CHEDWORTH ROMAN VILLA YANWORTH GLOUCESTERSHIRE

ARCHAEOLOGICAL FABRIC SURVEY

CA PROJECT: 1401 CA REPORT: 04173

Author:	Gail Stoten	
Approved:	Neil Holbrook	
Signed:		
Issue: 01		Date: March 2005

This report is confidential to the client. Cotswold Archaeology accepts no responsibility or liability to any third party to whom this report, or any part of it, is made known. Any such party relies upon this report entirely at their own risk. No part of this report may be reproduced by any means without permission.

CONTENTS

1. INTRODUCTION	<u>6</u>
Historical and archaeological background	6
Objectives	6
Project methodology	
2. FABRIC RECORDING	8
Objectives	8
Methodology	8
Results	
3. ARCHAEOLOGICAL PLAN	<u>9</u>
Aims and objectives	<u>9</u>
Methodology	<u>9</u>
Results.	10
4. FABRIC ANALYSIS	10
Introduction	10
Methodology	
Historic photographs and postcardsFox's plans and elevations	1 <u>1</u>
Published articles	12
Roger Goodburn	13
Archaeological Survey of Buried Mosaics	14
Results	
Phases of rebuilding	
The east corridor	17
The south wing.	
The west wing	
The nympheum The upper north wing	
The lower north wing	
5. CONCLUSIONS.	
6. FUTURE RESEARCH OPPORTUNITIES	26

<u>7. ARC</u>	HIVE27			
8. CA F	ROJECT TEAM28			
9. REFI				
APPENDIX A. INSTRUCTIONS FOR USE OF HISTORIC IMAGES DATABASE32				
I IST O	F ILLUSTRATIONS			
Fig. 1	Site location plan			
Fig. 2	Plan of Roman Villa showing upstanding walls (1:5000)			
Fig. 3	Plan of Roman Villa showing previous archaeological interventions and location of			
1 ig. 0	recorded profiles (1:5000)			
Fig. 4	Recorded profiles (1:250)			
Fig. 5	Plan of Roman villa showing location of elevations (1:300)			
Fig. 6	Elevation 1 (1:50)			
•	Elevation 2 (1:50)			
_	Elevation 3 (1:50)			
•	Elevation 4 (1:50)			
Fig. 10	Elevation 5 (1:50)			
Fig. 11	Elevation 6 (1:50)			
Fig. 12	Elevations 7-10 (1:50)			
Fig. 13	Elevation 11 (1:50)			
Fig. 14	Elevation 12 (1:50)			
Fig. 15	Elevation 13 (1:50)			
Fig. 16	Elevation 14 (1:50)			
Fig. 17	Elevation 15 (1:50)			
Fig. 18	Elevation 16 (1:50)			
Fig. 19	Elevation 17 (1:50)			
Fig. 20	Elevation 18 (1:50)			
Fig. 21	Elevation 19 (1:50)			
Fig. 22	Elevation 20 (1:50)			
Fig. 23	Elevation 21 (1:50)			
Fig. 24	Elevation 22 (1:50)			

- Fig. 25 Elevation 23 (1:50)
- Fig. 26 Elevation 24 (1:50)
- Fig. 27 Elevation 25 (1:50)
- Fig. 28 Elevation 26 (1:50)
- Fig. 29 Elevation 27 (1:50)
- Fig. 30 Elevation 28 (1:50)
- Fig. 31 Elevation 29 (1:50)
- Fig. 32 Elevations in rooms 1-4 and corridor, in south wing (1:50)
- Fig. 33 Elevations in rooms 3 and 5a (1:50)
- Fig. 34 Elevations in rooms 5, 5b, 6, 7 and 8 (1:50)
- Fig. 35 Elevations in rooms 10, 11, 12 and 13 (1:50)
- Fig. 36 Elevations in rooms 14 and 15 (1:50)
- Fig. 37 Elevations in room 16 (1:50)
- Fig. 38 Elevations in rooms 14 and 15 Nympheum (1:50)
- Fig. 39 Elevations in rooms 19 and 20 (1:50)
- Fig. 40 Elevations in rooms 21 and 21a (1:50)
- Fig. 41 Elevations in room 22 (1:50)
- Fig. 42 Elevations in room 23 (1:50)
- Fig. 43 Elevations in rooms 24 and 24a (1:50)
- Fig. 44 Elevations in rooms 25 and 25a (1:50)
- Fig. 45 Elevations in rooms 26 28 (1:50)
- Fig. 46 Elevations in rooms 29a, 30, 31 and 31a (1:50)
- Fig. 47 Plan of Roman Villa, showing areas of modern rebuilding of above ground masonry
- Fig. 48 Plan of Roman Villa showing areas of known intact Roman stratigraphy

SUMMARY

Site Name: Chedworth Roman Villa

Location: Yanworth, Gloucestershire

NGR: SP 0530 1345

Type: Archaeological Fabric Survey

Location of Archive: The National Trust, Chedworth Roman Villa

Between October 2002 and October 2004 Cotswold Archaeology (CA) carried out an archaeological fabric survey for The National Trust at Chedworth Roman Villa. This project comprised the production of a plan of the villa and elevations of all visible masonry. A programme of fabric analysis was carried out in order to identify areas of the villa with the greatest potential for Roman masonry to survive undisturbed.

Despite the removal of stone from the villa for the production of lime, documentary sources suggest that the walls stood above the floor levels on excavation. However, the fabric analysis, which included the examination of historic photographs, drawings, archives of excavations, correspondence held at Chedworth and published articles, has demonstrated that much rebuilding has taken place at the villa since its discovery in 1864. The plotting of the areas in which modern rebuilding has taken place has allowed the areas with the greatest potential for Roman fabric to survive undisturbed to be identified.

The areas where there was least evidence for modern rebuilding are those which have been protected by the shelters constructed in the 1860s, the eastern and western walls of room 22, the northern walls of room 25, the north-western and north-eastern walls of the nympheum and an area of masonry at the northern end of the eastern corridor. It has not been possible, however, to classify these areas as original Roman fabric. A review of the documentary sources allowed several campaigns of rebuilding at the villa to be identified, including one which predated all available photographs, drawings and detailed records, hence it has not been possible to assess the extent of this phase of rebuilding.

Despite the modernity of much of the visible superstructure, it is likely that many of the walls contain Roman fabric below current ground level. *In situ* Roman deposits have also been revealed by excavations in the 20th-century within and immediately outside known rooms, and in the mostly-unexcavated south wing.

1. INTRODUCTION

1.1 Between October 2002 and October 2004 Cotswold Archaeology (CA) carried out an archaeological fabric survey for The National Trust at Chedworth Roman Villa (centred on NGR: SP 0530 1345; Fig. 1).

Historical and archaeological background

- 1.2 The villa at Chedworth was excavated in 1864, following chance finds of pottery and *tesserae* in the area, although the presence of the villa was known about by local woodsmen for some time before. The villa has been open for public viewing since its excavation, when it was the private property of the Stowell Estate, and after its purchase by the National Trust in 1924 (Irvine 1987). Several small-scale excavations have taken place at the villa in the 20th century, including investigations of the northern bath suite, inner courtyard and eastern corridor.
- 1.3 The current published model for the development of the villa is largely based on the work of Richmond (1958-65) and Goodburn (1979-93). Neither of these campaigns has been adequately published, and consequently the evidence on which the proposed sequence is based is not available for scrutiny. The conventional view of the villa is that it was occupied from the early 2nd to late 4th centuries (Goodburn 1983). Current thinking is that it originated as three separate blocks in the 2nd century which were subsequently incorporated into a single building around inner and outer courtyards in the later Roman period. This structure comprised areas at different levels; the north wing stands on a terrace partially recessed into the hillside and the south wing lies at a lower level on the valley bottom (RCHME 1979). Recent work suggests that this consolidation into a single building occurred as a massive change in the 4th century, rather than as a gradual development (Bethell pers. comm).

Objectives

1.4 The National Trust is currently considering a redevelopment of the protective shelters at Chedworth, built in the 1860s, to ensure the long-term survival of the monument. In order to achieve this, some prioritisation of the most important and vulnerable areas of the villa must occur. Anecdotal evidence suggests that some areas of masonry are modern, and one of the objectives of the project was to

identify these areas, in order that those parts of the villa where there is the greatest potential for undisturbed Roman masonry to survive could be identified.

1.5 In order to carry out this analysis, a base record comprising a plan and elevations of all visible masonry at the villa was needed. These records also provide a snapshot record of the walls of the villa, against which any subsequent change can be measured.

Project methodology

- 1.6 The project comprised three stages. First elevations were produced of all of the visible villa masonry (Chapter 2; *Fabric recording*). This was achieved through taking digital photographs of all masonry, which provided a photogrammetric base for the production of digital elevation drawings.
- 1.7 All visible structures of the villa were surveyed using a Total Station, in order to create an accurate plan of the site. Transects were also taken across the site in order to illustrate the relative levels of different areas of the villa (Chapter 3; Archaeological plan).
- 1.8 These elevations and plan were used in the final stage of the project in which areas of modern repairs and rebuilding were identified (Chapter 4; *Fabric analysis*).
- 1.9 Following a meeting at the villa between Cotswold Archaeology, Phil Bethell (National Trust property manager) and Steve Bagshaw, it was decided that there was low potential for mortar analysis to contribute to the identification of areas of modern rebuilding, due to the extensive repointing which has taken place. Previous mortar studies (BUFAU 1995) had been undertaken during the removal of the outermost pointing, enabling mortar further into the core of the wall to be examined. It was also decided that there was little potential for the petrological examination of the walls, as it was probable that early rebuilds had involved the reconstruction of the walls with Roman masonry found during the original excavations rather than imported stone which could be identified as such, as was present at Great Witcombe Villa (CA 2002).

2. FABRIC RECORDING

Objectives

- 2.1 The objective of the programme of recording was to produce elevations of all of the visible masonry of the villa, rapidly and cost effectively. These elevations provided the base for an analysis of the fabric of the villa (chapter 3, below), and assisted in the Trust's ongoing conservation work at the property (National Trust 2001).
- 2.2 The elevations also provided a snapshot record of the visible masonry in 2003/4, allowing any erosion of the stonework to be noted and future deterioration mitigated against.

Methodology

- 2.3 All visible masonry structures were recorded, with the exception of the area obscured by the temporary building in the north wing and the easternmost room of the north wing, for which a set of elevations has already been produced. Field work was carried out between October 2002 and February 2003, and November 2003 and September 2004.
- 2.4 Each wall was marked with a continuous horizontal chalk line, the placement of which was determined by use of a laser-sighted level. This horizontal line was marked with vertical lines at 1m intervals or at 0.5m or 0.2m intervals if the wall was of lesser length. If a wall exceeded 1.2m in height, two horizontal lines were marked on the wall, either 0.5m or 1m apart depending on the height of the wall.
- 2.5 The walls were photographed in overlapping sections approximately 1m in length, with at least two vertical markers visible in each shot to ensure that the digital images could be correctly scaled. Where the height of the wall exceeded 1.2m, the upper and lower sections of the wall were photographed separately.
- 2.6 Following the downloading of the digital images onto a computer at Cotswold Archaeology, the images were scaled and located in their correct position behind a pre-drawn grid using the illustration package *Adobe Illustrator*. This allowed the digitisation of individual stone blocks in their correct relative position to form digital elevations of the walls of each room. The elevations of the walls of several rooms were amalgamated to form long elevations along the principal axes of the villa.

- 2.7 Areas of the villa with curved walls, where the methodology outlined above was found to be unsuitable, were drawn by hand, and the resulting elevations scanned and digitised.
- 2.8 The elevations were checked against values for the length and height of each wall, taken during the fieldwork. The elevations were also compared against the walls of the villa in the field, to check for any inaccuracies.

Results

2.9 A complete set of elevations has been produced of the visible masonry of the villa. These are presented in Figs. 5 to 46, annotated with the results of the fabric survey. These elevations have also been stored in digital form on compact disc which will enable their use for future projects at the villa.

3. ARCHAEOLOGICAL PLAN

Aims and objectives

3.1 A plan of the villa had previously been produced by On Centre Surveys in 1996. Although this plan accurately represented the lengths and positions of the walls, their forms had been simplified and their lines had been presumed to be straight. In addition, areas of detail such as the internal structures within rooms 19 and 22 had been omitted. The aim of this part of the project was to produce a ground-level plan of the villa, accurately representing the forms of the walls and including the detail missing from the previous survey.

Methodology

3.2 The survey was undertaken using a Leica TCR 705 Total Station with 'reflectorless' capability. The survey was undertaken from a network of control stations and detail controls. The control stations were established by means of a ring traverse based upon three permanent ground markers (PGMs) installed by On Site Surveys in 1996. The control stations were marked by pins. The detail controls were established by a series of closed traverses from the control stations and were marked by pins or used items of 'hard' map detail such as kerb stones and drain covers. As some of the detail control points were in areas open to public access the

integrity of the controls was tested at the beginning of each session of surveying. The error identified during these tests at no point exceeded 2mm.

- 3.3 The co-ordinate values used during this survey were based upon those instituted by On Site Surveys in 1996. Measurements were taken during the survey using a combination of Infra Red readings to a mini-prism and 'reflectorless' readings taken directly on stonework.
- 3.4 The measurements taken during the survey were recorded electronically in the Total Station's internal data logger and supplemented by hand written records of important control information. The electronic data was downloaded on to a PC using Leica Survey Office 1.33 and manipulated using Leica's own LisCad Lite 6.2. Subsequent drawings were produced using Adobe Illustrator 10.

Results

- 3.5 A plan of all visible masonry was produced at ground level (See Fig. 2). This has also been supplied in digital format (Adobe Illustrator 8 and AutoCAD files on compact disc) and can be manipulated for use in future projects. Four transects across the site were also produced in digital format (Figs. 3 and 4).
- 3.6 The main advantage of this survey over previous plans of the site is that it depicts the walls of the villa with greater accuracy. Multiple measurements have been taken along each wall, enabling their line and form to be plotted in greater detail. The CA survey also included more station points within the buildings, allowing internal the features to be more accurately located.
- 3.7 More areas of archaeological detail have been included in the present survey. Internal features in rooms 19 and 22 and hypocaust channels in rooms 24a and 25 have been recorded, as well as the precise locations of the hypocaust pilae in room 26.

4. FABRIC ANALYSIS

Introduction

4.1 Anecdotal evidence suggested that much of the villa had been reconstructed following its discovery in 1864, and that repairs and rebuilds had taken place throughout the 20th century. The objective of this survey was to collate all information from all available sources concerning alterations, repairs and rebuilds of the walls, in order to identify the areas in which there was most potential for Roman fabric to survive unaltered.

Methodology

4.2 This section describes the sources of information used in the fabric survey, and how they were interpreted and their limitations.

Historic photographs and postcards

- 4.3 Historic images of the villa were obtained from the catalogues of prints and slides held by the National Trust, the archives of excavations and from three albums of photographs compiled by A.N. Irvine. The albums were particularly useful, as many of the photographs had been annotated.
- 4.4 All of the images were scanned, and a database compiled in Microsoft Access, on which the photographs were correlated with all of the walls visible in each, each wall elevation having been given a unique number. Interrogation of the database allowed each elevation to be considered individually, comparing it with all historic images in which it was shown. The wall elevation numbers are shown in the body of the text as CAID 00 (Cotswold Archaeology Identification), and the historic photograph numbers as CA00.
- 4.5 Using the database of photographs and postcards and the base elevations produced by Cotswold Archaeology, it is possible to identify areas of modern stonework where they were not present in, or of greatly different appearance to, historic images. In most cases it was not possible to compare stonework of the base elevations to historic images on a stone-by-stone basis, as it was found that taking photographs from any angle other than directly face-on greatly affects the appearance of block shapes, and the replacement of occasional blocks within a wall or its re-pointing can likewise greatly affect its appearance, making such comparisons extremely difficult.

In only a few cases was the appearance of the stonework of a wall sufficiently different for a wall to be identified as a rebuild.

4.6 It should also be noted that the coverage of historic photographs across the villa is not consistent. The images have concentrated on the most impressive vistas across the site, leaving areas of poor coverage, such as the rears of buildings.

Fox's plans and elevations

- 4.7 An early set of watercolour drawings of the villa were produced by George E. Fox and are dated September 1886. These are now held by the Society of Antiquaries, London and comprise an overall plan of the villa, and a series of more detailed plans of different areas of the villa, with elevations along several principal axes. The main plan was used in a later article, published in *Archaeologia* (Fox 1895).
- These drawings have been useful in identifying walls and areas of masonry that are not depicted on the drawings, and so are likely to have been constructed since. Fox depicted the walls of the now-roofed rooms as though the shelter sheds had not then been constructed, although if the plans and elevations were produced around in or shortly before 1886, the shelter sheds would already have been standing for twenty years. Hence, the heights at which the elevations stopped have been treated as possible breaks between the Roman fabric and later heightening of the walls during the construction of the shelters, as any such break may have been visible in the 1880s, but they have not been considered definitive evidence of the height of the Roman fabric.
- 4.9 In some areas it has been possible to compare the base elevations with areas of stonework depicted on the elevations on a stone-by-stone basis, although this has only been attempted in areas of unusual stonework, where it is certain that efforts were made to accurately represent individual blocks, and has not been attempted in area of regular looking masonry, as the accuracy of these depictions is unknown. Some areas of stonework were labelled as modern on the 1886 elevations, providing further evidence of rebuilding.

Published articles

4.10 Several accounts of the discovery and subsequent excavation of the villa were published in the 19th century, which have provided some information concerning the

original fabric of the villa. These sources note areas where repairs have been made and mention now-disappeared features in walls. Descriptions of the villa in these early sources have not been taken as descriptions of the villa as it stood on excavation as they post-date an initial possible phase of reconstruction immediately after the excavation.

4.11 Articles published in the 20th century, including specific articles on excavations and more general articles on the villa and villas in general, provided more information including the location of Roman walls found during excavations, sometimes beneath modern reconstructions, and descriptions of ongoing and previous repairs and reconstructions.

Archive material at Chedworth

- 4.12 Archive material held at the National Trust offices at Chedworth included material collated by A. N. Irvine, custodian of the villa from the 1930s to the 1970s, which comprised transcriptions of anecdotal evidence from people who excavated the villa, a list of excavations and repairs, correspondence regarding repairs, and general notes and observations. This material proved to be particularly useful. A tape of an interview with Mr. Irvine in 1987 has also been reviewed.
- 4.13 Other material held at the villa included archives from excavations. These included elevations produced by BUFAU, following investigations into the mortar of some of the walls in the north wing during conservation works (BUFAU 1995).
- 4.14 Missing from the archive at Chedworth are any notes made during the original excavation of the villa by its excavator James Farrer, which have now been lost. The precise nature of these notes is unknown, but they included a plan of the villa made immediately after its excavation, which would have been of great use during this project. James Farrer, who was custodian of the Stowell Estate while Lord Eldon was underage, is known to have argued with Lord Eldon, when he came into control of the estate, and it is thought that Mr. Farrer took all such material with him on his departure from the area in 1866. In an interview of 1987, A. N. Irvine described how he contacted Mr. Farrer's family, but they held no such material in their possession. A further search request of all likely archives has revealed nothing.

Roger Goodburn

4.15 Roger Goodburn and Sally Stow, former site archaeologists for the villa, provided copies of interpretive elevations which they produced during conservation work on certain walls, mainly in the north wing and nympheum of the villa (Goodburn 1984, 1989, 1991, 1993). During a meeting at Cotswold Archaeology's offices in June 2004, they also provided information of rebuilding works at the villa (Goodburn 2004, Goodburn pers. comm.). The remainder of the archive for their excavations at Chedworth was not made available to CA.

Archaeological Survey of Buried Mosaics

4.16 The results of the Archaeological Survey of Buried Mosaics (Fig. 3; CA 2000), which involved the excavation of test pits adjacent to the walls of the villa, were reviewed for information concerning any discernable breaks in the fabric of the walls which were seen below the current ground level during the excavations.

Gloucestershire Records Office

4.17 The catalogue of Gloucestershire Record Office was reviewed to see if any material relevant to the project was held there. Whilst material collected by A. N. Irvine was present, it was apparent that resources relating to the villa had been given to the National Trust and that the collection at the record office related to other local history and forestry.

Results

- 4.18 The information resulting from the analysis which is specific to individual areas of above ground masonry has been annotated on the elevations in Figs. 6 to 46. Where stretches of wall appeared the same on historic photographs, this information has also been added to the elevations, as it may be of relevance to any future work on the dating of the walls.
- 4.19 In addition, the sources provided more general information on the condition of the villa on excavation and subsequent phases of rebuilding, which is summarised in the following section, *Phases of rebuilding*. This is of particular relevance as the sources mentioned above have provided evidence that many of the walls have been rebuilt, but not the precise time at which they were.

4.20 Following *Phases of rebuilding*, there is a discussion of the rebuilding that has occurred in each area of the villa, in sections *The east corridor, The south wing, The west wing, The nympheum, The upper north wing, The lower north wing.* Areas of above ground masonry at the villa which have been definitely and probably rebuilt have been shaded on Fig. 47.

Phases of rebuilding

- 4.21 The height to which the walls of the villa stood immediately after it was excavated in 1864 is not known. As mentioned above, the original notes and plan of the villa on its excavation were lost when the excavator, James Farrer, left the area in 1866. No photographs of the villa at this time are present in the archives.
- 4.22 Stone from the villa had been robbed to feed a lime kiln which had been present at the site, before the site was excavated. A.N. Irvine, who collected and studied accounts of the discovery of the villa, concluded that 'The evidence is, that except in a few places, walls had not been robbed down to floor levels, in general it seems that only the easily got stone was taken.' He later stated that one of the unusual features of Chedworth was the large amount of stone walling that was intact at the time of excavation (Irvine 1987). This is corroborated by an account of the discovery of the site which mentions that walls were visible in the woods before excavation and that workmen dug alongside these walls in order to find tessellated floors (Gloucestershire Echo 1930).
- 4.23 The first phase of rebuilding at the villa appears to have taken place after its excavation, in the mid 1860s. James Farrer is known to have spent a large amount of money consolidating the villa after its excavation, as this is said to have been the cause of the argument with Lord Eldon which led to him having no further involvement with the site. This money appears to have been spent on the museum, the protective shelters and on tidying up the walls.
- 4.24 Irvine (undated d) mentions that 'measures to protect the remains uncovered were thought of at an early stage.' The museum was constructed by 1885, and the cover buildings over the west wing and room 23 were started then or very soon afterwards. These buildings must have been finished when members of the Cotteswold Naturalist's Field Club visited on 22nd May 1867 as they are mentioned in a description of their visit: '...the substantial buildings erected over them [the existing

remains] by Lord Eldon, to protect them from further decay or wanton destruction' (Guise Bart 1868). The walls of these buildings must have been consolidated and heightened to take the roof structures.

- 4.25 Irvine (undated d) also described the measures taken in the 1860s specifically for the walls outside the protective shelters: 'Besides the sheds built to protect the mosaics and baths, all excavated walls were capped by using one of two methods: (1) using hexagonal Roman roofers of stone salvaged while digging was in progress and (2), using flat slabs of a shelly limestone brought to the site for the purpose. ... Many walls covered by (1) needed little maintenance for 60 years or more, while those treated otherwise, were, all the while needing repairs.'
- 4.26 In order to cap the walls in such ways, they must have been consolidated and levelled up first, and it is likely that the opportunity was taken to raise the height of any walls that had been robbed to a low level, in order that they might show above the ground level an aid understanding of the layout of the site. Material to do this was likely to have been abundant, with original Roman facing stones from collapsed walls present across the site.
- 4.27 Fox's plans and elevations of 1886 mark some very small areas of the villa as modern, such as the wall at the east of the south corridor (CAID 30) and the steps of the eastern corridor. These drawings were completed twenty years after the initial phase of rebuilding at the villa, and walls rebuilt with Roman material may have been indistinguishable from the original walls, and so this source cannot be seen as an accurate representation of all of the areas of modern walling constructed during the initial campaign of consolidation.
- 4.28 Some early accounts of visits to the villa make mention of the walls, but these date to after the possible initial period of rebuilding in 1864-6. In an article on the villa, Scarth (1869) mentions that 'owing to the peculiarity of the situation on the slope of the hill, the walls remain to a greater height than usual'. In an address to the Cotteswold Naturalist Field Club, Guise Bart (1868, 202) described the original walls as standing to a height of 3 or 4 feet tall.

- 4.29 As mentioned above, the walls probably needed ongoing repairs throughout the late 19th century. The villa is in a frost hollow and kept damp through the presence of the trees so close by, hence it is very susceptible to frost damage.
- 4.30 After forty years, the protective shelters themselves also needed repairing. The roofs of the dining room and baths were recovered in 1910/11 (Irvine undated d).
- 4.31 Two significant phases of rebuilding occurred in the 20th century, following the First and Second World Wars. Irvine (1987) recalls that when his parents took over as custodians of the villa in 1918 the villa was in a very poor state of repair following the lack of labour during the war, and that it took '...a lot of getting back into something like shape again.' The mosaics and bath structures under the protective shelters survived well, but the rest of the villa was 'very, very neglected'. He also recalled that a similar period of neglect took place during the Second World War, and that again the villa needed much repairing afterwards.
- 4.32 Much work was carried out at the villa between 1958 and 1965 by Professor Ian Richmond. Records of these works are present in the archives at Chedworth, which has allowed this information to be annotated onto the elevations (see Figs. 6 to 46). Briefly, this work comprised consolidation and rebuilding of modern areas in room 4, rebuilding in rooms 12 and 13, the rebuilding of a doorway in room 16, the erection of the shelter over room 22, defining the walls in rooms 3 and 5a, repairs to the east wall of the west corridor. During his work at the villa, Professor Richmond also defined the original route of the southern wall of the north corridor. This was later rebuilt along the correct alignment in 1967.
- 4.33 Letters of the 1970s suggest that walls were rebuilt as the need arose, presumably following collapse. These walls included CAID 18 and 49. re-pointing works and occasional consolidation of walls has been taking place since. Irvine noted that, following Professor Richmond's insistence from 1957 onwards that the walls should be capped with sloping cappings, the rate of wall damage at the villa greatly declined (Irvine undated d).
- 4.34 An area of wall on the eastern side of the east corridor was rebuilt in 1981, following the demolition of part of the custodian's house, which encroached into this area, and excavations by Roger Goodburn. Interestingly, a letter of 1979 is present in the

archives at the villa, addressed to A.J. Finlinson of the National Trust from Christopher Bishop, of Eric Cole and Partners, Chartered Surveyors justifying reconstruction of the wall. In proposing this action he states that *'Furthermore, most of the existing exposed walls are at best "heavily restored"*, so no real change in policy is involved.'

The east corridor

- 4.35 Of the main walls of the eastern corridor, the southern area of the eastern wall has definitely been rebuilt: the southern part was built in 1949 and the northern part in 1981, following the demolition of an area of the custodian's house which encroached into this area (CAIDs 374-6, 408-19; Irvine undated c, Goodburn 1981). It is probable that all but the lowest courses of the northern walls are modern rebuilds (CAIDs 384, 389-92, 399-407; Goodburn pers. comm.). There is no evidence to suggest that the southern part of the western wall has been rebuilt (CAIDs 373, 377-9), although the fact that the other three walls in this area are mostly modern makes it probable.
- 4.36 Photographic evidence also suggests that the walls bounding the steps centrally placed within the western wall have been rebuilt (CAIDs 381-2; see elevations for photographic references).
- 4.37 There is no evidence that a block of masonry at the north of the eastern wall has been rebuilt (CAIDs 396-8), and its stonework matches Fox's elevation of 1886. This has the greatest potential to be Roman fabric of any area of the eastern corridor, although it is possible that the southern part of the western wall is little altered.

The south wing

4.38 There is much evidence of rebuilding in the south wing. Excavations in 1954 demonstrated that the walls of room 4 are modern (CAIDs 1-12, 19; Rutter 1954) and correspondence held at the villa shows that the south wall of room 1a (CAIDs 13, 17, 18) and the wall between the east and south corridors (CAIDs 49-53) were rebuilt in the 1970s (Sly and Sons 1971, 1973). Comparisons with Fox's plans and elevations of 1886 have demonstrated that the western wall of the south corridor (CAIDs 30, 33-5, 47), the western section of the southern wall of room 3 (CAIDs 59-67), the southern section of the western wall of room 1 (CAIDs 21-3), the northern

section of room 3 (CAID 29) and the western section of the northern wall of the south corridor (CAIDs 37-8, 58) are modern.

- In addition to these areas, comparisons with photographic sources have shown that several walls in the south wing were previously lower than they stand today, making it probable that they have been rebuilt, as there would seem to be no reason for heightening them. These include all walls of room 2, part of the wall to the west of room 2 (CAIDs 38-44, 55-8) and the eastern section of the south wall of the south corridor (CAIDs 29, 32; see elevations for photograph references). Comparison with historic photographs has also indicated that the central section of the north wall of the southern corridor (CAIDs 48, 54) has been restored, which was corroborated by Roger Goodburn (pers. comm.). Photographs have also shown that the wall between rooms 1 and 1a (CAID 27) was originally higher, and so has probably been rebuilt.
- 4.40 Comparison with Fox's plans and elevations of 1886 showed that the northern part of the western wall of room 1 was originally higher, and so has probably been altered since. Fox's plans also do not show a dog-leg between the southern walls of rooms 1 and 1b which is present today, suggesting some rebuilding has taken place in this area (CAIDs 12, 13, 18, 19).
- 4.41 In conclusion, there is much evidence of rebuilding in the south wing and while there is potential for undisturbed Roman fabric to survive low down in the walls, much of their superstructures is likely to be modern.

The west wing

4.42 Starting at the south of the wing, all of the walls of room 5a, excluding the northern wall, appear to have modern superstructure. The southern and eastern walls were not depicted on Fox's plan of 1886 and were defined and levelled up in 1959/60 (CAIDs 69, 70, 73-5; Irvine undated c). The western wall was not depicted on Fox's plan of 1886 and is also known to have collapsed in 1992 (76-79; Goodburn pers. comm). Investigations by Roger Goodburn suggested that the lowest 2 courses visible at the rear of the wall were undisturbed Roman fabric (Goodburn, drawing 84). The setting of the stoke hole at the northern end of room 5 was depicted on Fox's plan of 1866, but the southern part of the western side (CAIDs 80-1) was shaded as modern.

- 4.43 The walls of room 5 must have been levelled up and probably heightened in 1864-6 when the protective shelter was constructed (CAIDs 79, 91-109). Fox's elevation of the interior face of the western wall (CAIDs 96-9) suggests that the top three or four courses of the building are modern, with modern fabric extending lower down over the stoke hole. This has been corroborated by investigations of the exterior of this wall by Roger Goodburn (CAID 79; drawing 84). These suggest that the top three courses of stonework are modern, but that the area of modern stonework above the stoke hole is much more extensive than Fox suggested, or has been rebuilt since Fox's elevations were produced.
- 4.44 In the area between the two protective shelters it is apparent that quite a large amount of rebuilding has taken place. The wall between rooms 7 and 8 was extensively repaired during World War 2 (CAIDs 122-3; Irvine 1965) and the eastern and western interior elevations of room 7 were refaced in 1965 (CAIDs 110, 120; Irvine undated c). Comparisons of the walls with Fox's elevations of 1886 and historic photographs suggest that the eastern and western walls of wall of room 6 have been rebuilt (CAIDs 115-117) and that most of the superstructure of the western wall of room 8 has been constructed since 1886 (CAIDs 79, 110). The doorway in the western wall of room 5b is marked as modern on Fox's plan of 1886 (CAID 119).
- 4.45 Most of the walls in the area between the protective shelters were levelled in 1965 (Irvine undated c). The reason for this is not known, but stone from other walls had been removed to build new structures, such as material from the rear wall of the northern wing to build the shelter over room 22. It is possible that this is what happened in this area, which would suggest that the walls here were known to be modern at the time the stone was removed.
- 4.46 The walls of the western bath house are likely to have been levelled up and probably heightened in 1864-66 when the protective shelter was constructed (CAIDs 124-7, 133, 152-3, 162, 165, 169, 177-9, 421). Fox's elevation of the interior of the western wall shows only the lowest two courses of the western wall of room 10 and the lowest four courses of the western wall of room 11 as being present. This elevation appears to have been drawn after the construction of the shelter sheds, but

comparison with the results of other investigations in room 5 showed the elevations to be a fairly accurate indicator of areas of undisturbed Roman fabric.

- 4.47 Of the other walls of the western bath house, there is evidence that discreet areas have been rebuilt, such as the northern wall of room 12 and the wall between rooms 12 and 13 which were rebuilt in 1958 (CAIDs 131, 172; Richmond 1959, Irvine undated b), the doorway between rooms 10 and 14, which has been reset (CAIDs 154-7; Richmond 1959) and the western part of the boiler area which was shaded as modern on Fox's plan of 1886 (CAIDs 128-30).
- 4.48 To the north of the western bath house, the boiler stand is likely to have been rebuilt. Fox (1887) described the stand as having needed a good deal of repairing and the stand received further modifications in 1958 (CAIDs 135-9; Irvine undated c). It is also probable that the western wall of this area has been rebuilt (CAID 140, 151). It was higher on Fox's elevations of 1886, was consolidated in 1989 (Goodburn 1989) and investigations by BUFAU in 1995 concluded that only the lowest three courses of the interior face were likely to be undisturbed Roman fabric (BUFAU 1995). Investigations by BUFAU also suggested that most of the central wall in this area had been rebuilt (CAIDs 142, 145; BUFAU 1995). The doorway in this wall was unblocked in 1958 (Irvine undated c). A modern entrance was depicted on Fox's plan of 1886 in the northern wall (CAID 141), which has now been blocked. Photographs of 1994 (CA185) show that a small area of the easternmost wall has been rebuilt.
- 4.49 The western corridor, present to the east of the west wing, has been at least partially rebuilt. The southern stretch of wall was rebuilt in 1960 (Irvine undated c).
- 4.50 The areas with the greatest potential for Roman masonry to survive undisturbed in the west wing are those which were protected by shelters and, although the external walls of these are likely to have been levelled and heightened in 1864-6, Goodburn's investigations have demonstrated that Roman fabric survives to a reasonable height in the western wall of room 5. The walls of room 5a are almost all modern rebuilds and it is apparent that much rebuilding has taken place between the two covered buildings, although there is some potential for Roman material to be present along the eastern side of rooms 6, 7 and 8. The eastern area of room 16 also appears to have been largely unaltered.

The nympheum

- 4.51 Some rebuilding has taken place in the nympheum. Roger Goodburn's investigations of the rear, north-western wall suggested that much rebuilding has taken place at the south-western side, although in places Roman fabric may survive to the full height of the present wall at its rear (CAID 199; Goodburn elevation 93/2). Interestingly, an account of a visit to the villa in 1868 (Grover 1868, 131) suggests that the walls then stood to the height that they do today, perhaps suggesting that the walls were partially rebuilt before this date, immediately after excavation.
- 4.52 Fox's plans of 1886 show that features were present in the south-eastern end of the south-western wall (CAID 195). These cannot be seen today, suggesting that rebuilding has taken place since. Fox's plan also shaded the south-eastern area of the pool as modern. Fox's elevations have shown that the top courses and buttress of the north-eastern wall are modern (CAIDs 200-3).
- 4.53 Although some levelling up of walls has taken place at the nympheum, and some areas of wall have been rebuilt, Goodburn's investigations have shown that Roman fabric survives well above ground level at the back of the apse. There is also potential for Roman fabric to be present in the north-eastern wall of the nympheum.

The upper north wing

- 4.54 Starting at the western end of the upper north wing, historic photographs suggest that the wall to the west of room 19 (CAIDs 210-3) was higher in the early 20th century, and may have been rebuilt. Investigations in this area in 1988 concluded that almost all of the visible masonry was modern (Goodburn 2004). The central wall in room 19 was higher in 1886, and may have been rebuilt. Most of the western wall of room 19 was rebuilt in 1989, although investigations during conservation found some surviving Roman masonry in the northern corner (CAID 215; Goodburn elevation 89/1, Goodburn 2004).
- 4.55 The northern wall and south-eastern corner of room 22 were constructed in 1959, when the protective shelter was built (CAIDs 229, 239-40, 242-3, 245, 262; Richmond 1959), although the eastern and western walls were present before the shelter and were just levelled and consolidated (CAIDs 222, 227, 244, 246-7; Irvine

- undated c). Historic photographs also show that the doorway in the central wall of room 22 has been rebuilt (CAIDs 430-2, 441-3).
- 4.56 Some repairs have been made to the baths themselves in room 22. Fox's elevations of 1886 show that some areas are definitely modern (CAIDs 433-5). The rear wall of the southern bath (CAID 422) was higher on Fox's elevation of 1886, lower in photographs of 1927 (CA581) and the stonework of the entire bath appears different in 1934 (CA553), and so it is likely to have been rebuilt. Part of the southern area of the northern bath has been heightened since 1934 (CA585).
- 4.57 The walls of room 23 were heightened during the construction of the shelter in 1864-6, and Richmond (1959) thought that the northern wall (CAIDs 251, 264) had been almost entirely rebuilt. There is no evidence for the rebuilding of the internal structures within this room.
- 4.58 The southern wall of room 21 (CAIDs 233, 236) is definitely modern, having been constructed in 1959 (Irvine undated c). The steps to the south were restored at this time (CAIDs 313, 314, 234; Richmond 1959). The eastern wall of room 21 has also been at least partially rebuilt (CAIDs 235, 266). Comparison with Fox's elevations of 1886 shows that part of the southern end has been rebuilt, although the blocks of the doorway present in the wall were shown on the elevation. Historic photographs show that a set of steps were present at the north end, which have now been removed and the wall rebuilt. Work by BUFAU in 1995 also suggested that the northern part of this wall was modern.
- 4.59 To the south, there is little evidence of rebuilding in room 20, although the steps at the west are marked as modern on Fox's plan of 1886. Part of the western wall was higher in 1870 (CA580), and may have been altered since.
- 4.60 Fox's plans and elevations show that several areas of the eastern part of the upper north wing have been rebuilt, including the southern entrances to rooms 21a and 24a (CAIDs 268, 270, 279, 303) and the northern wall of room 24a (CAIDs 282, 305). Fox's elevation of 1886 shows the northern, apsidal wall of room 24 (CAID 278), but this could not be seen in a photograph of 1929 (CA546), suggesting it may have collapsed between these two dates. Investigations in 1995 suggested that the upper courses of the eastern and western sides were modern (BUFAU 1995). Other

investigations by BUFAU in this area concluded that the southern walls of rooms 21a and 24a (CAIDs 267-72, 279-80), and the eastern and western walls of room 25a (CAIDs 283-5, 299-301) are modern. These investigations have also suggested that the central and northern part of the wall between rooms 24 and 24a has been rebuilt (CAIDs 273 -5, 281).

- 4.61 Investigations by BUFAU and comparisons with Fox's elevations also suggest that at least the upper half of the northern walls of room 25 (CAIDs 289-93, 309-12) have been rebuilt. The eastern side of this room (CAID 297) also appears to have been rebuilt. The stonework does not match well with a photograph of 1919 (CA559), which also shows that the buttress projecting from this wall is also a rebuild (CAIDs 294-6). Richmond (1959) recorded that much stone had been robbed from the south wall of room 25 (CAIDs 298, 302-4), suggesting that the wall present today is modern.
- 4.62 The greatest potential for Roman fabric in the upper north wing is again in the area which has been protected by a shelter since its excavation, in room 23, although the walls have been heightened, and the northern wall is thought to have been rebuilt. There is also potential for Roman fabric to be present in the eastern and western walls of room 22, and the northern bath structure within room 22, although there is evidence to suggest that the southern bath may have been rebuilt. Fox's elevations and investigations of mortar in 1995 suggest that the northern wall of room 25 also contain Roman fabric above ground level. The stones of the blocked doorway in the eastern wall of room 21 may be Roman, although the rest of this wall has been much disturbed.

The lower north wing

4.63 There is evidence that most of the walls of the lower north wing have been rebuilt. The northern wall of the wing is likely to be a modern rebuild, as it was lowered in 1959 and the material used to build the shelter over room 22, suggesting that it was known to be modern at this time (CAIDs 315, 366; Irvine undated c). An area of this wall was investigated by Roger Goodburn, and very little of the superstructure is thought to be Roman (CAID 366; Goodburn 91/2, 91/1). The easternmost stretch of the northern wall was not depicted on Fox's plan of 1886.

- 4.64 Most of the north/south walls projecting from the northern wall of the wing appear to have been rebuilt. Most of the wall between rooms 26a and 27 (CAIDs 328-34) and the wall between rooms 31a and 32 (CAIDs 357, 359) are not depicted on Fox's plan of 1886. Irvine (undated c) records that the walls of rooms 30 (CAIDs 349-53, 345) and some walls within room 31a (CAIDs 354-9) were rebuilt in 1961. Irvine (undated b) also mentions that the eastern and western walls of room 29 (CAIDs 342-348) were rebuilt before 1950. In annotation to a photograph of this area in c.1900, he wrote 'All masonry showing was at the time of the photograph original work. Wall mortar has largely perished and this allowed walls to later on disintegrate rapidly. Most had been rebuilt by 1950'. This last comment appeared to include walls in a wider area than those in room 29, and is probably true for much of the lower north wing.
- 4.65 An area at the south of the eastern wall of room 27 was rebuilt before 1934 (CAIDs 335, 341; Irvine undated b) and the northern part of this wall was higher in 1927 (CAIDs 335, 341; CA4), suggesting that the whole wall has been rebuilt. The eastern and western walls of room 26 were also higher in the early 20th century (CA13), suggesting these walls may have been rebuilt.
- 4.66 The wall which defines the south of the rooms has less evidence for rebuilding. A short length between rooms 26a and 27 (CAIDs 328-9, 331-3) was not depicted on Fox's plan of 1886, and the eastern section (CAID 338) could not be seen in a photograph of 1927 (CA4), although it may not have been excavated at this time. The southern wall of the south corridor was rebuilt in 1967 (CAIDs 370-2; Irvine undated c).
- 4.67 It is probable that most of the lower north wing has been rebuilt. Historic photographs show that the walls here were capped with flat slabs, and Irvine (undated d) states that walls capped in this manner constantly needed repair. The greatest potential for intact Roman fabric is in the wall defining the northern side of the corridor.

5. CONCLUSIONS

- 5.1 Accounts of the discovery of the villa suggest that the walls of the villa stood to a reasonable height above the floor levels on excavation. However, the comparison of elevations of the villa produced in 2003/4 with historic photographs and drawings, as well as the use of information from archives and published articles, has demonstrated that much rebuilding has taken place at the villa since its excavation in 1864. The plotting of all the areas of known rebuilding allowed areas in which little modern disturbance has apparently taken place to be identified.
- 5.2 The areas of the villa with the greatest potential for Roman fabric to survive intact, where there is least evidence for modern rebuilding, are those which have been protected by the shelters constructed in the 1860s. These areas were sheltered from the elements during periods of neglect throughout the wars. The external walls of these structures have been heightened and levelled in the 1860s, but there is little evidence of alterations in these areas since.
- 5.3 There is also potential for Roman fabric to survive in the walls of room 22, which was covered by a protective shelter in 1959. A large amount of the northern and southern walls of the room were constructed at this time, but the eastern and western walls were already present. Within this room, there is potential for the northern bath to be undisturbed Roman fabric.
- Also in the upper north wing, there is potential for Roman masonry to survive in the northern walls of room 25, where Goodburn's investigations suggest that undisturbed masonry is present. A blocked doorway in the eastern wall of room 21 may be original Roman fabric.
- 5.5 The nympheum has potential to contain Roman fabric, in the north-western apse and north-eastern walls, as Goodburn's investigations have demonstrated. An area of masonry at the northern end of the eastern corridor has the potential to be undisturbed Roman fabric.
- 5.6 Although these are the areas with greatest potential, with little evidence of disturbance, they are not areas of definite Roman fabric. There are no records predating the first probable campaign of rebuilding in 1864-6 and so areas of

masonry built at this time have been impossible to map. Detailed records of rebuilding at the villa were not kept until the 1930s, when A. N. Irvine started his archive, and it is possible that areas of rebuilding took place in the early 20th century which it has not been possible to identify in this study.

5.7 The modernity of much of the visible superstructure of the villa does not detract from the importance of extensive deposits of intact stratigraphy which survive below current ground level. It is likely that in many instances the lower, subterranean courses of the walls contain Roman fabric. In addition, excavations in the 20th century have revealed *in situ* Roman deposits within rooms, surviving across much of the villa (Fig. 48).

6. FUTURE RESEARCH OPPORTUNITIES

- 6.1 Discussions with S. P. Bagshaw during a site visit to the villa, combined with the results of the fabric analysis, suggest that there is likely to be little value in mortar analysis as nearly all walls of the villa have been re-pointed. It is conceivable that careful demolition of the walls might indicate the limit of surviving core, and thus areas where intact fabric survives, but this is obviously a destructive process with no guarantee of obtaining much new information.
- Detailed consideration of stone size, sources and tooling are also likely to be of limited value due to the extensive nature of the rebuilding. It has been suggested that areas of modern rebuild are more regularly coursed, built of smaller blocks with less-distinct edges and faces than undisturbed Roman masonry (BUFAU 1995). However, these conclusions were drawn with reference to a small area of the villa (rooms 21a to 25) and have not been corroborated by the results of analyses in other areas, such as the northern wall of room 26 where investigations by Goodburn demonstrated that the modern fabric was constructed of larger blocks than the probable Roman fabric below.
- 6.3 Perhaps the most valuable technique would involve the removal of grass and earlier backfill to expose the lowest courses of walls, and in particular the interface between the walling and foundation. This may help to determine whether rebuilding has occurred from the foundations upwards.

This survey has shown the considerable degree to which the upstanding masonry has been rebuilt. Nevertheless, clearly considerable deposits of Roman stratigraphy are left, especially in the lower south wing, which has only been examined on a limited scale. Elsewhere, there is good reason to believe that stratigraphy survives, for it is clear that the Victorians ceased excavation at the top of the 4th-century surfaces, and investigation of earlier deposits has only occurred in limited areas.

7. ARCHIVE

- 7.1 Following the completion of the project, the archive will be deposited with the National Trust, at Chedworth Roman Villa. This will contain a compact disc with digital copies of this report in Microsoft Word format and all illustrations, including plans and elevations, in Adobe Illustrator version 8 format. A version of the plan in AutoCAD 2000 format will also be included, with a Microsoft Word document explaining the origin of the coordinates used in the survey.
- 7.2 All digital photographs used for the production of the elevations will be included on the compact disc in 'jpeg' format, having been given unique numerical file numbers. Plans in Adobe Illustrator version 8 will link these numerical file numbers with the elevations of the villa.
- 7.3 The compact disc will also contain a copy of the Microsoft Access database of historic photographs. This database includes digital copies of all of the historic images. A Microsoft Word document will be included, explaining how the database can be interrogated. A plan in Adobe Illustrator 8 format will show the CAID numbers for each area of masonry at the villa, which will be needed to search the database for images of particular elevations.
- 7.4 Original elevation drawings of those areas of the villa which it was necessary to draw by hand will also be deposited in the archive. Notes taken whilst surveying the villa for the production of the archaeological plan will be included.

8. CA PROJECT TEAM

8.1 Fieldwork was undertaken by Sam Inder, Mike Rowe, Gail Stoten and Richard Young, assisted by Darren Mudiman, John Naylor and Mo Patel. The fabric analysis was undertaken and the report written by Gail Stoten. The illustrations were prepared by Peter Moore. The archive has been compiled by Gail Stoten. The project was managed for CA by Neil Holbrook.

9. REFERENCES

Published sources

- CA (Cotswold Archaeology) 2000 Archaeological Survey of Buried Mosaics, CA typescript report **001195**
- CA (Cotswold Archaeology) 2002 Great Witcombe Roman Villa, Gloucestershire, a study of its fabric and environs, 1999-2000, CA typescript report **02050**
- Cleary, R., Goode, J., Bethell, P. and Cosh, S. 1998 'Archaeological investigations at Chedworth Roman Villa' in *Glevensis* **31**, 63-66
- Fox, G.E. 1887 'The Roman villa at Chedworth, Gloucestershire' *The Archaeological Journal* 44, 322-335
- Fox, G.E. 1895 'Notes on some probable traces of Roman fulling in Britain' *Archaeologia* **59**, 207-232
- Gloucestershire Echo 1930 'Chedworth Roman Villa: how it was found'. Published 16 April 1930, in *The Gloucestershire Echo*.
- Goodburn, R. 1981 'Chedworth Villa' Britannia 12, 233
- Goodburn, R. 1989 'Chedworth Villa' *The Transactions of the Bristol and Gloucestershire Archaeological Society* **107**, 254

- Grover, J.W. 1868 'On a Roman villa at Chedworth', *The Journal of the British Archaeological Association* **24**, 129-135
- Guise Bart, W.V. 1868 'Presidential address' *The Proceedings of the Cotteswold Naturalists Field Club* **4**, 201-202
- National Trust 2001 Chedworth Roman Villa, Conservation Plan, National Trust typescript report
- RCHME (Royal Commission on Historical Monuments (England) 1979 Ancient and Historical Monuments in the County of Gloucester, Volume 1: Iron Age and Romano-British Monuments in the Gloucestershire Cotswolds, London, Her Majesty's Stationery Office
- Richmond, I.A. 1959 'The Roman villa at Chedworth 1958-9' *The Transactions of the Bristol and Gloucestershire Archaeological Society* **78**, 5-23
- Rutter, E. 1957 'Chedworth Roman Villa, an exploratory trench' *The Transactions of the Bristol and Gloucestershire Archaeological Society* **76**, 160-4
- Scarth, P. 1869 'Roman villa at Chedworth' in *The Journal of the British Archaeological Association* **25**, 219-221

Unpublished sources

- Bishop, C. 1979 Letter to A. J. Finlinson dated 1st May 1979, held by The National Trust at Chedworth Roman Villa, Gloucestershire.
- BUFAU (Birmingham University Field Archaeology Unit) 1995 Archive from a programme of interpretive building recording carried out during conservation works at the villa, held by The National Trust at Chedworth Roman Villa, Gloucestershire.
- Fox, G.E. 1886 Drawings of a Roman Villa, Chedworth Gloucestershire, held by the Society of Antiquaries, London (roll room 3c, roll 9)

- Goodburn 1983 Excavation and conservation programme 1983 and other notes, held by The National Trust at Chedworth Roman Villa, Gloucestershire.
- Goodburn 1984 Elevation drawing 84/10, held by Roger Goodburn.
- Goodburn 1989 Elevation drawing 89/1, held by Roger Goodburn.
- Goodburn 1991 Elevation drawings 91/1, 91/2, 91/4, held by Roger Goodburn.
- Goodburn 1993 Elevation drawing 93/2, held by Roger Goodburn.
- Goodburn 2004 Notes supplied by Roger Goodburn concerning conservation work which took place at the villa, held by Cotswold Archaeology
- Irvine, A. N. 1965, Excavation at Chedworth Roman Villa, July 1965, held by The National Trust at Chedworth Roman Villa, Gloucestershire.
- Irvine, A. N. 1987 Interview recorded on 23rd July 1987, held by The National Trust at Chedworth Roman Villa, Gloucestershire.
- Irvine, A. N. undated a Album of photographs of Chedworth Roman Villa (red cover), held by The National Trust at Chedworth Roman Villa, Gloucestershire.
- Irvine, A. N. undated b Album of photographs of Chedworth Roman Villa (labelled 'album 2'), held by The National Trust at Chedworth Roman Villa, Gloucestershire.
- Irvine, A. N. undated c Excavation and work done, Chedworth Roman Villa, held by The National Trust at Chedworth Roman Villa, Gloucestershire.
- Irvine, A. N. undated d Chedworth Roman villa: some notes on the site by one who lived and worked there over a period of years, held by The National Trust at Chedworth Roman Villa, Gloucestershire.
- Irvine, A. N. undated e Chedworth Roman Villa: excavations on the site, held by The National Trust at Chedworth Roman Villa, Gloucestershire.

- Rutter, E. 1954 Excavations at Chedworth September 1954, account of excavations in room 4, held by The National Trust at Chedworth Roman Villa, Gloucestershire.
- Shoesmith, R. 1977 Excavations at Chedworth Roman Villa, Gloucestershire, 1977, an interim report, held by The National Trust at Chedworth Roman Villa, Gloucestershire.
- Sly and Sons 1971 Letter sent to N. Irvine dated 25th January 1971, held by The National Trust at Chedworth Roman Villa, Gloucestershire.
- Sly and Sons 1973 Letter sent to N. Irvine dated 1st February 1973, held by The National Trust at Chedworth Roman Villa, Gloucestershire.

APPENDIX A. INSTRUCTIONS FOR USE OF HISTORIC IMAGES DATABASE

The database entries can be accessed by opening the file, clicking once on 'Forms' in the menu on the left side of the dialogue box which comes up, and then double-clicking on the 'Table' icon in the window to the right.

Historic images can be viewed by double-clicking on the icon in the image window of each database entry.

To search for historic images of particular elevations:

- Identify the CAID for the chosen elevation on the CAID index drawing, in the 'Other archive material' folder of the CD.
- From the dialogue box which comes up when the database is initially opened, click once on the 'Tables' option on the left hand side and double click on the 'Rooms' icon to the right.
- Click on the icon on the icon bar with a picture of a funnel and a form behind (Filter by form) **or** go to 'Records' on the top tool bar, then 'Filter', then 'Filter by form'.
- Type the CAID number required into the now-blank CAID column.
- Click on the icon with a picture of a funnel on, on the icon bar, **or** 'Filter' on the top menu bar, then 'Apply filter/sort' on the next menu.
- The CA image numbers which are listed in the resulting table can be looked up in the database, and attached images viewed.
- To start the search again, first clear the previous filter by pressing the icon with the funnel on again **or** going to 'Records' on the top menu bar, then 'Remove filter/sort'.
- When closing the window it will ask if changes to the design of the table 'Rooms' should be saved. They should not be saved.