, however, was revealed when checking the profile of the lake. Erosion had been caused by the through flow of water from west to east, from a slightly offset pipe originating in John Duells' canal. This had created a sinuous erosion pattern directed towards the south, which had also undercut the south bank. Stones, initially thought to have been refuse dumped conveniently in north corner of the D shaped extension of the lake, were now recognised as an attempt to counter this erosion.

On the south side of the Leg O'Mutton three sections were excavated through the amphitheatre using a JCB. Intended to investigate the structure of the bank, the sections showed only that the north face, on which Rocque in 1735 had shown shrub lined terraces, had probably never been completed to this design. Instead it seems Rocques' 1737 form had been preferred. Further probing and limited sections revealed the remains of a low brick wall capped by limestone coping and surmounted by iron

railings. This was one of the few instances in which archaeology had been able to characterise minor features shown by Rocque in 1735 and 1737 for which there is otherwise no key. In this case the lines which separated the Leg O'Mutton from the amphitheatre behind, if fully implemented with low walls and iron railings, may have partially enclosed both the Leg O'Mutton and Ladies Lakes.

Investigation of the Long Canal (Fig 5) confirmed the flow of water from west to east provided the source of water for both the Long Canal and Ladies Lake. The earliest water pipes had been constructed from a combination of terracotta pipes and planked channels. This type of pipe was referred to as early as 1703 (BLARS: L31/289) although the lateral canals were not constructed until 1706. In the centre of the broad end of the Long Canal was a rectangular brick plinth, surviving only as a single course of brickwork. This was subsequently identified with a pedestal for Neptune referred to in 1716 (BLARS: L30/33/22) and seemed to confirm that his statue had once stood at the north end of the canal. Lastly, on the western side of the canal four brick built land drains flowed into it: further confirmation of the west to east drainage pattern.

The final water body to be investigated was the Atlas Pond (Fig 6). Constructed in an area once occupied by Mr Ackres Canal, though this was filled in 1716, it had never been clear how the Atlas Pond had been supplied. Investigation revealed the pond had once been flanked by a sand path but yielded no details of a spring or water pipe, as only stone lined field drains emptied into it from all sides.

THE 'OLD' HOUSE

In the hot dry summer of 1988 parch marks began to appear on one of the parterres. These are often the result of shallow soil drying out above levelled foundations to leave a brown area of dry grass. The parch marks at Wrest were soon recognised as those of the earlier house for which only the general location had been known. It was an opportunity to map the foundations of the 17th century structure and to locate the structure accurately within the garden (Fig 7). A combination of geophysical survey and parch marks revealed details of the north front, including rainwater conduits, as well as plans for the rear of the structure. The collective evidence suggests the remains of the house were not extensively removed below ground level and that survival can be expected to be good. Furthermore the survey hinted at differences between the original foundations and the reconstructions of Collett-White (1991a & b).

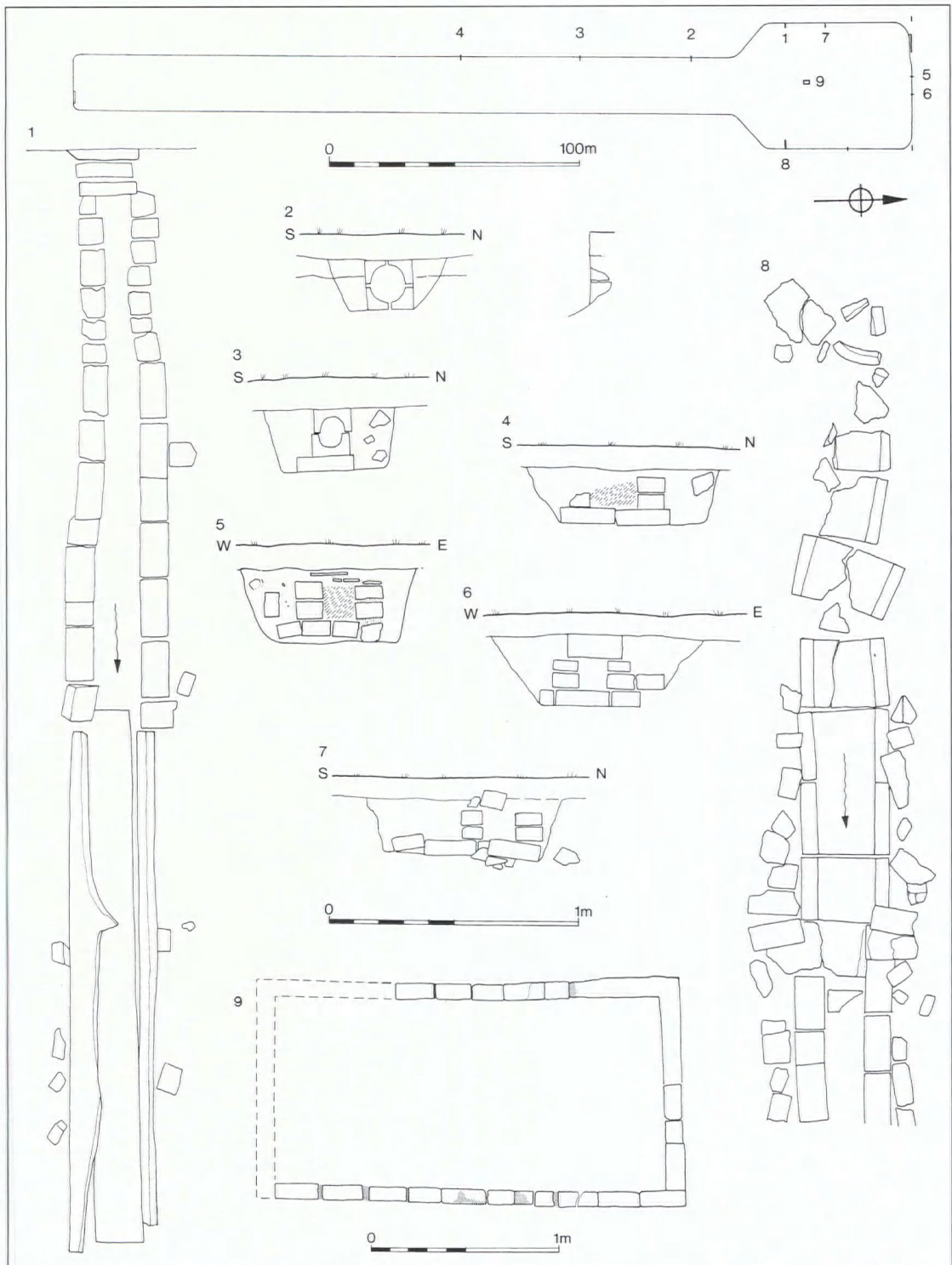


Figure 5 Drainage pattern and the Neptune Plinth in the Long Canal.

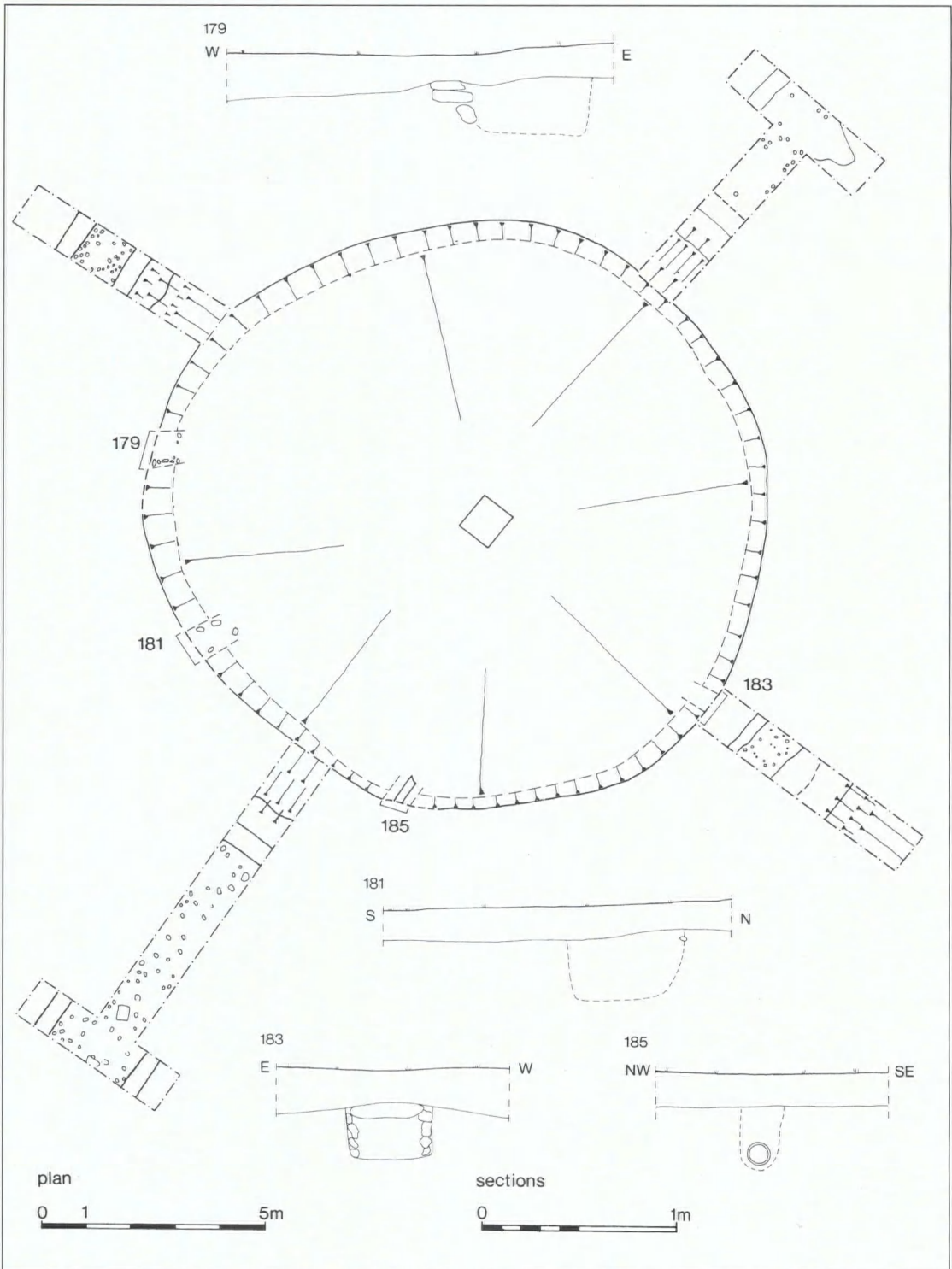


Figure 6 The Atlas Pond and drains

CONCLUSIONS

The contribution of archaeology to the restoration of the gardens at Wrest Park was of significance in three areas. The first was in gaining a deeper insight into the visual impact of the early garden. The restoration programme had acknowledged the historical development of the garden and LUC had firmly established that, although the present garden at Wrest retained the form of the Great Garden originating in the early 1700's in its planting and visual impact, what survived was a garden of the 19th century. The underlying principle of restoration, therefore, was not to attempt to restore to a particular period but to enhance and retain the historic character of the existing garden. The result of this approach is that many visitors leave with an impression of a magnificent but predominantly green garden. This image is clearly at odds with what is now known as the early garden, and the three phases of the Great Garden. The archaeological investigation has served to record how the formality of the earlier gardens had been expressed through colour and the sub-division of garden elements. The impact of yellow sand paths, wrought iron fencing and low brick walls, together with some areas of sandstone paved surfaces, must have been tremendous in the first quarter of the 18th century. Details like these are often absent from the birds eye views of Kip (Jaques and van der Horst 1988) and of the later Rocque plans.

A second area of concern for the investigations had been the practical detail underlying the garden fabric. To this end the extensive drainage runs, flowing west to east, confirmed the importance to the garden of field drains. Furthermore the use of covered field drains, indicates a remedy that avoided the problems of erosion and leaf fall faced by more recent open drains in extensively planted areas. Similarly, although primarily visual in impact, the metalling of paths with sand or paviments must have made a significant contribution to improved drainage leaving the garden more or less accessible throughout the year.

The final contribution of archaeological investigation was not only to confirm the orientation and layout of several lost features, such as rounds and paths, but to establish more precisely the orientation of several rides. By locating the position of the old house, archaeology provided the basis for re-assessing in detail the balance of the early garden before the 1830s, helping to re-create not only the geometric plan underlying the garden but also to further clarify the visual impact of sight lines for those who visited and enjoyed the garden (Hunter 1997).

ACKNOWLEDGEMENTS

Bedfordshire County Archaeology Service would like to thank the Bedfordshire and Luton Archives and Records Service for permission to reproduce Plates 1-4.

BIBLIOGRAPHY

- Brown, A E, (ed.), 1991, *Garden Archaeology*, CBA Research Report 78.
- BCAS 1988, *Archaeological Investigation of the Leg O' Mutton Lake Wrest Park*, BCAS Report.
- BCAS 1989, *Archaeology at Wrest Park*, BCAS Report.
- BCAS 1990, *Garden Archaeology at Wrest Park Bedfordshire 1989-1990: An Interim Report*, BCAS Report.
- BCAS 1991, *Archaeology at Wrest Park 1990-1991: An Interim Report*, BCAS Report.
- Collett-White, J, 1991a, 'The Old House at Wrest - I', *Bedfordshire Magazine* 22, No 176, 322-326.
- Collett-White, J, 1991b, 'The Old House at Wrest - II', *Bedfordshire Magazine* 23, No 177, 4-12.
- Cunningham, C M, 1988, 'Audley End, Saffron Walden', *Post Medieval Archaeology*, 216-217.
- Currie, C K, and Locock, M, 1991, 'An evaluation of archaeological techniques used at Castle Bromwich 1989-90', *Garden History* Spring 1991.
- Dix, B, 1991, 'Towards the restoration of a period garden', in Brown, A E, (ed.), 60-73.
- Fowler, G H, 1922, 'Bedfordshire in 1086: an analysis and synthesis of Domesday Book', *Quarto Memoirs of the Bedfordshire Historical Record Society*, Aspley Guise.
- GSOB 1991, *Report on Geophysical Survey: Wrest Park 1991*, Geophysical Surveys of Bradford.
- Godber, J, 1963, *Wrest Park and the Duke of Kent 1671-1740*.
- Hunter, A, 1997, 'The Country-House weekend: Wrest in the 1890s', *Bedfordshire Magazine* 26, No 202, 47-52.
- Jaques, D, and van der Horst, A-J, 1988, *The gardens of William and Mary*, London.
- Land Use Consultants 1983, *Historical Survey of Wrest Park*, unpublished report for Directorate of Ancient Monuments and Historic Buildings, London.
- Land Use Consultants 1993, *Historical Survey of Wrest Park. Wrest Park Masterplan (2) for Restoration and Management*, unpublished report for English Heritage, London.
- Smith, N, 1995, *Wrest Park*, English Heritage.
- Taylor, C C, 1991, 'Garden Archaeology: an introduction' in Brown, A E (ed.), 1-5.