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Gardens Archaeology at Croft Castle in 2001



**Report prepared by
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Herefordshire Archaeology is Herefordshire Council's county archaeology service. It advises upon the conservation of archaeological and historic landscapes, maintains the county Sites and Monument Record, and carries out conservation and investigative field projects. The County Archaeologist is Dr. Keith Ray.

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Summary:

A first season of archaeological site investigations was carried out at Croft Castle in September 2001 as part of a 'Croft Castle in its landscape' project. The aim was to establish the sequence, date and character of formal gardens that had once existed, but were now vanished except for a few earthwork traces above ground, in the near vicinity of the present mansion.

This interim report on the investigations provides an account of the opening of a series of small exploratory excavation trenches, mostly to the south of the mansion. It describes the survey of visible earthworks, and the uncovering of remains of foundations of an early terrace wall immediately to the south of the mansion, and beyond the bastioned terrace of c.1820 which stands complete today.

The report then goes on to describe the focus of investigations within the site of a sloping formal garden of the later seventeenth century. Features of this garden explored or revealed in the excavations included the southern terrace-edge, the line of the west boundary wall, and indications of formal planting beds. At more than one location, the foundation of the garden terrace was seen to include rubble from demolished C16th brick and stone buildings. Extensions to this garden to the south and east were created as earthworks, probably in the first decade of the C18th. Enigmatic features included rubble-filled pits without brick, and sealed beneath the later garden foundations.

A causeway uncovered to the west of the main garden was built over a silted up fishpond containing items of medieval date. To the west of the mansion, two trenches were opened that revealed in one the line of a garden wall traced also from the air and by geophysical survey, and in the other rubble fill of a possible sunken garden of C16th or later date.

This is the first in a series of reports on the work at Croft Castle between 2001 and 2004. They are listed in Appendix 1 below.

Disclaimer: It should not be assumed that land referred to in this document is accessible to the public. Location plans are indicative only. NGR's are accurate to approximately 10m. Measured dimensions are accurate to within 1m at a scale of 1:500, 0.1m at 1:50, and 0.02m at 1:20.

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Introduction

The 2001 site investigations at Croft Castle were planned to be the first stage in an intended three-year study of the close environs of the mansion that has survived to the present day, and is still known as 'Croft Castle'. This first season aimed to establish that there is a clear developmental history of the formal gardens traceable in the earthworks that could be substantiated and provisionally dated through excavation.

The focus for the 2001 investigations was the area of parkland within a C18th ha-ha, and immediately south of the bastioned terrace built around the Croft Castle mansion sometime between 1798 and 1825. Some limited exploratory work was carried out also to the west of the mansion. The project involved detailed measured recording survey of the extant earthworks, and some geophysical survey (Figure 1, earthworks and surface features plan).

Previous recording and study

The conventional interpretation of the present mansion (RCHME, 1934, 35-6) saw it as a quadrangular curtain-walled castle of C15th or earlier date that had been altered subsequently to accommodate a castellated mansion set around a central courtyard, from the C16th onwards. External study of the standing fabric of the building suggested, however, an integral build with cross-mullioned windows being contemporary with the essentially ornamental corner turrets. A likely date for this construction was hazarded at c.1580 – 1630, most likely either late in Sir James Croft's (c.1510 – 1590) lifetime, or during his grandson Herbert's tenure of the estate (1601-22). The stylistic evidence is discussed further below.

Previous archaeological and historical survey of the close environs of the castle had taken place in the 1980s (Fretwell, Knox and Young, 1987) and in the 1990s (Dalwood et al, 1992). However, no detailed recording of the form of the earthworks of the formal gardens had taken place then, and only the existence of three terraces above the ornamental lake had been noted. A regression study of the cartographic evidence had been undertaken as part of the earlier of the two surveys. Very rapid reconnaissance of the gardens and parkland had been undertaken for the review of the English Heritage Register of Historic Parks and Gardens (Stamper, 1996).

Initial study of the gardens earthworks

Herefordshire Archaeology staff made a study of the close environs of the castle in the period 1999-2001, mostly as a prelude to leading guided walks in the area. During this work, the area formerly covered by ornamental gardens was roughly

defined, and the most likely location of the former medieval village of Croft ascertained. It was noted that, to the south of the mansion, the uppermost terrace of the formal gardens (over which the bastioned terrace had been built) was entirely level. Moreover, the terrace continued westwards for some distance. Southwards below this level terrace there were formerly two sloping gardens with east and west boundaries appearing to be aligned upon the corner turrets of the mansion. Each of these sloping gardens terminated southwards with an artificially levelled terrace, and at the centre point of each such terrace there was a built stairway leading to a lower level.

A further terrace was situated with its southern limit in line with the southern terrace edge of the lower of the two sloping gardens. This limit was itself defined by a slight terrace which formed the southern boundary of an eastern formal garden. This east garden extended from just above the ha-ha, northwards to the former boundary wall of the churchyard (south of the present churchyard south boundary). The lower one-quarter of the east boundary to this garden is marked by an east-facing terrace slope (that diminishes in scale northwards from the south-eastern corner), which meets a curving earthwork prospect walk that itself extends north-eastwards from the lower part of the east garden. Northwards of this point, the eastern boundary of the east garden is indistinct at ground level.

West of the bastioned terrace around the mansion, the ground is very level southwards from an earthen bank on which the present walled garden south wall stands, until the edge of the level terrace is reached. However, within this area a subtle change in elevation is noticeable between an area northwards and an area southwards from a line extending due west from the south-west turret of the mansion. To the west of this level area, a further rectangular levelled area stands at a higher level, and oriented directly parallel with the west wall of the mansion.

To the south again, beyond the main level terrace, a side-valley extends southwards in parallel with the western sides of the southern sloping gardens. There are a number of earthwork interruptions to the course of this valley, and it is possible to define a series of ponds extending down the slope. It has been considered possible that these represent a cascade or similar formal feature (cf. Stamper, 1996).

Finally, both north and south of the prospect walk earthwork to the east of the east garden, there are traces of levelled areas cut into the general south-east facing slope of the hill. Those to the south of the prospect walk are much better defined and preserved, despite both the earlier course of the ha-ha and modern drains having cut through the area. This appears to suggest that the upper area was subject to landscaping, and that the lower area features better preservation. The levelled areas are tentatively interpreted as the platform stances for former buildings that stood within defined tofts of the former medieval village of Croft.

Aims and objectives

The aims and objectives of the site investigations of September 2001 at Croft Castle were set out in a detailed project design submitted to The National Trust (Project Design: 25th July 2001). The research questions framed for the investigations were (p.4):

1. What clues can be documented that would point to a particular date for the original design and construction of the terracing and the former formal gardens beyond the south front of Croft Castle?
2. What evidence can be found to substantiate the view that there once existed a cascade water feature to the west of the former formal gardens?
3. How do these gardens relate to the structural development of Croft Castle?
4. What indications may be present for the attribution of the design elements to the work of particular architects or designers?
5. How did the former formal gardens and terracing relate to the rest of the park landscape, designed or otherwise, at Croft Castle?

There were three key aims set out in the Project Design, for the archaeological project (p.4):

1. To carry out a series of investigations involving archaeological survey, excavation and recording, to establish something of the date, construction, use and demise of the structures concerned.
2. To address the research questions set out above.
3. To report upon the work, having established what it has produced in terms of new information about the gardens history of the site.

A series of five specific objectives for the earthwork survey element of the field investigation project were then specified, together with three objectives for geophysical survey. For the test excavation element, the following objectives were identified (p. 5):

- To examine and reveal part of each of the formal stairways and associated retaining walls, to establish their built form and any adaptations, and to assess their condition beneath the covering turf.

- To examine any locations at which structures associated with the putative water cascade may still exist, as indicated from the earthwork or geophysical survey.
- To examine an area within one of the parterres, where paths or other design features may survive.
- To examine related features, such as the curving boundary bank, and later features such as the presumed C19th carriageway in front of the south face of the mansion.

Method and progress of the investigations

The field investigation project began on (Monday) 2nd September 2001, and was completed on Friday 21st September. Prior to the beginning of fieldwork, the opportunity had been taken to examine aerial photographs of the site available for study in the collections of the Herefordshire Sites and Monuments Record, maintained by staff of *Herefordshire Archaeology* based at the Town Hall, Hereford. These photographs, and particularly those of 1995 taken under conditions of considerable parching of the grass, revealed the complexity of features that exist within the area of the formal gardens.

Surveys

The survey work carried out in September 2001 comprised five strands of activity. These were EDM survey, plane-table survey, contour survey, geophysical survey and built fabric recording.

The EDM survey was carried out by Tim Hoverd, Archaeological Projects Officer. It was used initially to provide a site grid as a framework for the further survey works. It provided a general mapped plan of the area of the site examined by survey and excavation in 2001. The EDM survey recorded the location of all the earthwork elements noted in the introductory section of this report, and provided the basis for the site plan produced here as Figure 1.

The plane-table survey was carried out in part as a training exercise, and eventually covered the two sloping formal gardens to the south of the mansion, and an area adjacent to this to the west. The survey progressed slowly, but enabled a full record to be made of the various subtleties of the earthworks, and in particular those of the terraces that former the southern terminus of each of the sloping gardens.

The contour survey was limited to the central area of the upper sloping garden. As conducted during the field project, it was found to contribute little to the recording of the earthworks additional to that mapped in the plane-table survey. It was therefore abandoned after completion of the central area grids within the upper of the two sloping formal gardens. The site archive will include specification of these areas.



Figure 1: EDM survey of principal earthworks shown as red hachures.

The geophysical survey (Figure 2), was conducted across the whole of the area covered by the south formal gardens. The survey was conducted using a twin-probe Geoscan RM15 resistivity meter. The results were surprisingly poor, with only a small number of the features evident from the parch-marking traceable

from the survey plots. This was due in large part to the masking effects of the natural rock outcrops that were covered in many areas by only a thin skim of turf. It was also due to the general dryness of the soil and its consequent low conductivity. In one location, close to Trench 7 in the north-west 'quadrant' of the upper sloping garden, the survey revealed the presence of a circular bedding trench, but this was evident and interpretable only after the bedding trench had been identified during excavation.

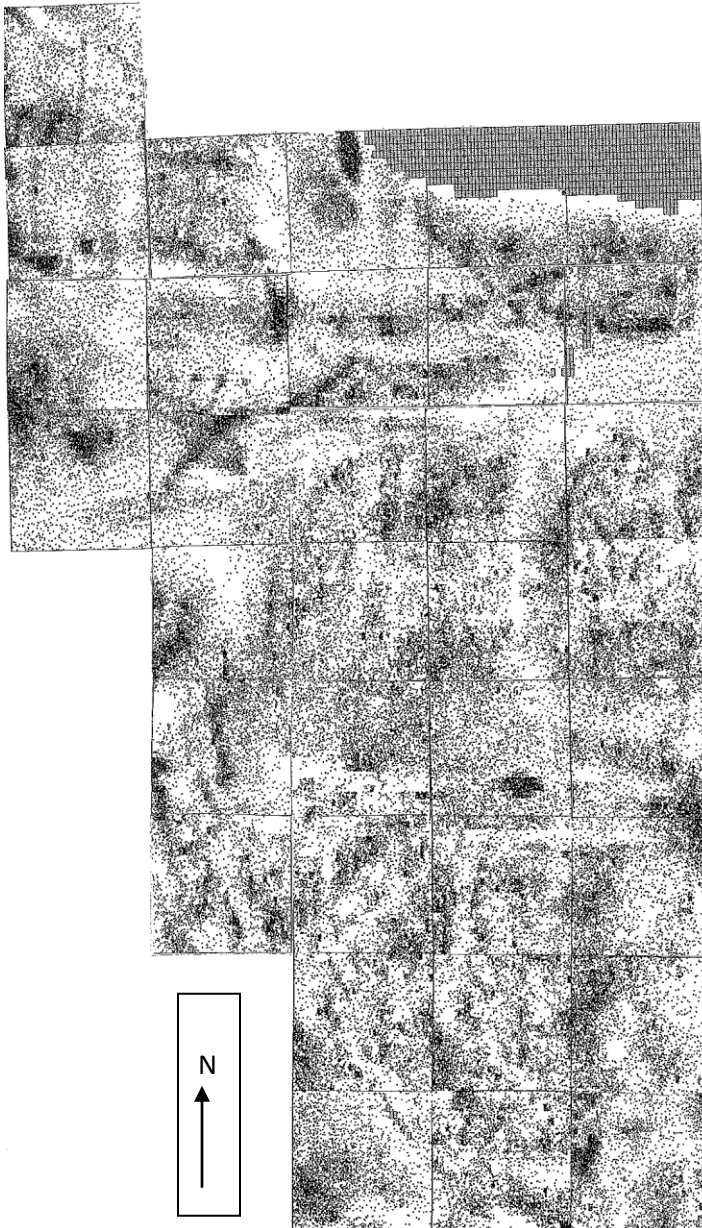


Figure 2: Resistivity survey of the south front of Croft. Each square represents a 20m by 20m survey grid.

Excavation

The site of the formal gardens was also investigated through the opening of a series of hand-dug exploratory archaeological trenches. It has to be admitted firstly, that this is an expedient rather than optimal way of investigating the form of the formal gardens. It is minimally intrusive where there is good earthwork survival, but it means that features that are sometimes very subtle, such as the details of planting areas within parterre, can be difficult to trace. Nor can such small-scale work hope to recover much of the plan of such gardens.

The site investigation excavation trenches were opened in a rolling programme, beginning in the first week of the field season. The primary focus was to be upon the upper sloping garden, with closely-targeted investigation of the likely perimeter, and some detailed exploration of the area to the west of the presumed central axis oriented upon the former south door of the mansion (now a ground-length window). The intention was to understand also something of the form of the two stairways evident as earthworks, and to examine the area of the possible cascade. Further concerns at the outset were to examine the form of the southern edge of the upper level terrace (which formed one of the most prominent earthwork features of the site), and to explore the west gardens in a more limited way.

An initial trench (Trench 1: measuring 6m by 2m and oriented 20 degrees west of North-South) was sited to reveal the surface of the carriageway built across the site of the formal gardens some while after the initial creation of the landscape park that succeeded the gardens. A second trench (Trench 2: measuring 6m by 2m and oriented North-South) was sited west of the stairway linking the upper and lower sloping gardens, and was sited to reveal the nature of the terrace edge to the upper sloping garden.

A third trench (Trench 3: measuring 7m by 5m and oriented North-South) was located so as to reveal the eastern half of the stairway linking the upper and lower sloping gardens. A further trench (Trench 4: measuring 4m by 4m and oriented North-South) was sited to examine the western half of the upper area of the divided stair descending from the terrace edge of the lower sloping garden.

A fifth trench was located just to the north of the south-eastern corner of the upper sloping garden (Trench 5: 3m by 2m, and oriented East-West). It was sited to reveal the line of the eastern boundary of the upper sloping garden. A sixth trench was one of several deliberately located in the north-western 'quadrant' of the upper sloping garden, to try to establish whether any of the original planting features could be traced.

A trench was located on an east-west alignment with its western end positioned in such a way as to be perpendicular to, and to cross, the presumed western boundary of the upper sloping garden, in the north-west 'quadrant' of the latter. This trench (Trench 7) was originally 8m by 1m in extent, and was later extended westwards by 1m. A further trench nearby (Trench 8, 6m by 1m, and oriented

North-South) was therefore set at right-angles to Trench 7, and was designed to cross the line of what was thought possibly to be a gravelled pathway, indicated by a stripe of high resistance readings in the geophysical survey.

Another trench (Trench 9, 6m by 2m, and oriented north-east to south-west) was excavated in the lower (southern) sloping garden, at the south-western angle of the earthwork terrace. This was designed to see if a scoop visible here represented the former location of a garden tower or other built structure. A trench was excavated to the north-west of Trench 9, beyond the presumed western limit of the lower sloping garden and immediately to the south-west of the south-western corner of the upper sloping garden. This trench (Trench 10, 5m by 1m, and oriented North-South) was designed to establish whether a highly parched area visible on the 1995 series of oblique aerial photographs of the site represented the site of another demolished structure.

A further trench (Trench 11, 4m by 2m, and oriented north-west to south-east) was located to the west of Trench 10, in the slight southwards trending valley thought possibly to be the site of a former cascade feature. The trench was positioned to cross the line of a parch-mark visible clearly in September 2001 that appeared to represent a causeway running across the valley from east to west. Another trench (Trench 12, 5m by 1m and oriented East-West) was located in line due East, and 14m away from Trench 7 in the upper sloping garden. This trench was so positioned as to bisect the central (North-South) axis of this latter garden, and to intercept the presumed eastern extremity of a circular planting feature revealed in excavation at the eastern end of Trench 7.

The first of two trenches excavated in the former west formal gardens (Trench 13, 6m by 1m, and oriented East-West) was located to the west of the bastioned terrace in the last week of the field season. A further trench in this area (Trench 15, 2m by 1m, and oriented East-West) was simply a slot excavated to test the character of a presumed wall-footing running from north to south and appearing to mark the western limit of the former west formal gardens.

Meanwhile, a trench was excavated perpendicular to the east-west edge of the level terrace to the south of the mansion, immediately to the south of the bastioned terrace. The latter had been built across this presumed earlier level terrace c.1820. The level terrace is also located above (north of) the upper sloping garden. This trench (Trench 14, 6m by 1m, and oriented North-South) was designed to bisect the line of the edge of the level terrace, which in September 2001 was marked by an east-west parch-line, perhaps representing the course of a former terrace retaining wall.

Finds Processing and Site Visits

A programme of initial processing of finds was established in tandem with the progress of the site investigations. This included the maintenance of a finds register. A site daybook and photographic log were also maintained. Single context recording sheets were completed on site for all trenches opened. (see archive below).

A full programme of site visits and tours open to the public was organised throughout the field season. A series of illustrated public talks were given by the author of this Report, and were held in the Ambassador's Room in the Croft Castle mansion. They included talks about the survey of the Croft Castle Estate, and about the history and archaeology of formal gardens. An exhibition was also mounted. This comprised six panels (three about the Estate survey, and three about the 2001 field project and the archaeology of formal gardens) set up in the entrance hall to the mansion. The illustrations included a coloured drawing by Brian Byron showing a hypothetical reconstruction of the formal gardens based purely upon reconnaissance survey of the earthworks and aerial photographs.

On Saturday 22nd September, a field visit took place that involved an assembly of expert opinion drawn from among National Trust staff and others. In attendance were Jeffrey Howarth (NT Regional Historic Buildings Adviser), Katie Fretwell (NT Parks and Gardens Adviser), Caroline Thackray (NT Regional Archaeological Adviser), and David Thackray (NT Head of Archaeology). Also attending were: David Whitehead (Head of History, Hereford VIth Form College, and project advisor on historic parks and gardens), Dr. Paul Stamper (Regional Inspector of Ancient Monuments, and project advisor on historic parks and gardens). Brian Dix (Northamptonshire Archaeology) and Professor David Jacques (De Montfort University, Leicester) kindly travelled some distance to view the investigations and make comment, without making a charge for their services. One of the authors of this Report, Keith Ray, guided the visit, and noted views on the development of the gardens reported here.

Results

The EDM and plane-table survey clarified both the general layout of the earthworks and some specific details to amplify the observations that had already been made. The geophysical survey added little to what was already apparent from aerial photographic evidence.

Trench 1

This trench was excavated in two stages. A first stage simply revealed the carriageway surface (102) and the contemporary flanking construction and drainage ditches (103 and 105). A second stage investigated a cut feature that was seen to traverse a corner of the southern end of the trench. The carriageway itself was left in situ and its foundation construction was not examined further.

The excavation showed the carriageway to have comprised a single carriage-width cambered roadway, 3m wide (103). At the spot investigated, which was just to the west of the west boundary of the upper sloping garden, the sides of the carriageway were defined by grooves cut into the natural limestone rock. This latter was outcropping very close to ground surface, and was covered by a layer of turf less than 0.2m thick. The surfacing comprised at least one layer of fine gravel imported to the location. On the sloping ground here, the gravel was held in place utilising the natural bedding plane of the rock. This plane dips from north to south within this part of the site.

The cut feature in the south-eastern corner of the trench appeared to be a linear ditch or cut (103). It was partially covered by tailings (104) from the carriageway surface, so predated its use. It was rock-cut with at least one vertical side and it was filled with a clean mid-brown fill (105). Only the western side of the linear feature was revealed in Trench 1, but the feature was in perfect alignment with a stripe of un-parched grass continuing south-westwards beyond the western limit of the upper sloping garden. It was therefore tentatively interpreted as the line of the robbed-out west wall of a triangular garden appended to the west side of the upper sloping garden.

Trench 2

This trench was also excavated in two stages. Firstly, all of the topsoil and superficial deposit was removed to reveal that the original terrace-edge was further south than the existing scarp had appeared to suggest. The line of this original edge was marked by a deliberately flattened surface to the natural rock in a stripe running east-west right across the trench near to its southern limit (207). Immediately to the north of this stripe was a further levelled linear zone that nonetheless had a covering of crushed stone (202). This latter was interpreted as material formerly filling part of the construction trench for wall footings for a terrace retaining wall. The location of the former wall footings was indicated by

the flattened surface in a linear stripe (213). Some traces of a finely crushed stone metalled surface (211) were noted immediately south of the robbed out wall line, and these were taken as indicative of the former existence of a path here.

The eastern half of the trench was then excavated to bedrock (203). This involved the removal in this area, of the deposits introduced when the garden was constructed (209) and (212). Their dumping here had produced an artificial earthen terrace retained by the former southern garden wall. The deposits of this origin within this trench comprised a matrix of clay soil with degraded limestone (derived from the bedrock). Several large stones were found in the upper part of the matrix. Their presence no doubt had provided stabilisation of the earth when first introduced. Some fragments of medieval pottery were retrieved from the lower part of the matrix. These were either derived from the original ground surface (which was otherwise not detectable), or had been re-deposited during the garden construction works.

Trench 3

Removal of the topsoil here immediately revealed the earthwork as covering the foundations of a semi-circular stair (302) that had once descended from the upper to the lower sloping garden. This comprised a stone rubble fan approximately 10m wide at its widest point, (although only the eastern half was excavated). Although none of the carved stone steps were left, a series of fragments of similar radius and proportions were located in a rockery within the walled garden. An area 1m wide and 4m in length was excavated along the eastern side of the trench. This cut through the foundation for the fan shaped stair and at a depth of 0.7m below the present ground surface, a layer of stone rubble, ashlar blocks and hand-made bricks (309) was encountered. This layer appears to represent a dumping deposit of building rubble, laid down in order to build up the terrace edge.

Trench 4

This comprised a 4m square trench which was sited in order to examine the western half of the upper area of the divided stair descending from the terrace edge of the lower sloping garden. The excavation revealed a lightly gravelled surface (402) below approximately 0.25m of topsoil. This directly overlay the earthwork and continued down both divisions as well as the area at which the divisions met. This, together with the absence of any masonry, indicates that this feature was designed and constructed as a "soft" garden feature forming a levelled platform at the top of a divided, gravel surfaced, ramp rather than stair.

Trench 5

This was located just to the north of the south-eastern corner of the upper sloping garden (Trench 5: 3m by 2m, and oriented East-West). It was sited to reveal the line of the eastern boundary of the upper sloping garden. Beneath approximately 0.3m of fine topsoil was a loamy soil containing frequent angular stones (502).

The southern half of the trench was excavated through this to reveal a linear cut (504) aligned on a north / south axis. Immediately to the west of this was a deposit featuring a light sandy matrix containing stone rubble, brick fragments and lime mortar (505). To the east of cut (504) was a levelled terrace (506) comprising a much harder sandy silt with only occasional mortar inclusions. This levelled terrace is presumed to be the robbed out cut for the terrace wall at this point.

Trench 6

This was one of several trenches, deliberately located in the north-western 'quadrant' of the upper sloping garden, to try to establish whether any of the original planting features could be traced. Whilst this trench failed to show any definite or formal planting patterns, it did show a "soft" patch (604) dug into the bedrock to a depth of 0.45m.

Trench 7

This was located on an east-west alignment with its western end positioned in such a way as to be perpendicular to, and to cross, the presumed western boundary of the upper sloping garden, in the north-west 'quadrant' of the latter. This trench was originally 7m by 1m in extent, and was later extended westwards by 1m in order to investigate the western cut for the terrace edge. The bedrock here was encountered at 0.15m below the turf. A slot (706) had been cut into the bedrock close to the eastern end of the trench. This comprised a 1.3m wide, flat bottomed, 0.1m deep rock cut depression aligned on a north-west / south-east axis. A similar cut (707), (in both width and orientation) was apparent at the western end of the trench although this cut had a total depth of 0.45m. The western edge of cut (707) was defined by a step in the natural (705), suggesting that (707) was either a deeper recut or originally had a 1m wide border / flower bed running parallel to it. It is suggested that the rock cut feature (707) represents the robbed out foundation trench for the western terrace wall. Feature (705) either represents a shallower, stepped foundation trench for the terrace edge or the base of a flower-bed / planting border. It is interesting to note that the base of cut (705) is at exactly the same depth as the base for cut (706). This may lend weight to the argument for both (705) and (706) being trenches for planting. These two features are separated by a 3.25m wide level strip of bedrock (703) and it is suggested that this formed the base for a path. It is suggested that the two parallel, shallow, rock-cut features relate to a pattern of parching in this area. There appears to be up to eight parallel linear features, regularly spaced and at an angle to the top terrace garden. This is considered to be a side garden running down the side of the gully.

Trench 8

This was laid out at right-angles to Trench 7, and was designed to cross the line of what was thought possibly to be a gravelled pathway, indicated by a stripe of high resistance readings in the geophysical survey. The trench measured 6m by

1m, and was oriented North-South. The area of high resistance noted in the geophysical survey was a band of bedrock. The remainder of the trench contained little of archaeological significance the bedrock becoming more fragmented under a layer of loamy soil (802) which became thicker towards the southern end of the trench.

Trench 9

This comprised a 6m by 2m trench, oriented north-east to south-west and was excavated in the lower (southern) sloping garden, at the south-western angle of the earthwork terrace. This was designed to see if a scoop, visible here, represented the former location of a garden tower or other built structure. The scoop was located on the corner of the terrace and was roughly circular in shape with a diameter of approximately 4.5m. Following the removal of the topsoil, a thin layer of small stone rubble (901) was apparent covering the northern half of the trench. Deposit (901) appears to have once covered the entire trench but has been very disturbed within the southern half of the trench. A series of root holes follow the edge of the undisturbed (901), resulting in a ragged edge to this deposit. The southern half of the trench comprised a soft, silty loam (903). It quickly became apparent that the feature (903) was a tree throw, relating to the planting of this part of the garden.

Trench 10

This trench measured 5m by 1m, and was oriented North-South. It was located in order to establish whether a highly parched area visible on the 1995 series of oblique aerial photographs of the site represented the site of another demolished structure. Close to the southern end of the trench, at a depth of 0.25m below the turf a 1.2m wide, vertically sided cut on an east – west axis was encountered (1012). This was filled buy a dark earth (1004) and appears to represent a planting feature. Close to the northern end of the trench the bedrock was cut by a sub-angular hole, 0.55m in diameter (1007). This was filled with a dark garden soil containing charcoal and brick fragments (1009). Both (1012) and (1007) were 0.35m deep and appear to represent planting features.

Trench 11

This measured 4m by 2m, oriented north-west to south-east and was located to the west of Trench 10, in the slight southwards trending valley thought possibly to be the site of a former cascade feature. The trench was positioned to cross the line of a parch-mark visible clearly in September 2001, that appeared to represent a causeway running across the valley from east to west. Excavation revealed a series of stone rubble dumps within the depression (1104), (1105) and (1108), with a narrow (0.6m) band of larger stone rubble fragments (1109) filling a cut (1108), which ran along the centre of the gully. A metre wide slot was excavated in the southern half of the trench which revealed that the stones deposits stopped at a depth of 0.55m below the turf. Below these deposits was a 0.8m thick layer of dark, loamy silt (1110). Cut (1108) continued into the silt and

at a depth of 0.7m below turf a 0.35m diameter, ceramic pipe was encountered. This followed the line of the gully and was left undisturbed. The pipe lay in the base of cut (1108). The remainder of silty deposit (1110) was probed and the base of (1111) was found at 1.45m below the turf. A fragment of medieval cooking pot was recovered from the silt along with a large lump of burnt clay/daub with wattle casts. Deposit (1110) was organically rich and appears to have been laid down under aerobic conditions suggesting that the gully (or parts of it) were under water for considerable periods of time. The depth of the silt build up would suggest that the water was no moving and it is therefore suggested that there was one or more ponds / pools within the natural gully.

Trench 12

This trench measured 5m by 1m and was oriented East-West. It was located in line due East, and 14m away from Trench 7 in the upper sloping garden. This trench was so positioned to bisect the central (North-South) axis of this latter garden, and to intercept the presumed eastern extremity of a circular planting feature revealed in excavation at the eastern end of Trench 7. Immediately below the turf was a compacted layer of stone and brick rubble in a dark earth matrix (1201). This directly overlay a deposit of larger stone and brick fragments (1203) which became more dense with depth and contained considerable amounts of mortar in the western half of the trench. It is suggested that this represent a built up base for some form of garden ornament around which a circular rock-cut bedding trench has been dug (see feature (706) in trench 7).

Trench 13

This was 6m long by 1m wide and oriented East-West. It was located to the west of the bastioned terrace in the last week of the field season. It was located in order to sample the deposits within the western garden. Immediately below the turf was a 0.45m thick deposit of clean topsoil and stone rubble (1301). Below this was a layer of brick and stone rubble (1302) containing much charcoal / ash and mortar. A sondage was excavated at both ends of the trench to a maximum depth of 1.2m below the turf but this layer was not bottomed. The level nature of this deposit may suggest that this material had been purposefully dumped at this location in order to build up this part of the garden.

Trench 14

This trench measured 6m by 1m, and was oriented North-South. It was designed to bisect the line of the edge of the level terrace, which in September 2001 was marked by an east-west parch-line, perhaps representing the course of a former terrace retaining wall. At a depth of 0.2m a 0.8m wide, coursed and lime mortared wall foundation was encountered (1403). The mortar used in the bonding of the wall was pinkish with occasional lime flecks. The wall was aligned on an East / West axis and corresponded with the visible parch mark.

Trench 15

Trench 15 measured 2m by 1m and was oriented East-West. It was simply a slot excavated to test the character of a presumed wall-footing running from north to south and appearing to mark the western limit of the former west formal gardens. At a depth of 0.25m the footings for a lime mortar bonded, 0.75m wide stone wall (1503) was encountered aligned on a North – South axis. The mortar used to bond this wall was again pinkish in colour.

Discussion

This section provides both interpretation and synthesis of the results of the investigations.

Pre-garden activity

A number of features visible as un-parched green stripes on the 1995 series of aerial photographs were not examined during the 2001 excavations, and remain enigmatic. Two rubble-filled features within trenches 13 and 14 and sealed beneath definite or presumed formal garden features are also enigmatic. The limits of neither feature were traced in the excavated areas.

No finds of prehistoric or Romano-British date were located in the excavations. However, several finds of medieval date were retrieved. This included a scatter of sherds of C13th-14th pottery. Mostly abraded, these may have derived from garden plots immediately adjacent to the presumed site of the deserted medieval village of Croft.

Trench 11 clearly intruded at least into the upper silts of a fishpond, and from the finds it is presumed that this pond is of medieval date. As such, it can now be regarded as one of a series of ponds descending this small valley from north to south. The finds (a large sherd of a finely made vessel, and a piece of daub from heavy wattle and daub panelling) will have come either from the medieval castle or the village.

The level formal garden terrace

It was established from Trench 14 that this terrace originally had a well-built retaining wall bordering its southern edge. Traces of the path or broad-walk along the inside of this terrace edge were also noted. No secure dating evidence for the construction of the terrace was obtained, but the stone and stonework differ from that of the present mansion. Notwithstanding this contrast in stonework, the pink mortar bonding the Trench 14 wall is very similar to that used in the bonding of many of the walls of the mansion, and it is accordingly hypothesised that they are contemporary.

It is therefore concluded in the interim, that the level formal garden terrace retained by the wall revealed in Trench 14 was laid out when the mansion was built. The terrace was subsequently slighted, however, and the rubble used to

produce a slope below the retaining wall included brick thought to be of late C16th or early C17th date (B. Dix, pers comm). It seems likely, therefore, that the terrace was incorporated into the upper sloping garden when this was constructed in the later C17th, and the break provided by the stone retaining wall was at that time no longer required.

The west gardens

On present evidence, these are thought to be contemporary with the level terrace to the south of the mansion. This is firstly because the mortar used in the build of the wall revealed in Trench 15 appears very similar to that used in the standing walls of the mansion and in the retaining wall found in Trench 14. Moreover, the rubble found in Trench 13 appears to be a levelling of this ground upwards in the later C17th, contemporary with the construction of the upper sloping formal garden to the south of the mansion. Might this area have therefore once comprised a *sunken* garden of the late C16th or early C17th, infilled in the late C17th?

There is also the apparent ‘testimony’ of the layout and design of the west gardens to consider. The wall revealed in Trench 15 is apparently the west wall of one of the terrace-edge gardens, and perhaps represents the west wall of a south-west formal garden of late C16th/early C17th date. If this is so, then there was also a west garden divided from the south-west garden by a wall also showing as a parch-mark both in 1995 and 2001. The west wall of this west garden is a puzzle, since the parch-marks appear to indicate that it stops only some 10m northwards from its junction with the north wall of the south-west garden/south wall of the west garden. This appears to be mirrored northwards, where (as is clear from the parch-marks) the north wall of the west garden turns a right-angle southwards, but again only runs for about 10m before ending. The intervening 30m or so could have been robbed out, but remains a puzzle for possible future work to resolve.

The upper sloping garden

This garden now appears to have been designed as a long rectangle extending from the south front of the mansion some 60m down the hill southwards. The southern terrace edge appears to have been built in the same way as the level terrace edge before it. If this is the case, the removal of even the foundations of the retaining wall represents a more thorough clearance of the site than when the level terrace edge was slighted. The fan-shaped stair was clearly built at the same time as the garden was constructed, since it appears to have been constructed integrally with the terrace retaining wall. Even if no further garden

originally existed southwards again, there was considerable landscaping here since material had been introduced to provide a smooth foundation for the southern foot of the stair. The local limestone used for the steps was not the finest material, but the individual slabs were carefully cut and shaped, and the stairway must have been an impressive feature as built.

The exact form of the east and west boundaries of the upper sloping garden is uncertain. It was presumed during excavation that the deeper squared cut found at the western end of Trench 7 represented the robbed footings of the west wall of the garden. However, the view of at least two of the specialist garden historians / archaeologists on seeing it was that it could equally have been a bedding feature. The way in which the rock-cut feature found at the eastern end of Trench 7 curved along both its western and eastern cuts does suggest that this was an original feature of the planting here. While in Trench 8 it was not possible to find any clear trace of garden deposits or features, the whole of Trench 12 was covered by a rubble and mortar spread that so far defies easy explanation.

What is more certain is how the southern terrace was built up. First a continuous dump of building rubble was spread on the ground surface of the slope of the hill over at least part of the area across which it was intended that the terrace should be located. Then topsoil was spread over this rubble, to construct an earthwork lynchet. The outer edges of this terrace were then reinforced and stabilised by introducing thin scatter of larger stones.

The dump of building rubble again included brick of late C16th or early C17th date, along with both stone and clay tiles, chunks of building stone with mortared surfaces, and finely dressed quoin stones. These came either from parts of the mansion subsequently demolished, or from garden features or buildings, or from otherwise unsuspected structures such as a banqueting hall (for the latter suggestion, B.Dix, pers comm). The likely date of this material is supported by finds of small pieces of fine ceramic of likely late C16th date. In turn, this supports a late C17th date for the construction of the garden. In design terms, it is thought likely that the garden dates to c.1680-90 (D. Jacques, pers comm).

The date of destruction of the garden is less certain. Sir Archer Croft had lost the house and estate by 1746, following the collapse of his investments (Uhlmann, 1979, 9). It may therefore have been Richard Knight, who bought the property, who, with his interest in landscape design, may have created the landscape park c1750.

The lower sloping garden

The excavation of Trench 4 has definitively shown that the southern terrace edge of the lower sloping garden was always an earthwork feature. As such, it had

never featured a stone retaining wall, except perhaps at its foot (not examined). Rather, the earthwork was carefully built up using a dump of clay and degraded limestone, and topped off with turf. Again, the terrace edge itself was reinforced and stabilised with the addition of scattered stones. No traces of metalling for the paths leading down the divided stair were found, and these stairs are better described therefore as 'ramps'.

The ramps would presumably have been turfed, and any features marking the limit of the garden above ground must have comprised vegetation, such as a box hedge. Had this garden been framed with topiary in this way, it could have been very 'architectural', if organic. The work in Trench 9 was not continued after it was realised that the scoop was in fact the site of a fallen tree. The investigation again illustrated the use of small stones placed within the soil matrix as a means of stabilising the terrace edge. It also showed that the c.1750 landscaping attempt to conceal the former existence of formal gardens here included the planting of trees on the corners of former earthworks, to soften their edges.

The gardens west of the upper sloping garden

The western end of Trench 7 intruded into the area that from parch-marks visible in both 1995 and 2001 clearly featured a close parallel series of ditches cut into the bedrock. These ditches numbered more than eight, on a north-east to south-west alignment, bounded to the north and west by the slot traced in Trench 1 and forming a presumed western boundary wall to this garden annexe. These ditches, which were quite shallow and narrow, but were nevertheless carefully dug with straight vertical sides, are provisionally interpreted as slots for plant-growing that also acted as water conduits for their root-systems. The 'plants' concerned would most likely have been soft fruit bushes, or perhaps some exotica such as peach or apricot trees (D. Whitehouse, pers comm).

Unfortunately, apart from demonstrating that planting had continued across this area, Trench 10 told us nothing about the character of any gardens located to the west of the lower sloping garden. The existing earthworks appear to indicate the existence of further small formal gardens or planted areas westwards beyond the small valley that had contained the fish-ponds.

The 'cascade' area

The latter further planted areas probably explain the feature revealed in Trench 11, namely the stone-built causeway. That this was no more than a pedestrian crossing of what had by that time become simply boggy ground was indicated by the lightness of 'build' of this causeway, that comprised simply a series of superimposed dumps of stone. The closeness with which this causeway aligned

with the path at the foot of the upper sloping garden wall indicates the likelihood that this causeway was created in the period 1680-1740.

The slight terrace features within the floor of the valley, that were suspected as being the flights of the cascade are now better interpreted as the sites of the earthwork dams dividing the series of fish-pools. However, the earthwork survey traced a regularity in the northern side of what might have originated as the uppermost of these fish-pools, and this might be indicative of a former water feature here. That there was at least one grand fountain here is suggested by the casual find (in a collapsed part of the western side of the landscape park ha-ha) of a piece of carefully crafted Italian marble. This appears to have provided both the plinth for a metal statue or other figure (as suggested by staining of its surface), and as the forcing chamber for the water supply for the fountain (indicated by the smooth hollowed underside of the stone).

The east garden and 'prospect walk'

The 2001 investigations provided no further information about these features. Nonetheless, the results from Trench 9 would seem to indicate the true origins of the very similar scoop located on the south-eastern corner of the earthwork terrace at the south end of the east garden. It is likely that this was also the result of the collapse of a tree planted there to 'soften' the earthwork during the c.1750 landscaping, or subsequently.

The recent pools, southwards

The existing pool situated above a large earthwork dam oriented north-south was, as is now clear, used as a sump for the effluent from the mansion during the Victorian period, and possibly also earlier. By 1790 (when it was featured in an aquatint by John Ross) the pool was already entirely ornamental, and was at that time one of a pair of such pools here. It is likely however that it began life as yet a further medieval fishpond.

The carriageway

The method of construction of the c.1820 carriageway is now known with some certainty. The roadway was single-track, but it was carefully surfaced and maintained, being in active use from c.1820 to 1913. A photograph of c.1910 shows the carriageway to have been bordered by a light metal post and wire fence. However, the posts were likely to have been of cast iron, and the 'wire' was shown from the piece found in the pit located within Trench 12 to have been of a heavy gauge.

The bastioned wall

Close inspection and recording of the bastioned wall revealed a number of features of interest. The repairs were noted in the survey results section of the report. It was realised during the 2001 field season that the stonework of the

facing of the wall extended well below the present ground surface, and that the wall had previously been fronted by a narrow but nonetheless reasonably substantial ditch.

The mansion

In the summer of 2001, the opportunity was taken to view the basement area of the present mansion. It was immediately apparent that there are no visible features, either within the building or in its external fabric, that any part of it originates in the medieval period. During the researching of the gardens history in preparation for the 2001 investigations, it became apparent that the mansion is perhaps best located stylistically within the canon of a first neo-Gothic phase of country house building. Such houses were built for the late Elizabethan and early Jacobean lordly families interested in chivalric codes and late medieval culture. They often featured ornamental corner towers or turrets, crow-stepped gables and ornamented chimneys, and they were routinely set within carefully designed formal gardens that added to their formality and symmetry.

In 2000 and 2001, some further studies of the history and fabric of Croft Castle were commissioned by The National Trust. The first of these was some documentary research carried out by Valerie Goodbury (*ibid*, 2000). The most significant finding of this research was the Inventory of Sir James Croft's property following his death in 1590 (and held at The Public Record Office at Kew). Although fragmentary, the description of the then Croft Castle and its chambers does not at all closely accord with the present building. For instance, it mentions a Hall, an Old Gallery, and a Gatehouse (*ibid*). This would seem to indicate that the buildings were of a different character and disposition then.

These doubts about the present building are echoed in the draft report prepared by Richard Morriss for The National Trust as a result of his preliminary buildings history inspection of the present structure (Morriss, 2001). Morriss sees the closest comparisons with Croft Castle among the late Elizabethan/early Jacobean 'Spencerian' or 'baronial revival' houses, and in particular those of rectangular plan and with corner towers, as at Thorpe Salvin (Yorkshire, before 1582), Lulworth Castle (Dorset, finished c.1608), and Ruperra (Glamorgan, finished 1626). There is a potential family link with Ruperra, and Morriss therefore prefers to see a time in Herbert Croft's most prosperous period at court, (c.1600-10) as a building date for Croft Castle (Morriss, 2001, 58).

The church

The church was refashioned and rededicated c.1515, following the death of Sir Richard Croft, a prominent local supporter of Edward IV, in 1509. The fine alabaster tomb to Sir Richard and his wife Eleanor now stands in the present

chancel, but once stood in a north chapel that is now demolished. The monument has been extensively re-arranged in its new setting.

A curiosity at Croft is the closeness of siting of the church and the mansion. It suggests that either the church or the castle was rebuilt to bring them within 10m of one another. One possibility considered in 2001 was that the church was moved when it was rebuilt and rededicated. However, it would appear that the earliest fabric in the nave, with north and south doorways flanked by symmetrically placed simple traceried windows, dates from the late C13th or early C14th. In this case, it would be the mansion that has moved eastwards, and this accords with the present view of that building.

The survey included the area immediately to the south of the present churchyard. An estate map of 1798 clearly shows that at that time the churchyard was bounded by a straight wall to the west and by another to the south, southwards of the present fence. The earthworks in this area appear to indicate that even this was a rationalisation of a former curving southern boundary to the churchyard, and this presumably represented the medieval configuration.

Significance

The investigations

The fieldwork reported in a preliminary way in this report is believed to comprise the first archaeological investigation of a series of historic formal gardens in Herefordshire solely for research purposes. There have been few such investigations under any circumstances, but normally such studies are undertaken during garden restoration, as for instance at nearby Court of Noke at Staunton-on-Arrow (Currie, 1998).

Although limited in extent, the investigations are also important for the success achieved in building a plausible chronological framework for the development of the formal gardens. They were also successful to some degree in clarifying how the gardens were constructed. Nonetheless, there are still several unresolved questions about the features associated with the gardens. Some, but not all, such questions may be resolved in future fieldwork undertaken as part of this Croft Castle environs project. In particular, it is hoped that investigations focused upon the site of the deserted medieval village may also provide further information about the east garden and the 'prospect walk'.

The earthworks

The significance of the earthwork survival to the south of the Croft Castle mansion is considerable. Firstly, the earthworks indicate clearly the growth of the garden from a terrace in the immediate vicinity of the castle to cover an area of several hectares on the hillside southwards and down-slope from the mansion.

Secondly, the earthworks represent different fates for the elements of the formal gardens dissolved c.1750. The earliest garden terrace wall was slighted but not removed, so their southern edge, scarped c.1680, has survived as a crisply defined and topographically clear, if relatively slight, feature. The earthworks of the lower terrace of the upper sloping garden were probably originally the most prominent of all such formal garden structures here. Nonetheless, they were severely truncated following the demolition and subsequent robbing of the lower retaining wall.

In contrast, the relatively soft earthwork landscaping of the lower sloping garden terrace has survived almost completely intact. As such, it preserves not only the crispness of the original, but also its entire form. A national importance of this is the rarity of the earthwork grassed divided ramp as a formal garden feature. To grasp the 'feel' of this garden as built, it is only necessary to imagine the form of the topiary that is likely to have bordered what may have been a simple grassed area below the wall of the upper sloping garden.

A slightly more attenuated significance of the earthworks is that they illustrate the accuracy of the aquatint by John Ross of c.1790, in that he indicates their definite if subtle presence by careful use of contrasts in the middle ground brown colour-wash. This in turn enables greater confidence in the other features represented in the aquatint view.

The archaeology of the Croft Castle formal gardens

The archaeology of these gardens is to be of considerable significance both locally, and in the general development of studies of Renaissance formal gardens in England. Firstly, the preservation of the below-ground remains, although variable is generally good. This means that there is significant research potential for further work at the site, if not necessarily during the present project.

Secondly, the earthworks associated with the gardens, particularly to the south of the mansion, have survived well and remain interpretable.

Acknowledgements

A very extensive list of thanks is to be headed by The National Trust staff at Croft Castle itself, and in particular David Atkins the House Manager and Yvonne Osborne the Property Manager. The tenant farmer is to be thanked for his forbearance during the excavation season, and for assistance with the back-filling of trenches. Mrs Caroline Compton, daughter of the late Diana Uhlmann (sister of the late Lord Croft) who retains a flat at the castle, is to be thanked for her continuing interest in and support for the project, as also is Bernard, Lord Croft, who lives close by and visited the excavations.

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None of the fieldwork would have been successfully conducted without the support of the supervisory staff and volunteers of *Herefordshire Archaeology*. Principal among these people are Tim Hoverd, Archaeological Projects Officer, who acted as site manager during the project, and Benedikte Ward, who supervised the registration and storage of finds. At various times, Julian Cotton, Rebecca Roseff and Paul White attended in a supervisory capacity. A total of twenty-two volunteers attended and worked at the site during the project season. Several among these people participated for two weeks (or more). Our thanks, especially, go to Graham Arnold, Dave Carter and Angela Currie, Marlene and Martin Hewitt, Laura Higgins, Chris High, Carly Jones, Barbara Joss, Pat Kay, Richard Lello, James Mabbitt, Sam Meadows, Tony Reeve, Graham Simpson, Howard Webb, Terry White and Paul Wood.

Appendix 1

List of reports covering the excavations at Croft Castle and environs 2001-4

HAR 42 Gardens Archaeology at Croft Castle in 2001.

HAR

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HAR

**CROFT CASTLE EXCAVATION
FINDS PER TRENCH**

CCG 2001

TRENCH NO.	POTTERY	BONE / SHELL	BUILDING MATERIAL		GENERAL		MISC	MISC	TOTAL PER TRENCH
						Glass	Clayp.		
1	3		brick	13	Nail	1			17
2	75	3	Daub, brick, mortar	29	Nails, slag, other fe. Obj., 1 coin	21	28	8	164
3	44	7	Brick, glazed tile, tile, mortar	66	Slag, nails, shoe buckle	49	29	2	197
4	15		brick	3	Slag, nails, shoe buckle	6	1		25
5	49	17	Brick, daub, mortar, tile	92	Slag, nails, pb.obj	27	7	3	195
6	110	1	Brick, daub	18	Slag, nails	34	10		173
7	25	2	Daub, brick, glazed tile	5	Slag, nails	23	24	3	82
8	83	8	Brick	21	Slag, nails, other fe.obj	33	56	3	204
9	5								5

10	34	2	Brick (mainly small pieces, many not retained)	37	Slag, hinge, nails, thimble, knifeblade	21	57	1	152
11	3		Mortar, brick, daub, plaster	42	Slag	5			53
12	47	7	Brick, mortar, worked stone	84	Slag, nails other fe. obj	38	27	3	206
13	5	2	Brick, daub, mortar, worked stone	40	Nails	3	8		58
14	6		Brick, mortar, worked stone	71	Nails	6	6	3	92
TOTAL	504	49		502		252	253	26	

Nothing logged under special finds for CCG01- **T7: Misc. 2 pieces of flint**

Site notebooks				2
Single context recording sheets	Plan drawings	Section		
drawings				
Trench 1				
Trench 2				
Trench 3				
Trench 4				
Trench 5				
Trench 6				
Trench 7				
Trench 8				
Trench 9				
Trench 10				
Trench 11				
Trench 12				
Trench 13				
Trench 14				
Trench 15				
Black and white photographs (films)				
Colour transparencies (films)				
Finds Registers				1

<i>Further Publication</i>

References

Validation

Herefordshire Archaeology operates a validation system for its reports, to provide quality assurance and to comply with Best Value procedures.

This report has been checked for accuracy and clarity of statements of procedure and results.

Julian Cotton , Archaeological Advisor.

