

8.35 MARBLE HILL HOUSE - ARCHITECTURAL PAINT REPORT (2004)

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MARBLE HILL HOUSE, TWICKENHAM

ARCHITECTURAL PAINT RESEARCH - ARCHIVE REPORT

MISS HOTHAM'S BEDCHAMBER AND EXTERIOR ELEMENTS

CLIENT: ENGLISH HERITAGE

CONTACT: ANN TOWERS

FEBRUARY 2004



ABSTRACT

This report details the architectural paint research of Miss Hotham's Bedchamber and exterior elements at Marble Hill House, Twickenham, London. This report has been compiled by Ian S-Crick. The research was undertaken by Ian S-Crick & Michael Smith of Crick Smith Conservation.

Cross-sectional paint fragments were removed from selected elements within the Bedchamber and from external joinery and render elements and mounted for cross-sectional analysis. The fragments were viewed under simulated daylight and UV illumination. Basic chemical spot testing was undertaken to identify the paint systems used. Extensive material analysis was not undertaken as part of this research exercise.

This report details the methodology followed for the research exercise and the findings of the investigations. The findings for each of the areas are discussed in turn and conclusions made on the original painted intention for the bedchamber and the exterior of the building. The surviving decorative histories of both are also fully recorded

The research identified that the original painted scheme within Miss Hotham's Bedchamber was typically Palladian in style with predominantly lead white joinery and vary dark red/brown skirting riser and architrave plinth blocks. The subsequent decorative schemes were mainly in lead white, presumably relying on the use of wallpapers for ornamentation.

Although the evidence for the original finishes on the exterior of the building was fragmentary, it clearly suggested that it may also have been an extremely plain scheme, with lead white wallface and joinery elements. Again this is typical of the restrained Palladian style.

For details of the research facilities and advice on the recreation of historic decorative schemes that Crick Smith Conservation are able to offer please contact Ian S-Crick directly using the details on the front of this report

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SECTION A – RESEARCH METHODOLOGY & BACKGROUND INFORMATION

1.0 Introduction

1.1 Clients brief (Aim of project)

This research was undertaken as part of an ongoing refurbishment and redecoration program. The exterior of Marble Hill House was due to undergo redecoration and repair. This provided the ideal opportunity to undertake an investigation into the surviving decorative history of the exterior. Principally this involved the investigation of the joinery elements and the various render and concrete surfaces. Although within the interior of the house the redecoration of Miss Hotham's Bedchamber had recently been undertaken, it was decided that as architectural paint research is a very discreet investigative procedure this would also be undertaken at the same time. The information could then be considered and implemented at some future point if it is decided that it is desirable to do so.

The researchers were commissioned by Ann Towers of English Heritage, to undertake these investigations and the results are recorded within this archive report.

1.2 Sources of Data

- Non-invasive investigation and observation of the painted surfaces of the painted exterior elements of Marble Hill House
- The cross-sectional analysis of a series of paint samples removed from the painted exterior elements of Marble Hill House
- Non-invasive investigation and observation of the painted surfaces of Miss Hotham's Bedchamber at Marble Hill House
- The cross-sectional analysis of a series of paint samples removed from the painted elements of Miss Hotham's Bedchamber at Marble Hill House
- Bryant, J. *Marble Hill House, Twickenham*. English Heritage property guide. 1998 revised edition.
- Draper, M.P.G. & Eden, W.A. *Marble Hill House and its owners. Chptr 10. (only) the restoration of the house*. Greater London Council 1970, (Provided by the client)
- Pevsner & Cherry, *The Buildings of England, London 2: South*. Penguin 2001 re-print

2.0 Areas of Investigation

2.1 Site Visits & Selection of Areas for Sampling

A site visit was made to Marble Hill House on the 18th February 2004, by Ian S-Crick & Michael Smith of Crick Smith Conservation. Before any sampling was undertaken the areas to be investigated were first examined for evidence of previous damage repair and replacement. Following from this small cross-sectional samples of the surviving paint layers were removed from the painted exterior elements and also the painted surfaces within Miss Hotham's Bedchamber.

2.2 Scope of Research

The research was limited to those elements and areas specified by the client. No additional sampling was undertaken on other elements or structures not specified within the original brief. The only archival and/or background information provided was taken from those sources detailed within point 1.2 previously. No additional archival and/or background information was provided by the client. If further archival research or paint analysis is subsequently undertaken then the findings and subsequent hypothesis within this report may require revision.

3.0 Examination of Cross-sections

The paint fragments removed from the elements of each area were examined at 40x magnification under a binocular microscope and representative cross-sections mounted in polyester resin for further cross-sectional analysis. The mounted samples were viewed at a range of magnifications from 40 to 500x under both simulated daylight and ultraviolet light in order that the stratigraphy and chronology of the decorative schemes could be understood and cross-referenced. Some basic media analysis of the paint layers was also undertaken using fluorescence techniques under UV illumination and chemical spot testing. Photomicrographs (photographs taken through the microscope) of key cross-sections were taken for inclusion within this report to support and clarify the information detailed. These graphically show, in cross-section, small samples of paint removed from various areas/elements. They illustrate the build-up of paint layers (successive decorations), through the buildings history. These are included within this report and are annotated with strata diagrams and explanatory text. The annotations describe the original decorative scheme and the relevance of the later layers. The colour descriptions detailed are generic, and the colours seen in the photomicrographs are representative only. The colours of the surviving paint layers may have altered since they were first applied. Pigments may have faded when exposed to strong light or atmospheric pollution, causing a lightening or darkening of the colour. Darkening of the paint media may also have altered the appearance of the paint.

4.0 General Background History

Figure 1). External view of Marble Hill House, South elevation, February 2004



Marble Hill House was built between 1724 and 1729 for Henrietta Howard, the mistress of George II, and later Countess of Suffolk. The house was extensively restored by the Greater London Council between 1965-66. The house was built by Roger Morris, the architect to Lord Ilay, who purchased the site for Mrs Howard. The design of the house was also influenced by Lord Herbert (later to become the 9th Earl of Pembroke) a leading influence in Palladian revival.

The house is stuccoed with stone dressing, with a projecting central bay on the north and south façades. The north façade also has Ionic pilasters above a rusticated basement storey. The roof is pyramidal with a modillion cornice.

The exterior of the building was extensively re-rendered and repairs made to the cornice and window treatments during the repairs of 1965-66.

SECTION B – INVESTIGATION FINDINGS

1.0 Miss Hotham's Bedchamber

1.1 Decorative Scheme Current at Time of Sampling

At the time of sampling the interior had very recently been redecorated in modern alkyd resin oilpaints. The joinery was decorated in a murky pale cream oilpaint with a grey/green applied to the upper wallfaces.

Figure 2). View of Miss Hotham's Bedchamber – March 2004



1.2 Research Findings & Conclusions

Despite major interventive works during 1965-66, extensive evidence for the original decorative scheme survived within the interior. Typically Palladian in style, the original decorative scheme was extremely restrained. The majority of joinery elements were plainly painted in a basic lead white oilpaint. The skirting risers and architrave plinth blocks were painted in a dark red/brown lead oilpaint. In some instances the doors would also be painted red/brown, however, within this interior the evidence on the door leading to Lady Suffolk's Bedchamber suggests that the faces of the doors were painted plain lead white. Unfortunately no evidence for the earliest scheme was identified on the upper wallfaces. In addition, the cornice, frieze and ceiling bed (incl. mouldings), were replaced during the 1965-66 works.

The chart on the following page, (figure 3), shows the full record of the surviving decorative history of Miss Hotham's Bedchamber. It can be seen that throughout the early history the joinery within the interior continued to be plainly treated with plain lead white oilpaint. Presumably the decorative emphasis was placed on the wallpapers applied to the upper wallfaces. The only exception during this phase is the use of mid pink in scheme 4. This scheme may date from the latter part of the eighteenth century, when pinks became a fashionable joinery colour for a short period, particularly when used in conjunction with greens. Although no green is seen here it is possible that the pink treatment was used to tie in with the coloration of the wallpaper.

Figure 3). Chart detailing the surviving decorative history of Miss Hotham's Bedchamber, with suggested attributed dates

Element	SHUTTER STILE	SHUTTER PANEL MOULDINGS AND PANEL BED	DOOR ARCHITRAVE LEADING TO LADY SUFFOLK'S BEDCHAMBER	DOOR LEADING TO LADY SUFFOLK'S BEDCHAMBER	ARCHITRAVE PLINTH BLOCKS AND SKIRTING RISERS	EGG AND DART MOULDING ON REVEAL TO ANTEROOM	DADO WALLFACE	WINDOW SASH	CORNICE AND HIGH LEVEL FRIEZE	CEILING BED AND APPLIED MOULDINGS
Scheme no.										
15). Applied 2004	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream alkyd oilpaint Pale cream zinc based oilpaint	Murky pale cream alkyd oilpaint Pale cream zinc based oilpaint
14). Extant 2003	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream alkyd oilpaint
13). 1965-66	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Murky pale cream modern alkyd oilpaint	Modern plain lead white oilpaint	Modern plain lead white oilpaint
12). Conversion to Park Keepers flat 11).	No scheme	No scheme	No scheme	No scheme	No scheme	Plain lead white oilpaint	No scheme	Plain lead white oilpaint	Modern plaster	Modern plaster
10.) Mid C19th	Pale blue lead oilpaint	Blued white lead oilpaint	Pale blue lead oilpaint	Pale blue lead oilpaint	Pale blue lead oilpaint	Blued white lead oilpaint	Blued white lead oilpaint	Blued white lead oilpaint		
9).	Pale cream lead oilpaint	Pale cream lead oilpaint	Pale cream lead oilpaint	Pale cream lead oilpaint	Pale cream lead oilpaint	Pale cream lead oilpaint	Pale cream lead oilpaint	Pale cream lead oilpaint		
8).	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint		
7).	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint		
6). Tidying scheme	Plain lead white oilpaint	Plain lead white oilpaint	No scheme	No scheme	No scheme	No scheme	No scheme	No scheme		
5).	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint		
4). Late C18th?	Mid pink lead oilpaint	Mid pink lead oilpaint	Mid pink lead oilpaint	Mid pink lead oilpaint	Mid pink lead oilpaint	Mid pink lead oilpaint	Mid pink lead oilpaint	Mid pink lead oilpaint		
3).	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint		
2).	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint		
1). Original scheme 1720's	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Two schemes of dark red/brown lead oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint		
Substrate	Softwood	Softwood	Softwood	Softwood	Softwood	Softwood	Softwood	Softwood		

Throughout this early period the main joinery colour was predominantly lead white, although this does vary in tone from very white whites to pale creams. During scheme 1, this was used with a very dark red/brown, a typically Palladian treatment.

Scheme 4, is a deviation from this however scheme 5 returns to this convention.

Scheme 6, is not a complete scheme, but is a tidying exercise applied to the shutters only.

The use of plain lead white continues until scheme 10. This scheme contains French ultramarine used to create a 'blued white'. French ultramarine was first created in 1825, manufactured in 1830, but was not widely used in housepaints until the middle of the century. The addition of blue to the white counterbalanced the natural yellow cast of lead white and also helped to reduce the further effects of yellowing caused by ageing of the paint film. Interestingly scheme ten was not overpainted on the majority of elements for a significant period of time. In fact it was only overpainted on the northern edge of the room initially in zinc based oilpaints and then lead until the early twentieth century. This differentiation between the northern and southern halves of the room presumably dates from the subdivision of the interior to create a kitchen and bathroom when this area of the house was converted into the Park Keepers flat by the Greater London Council.

During the works of 1965-66, the interior was re-established as a single space and the original ceiling replaced by a modern reproduction. The scheme applied at that time was a mixture of modern lead oilpaints, (applied to the new cornice, frieze and ceiling elements), and modern alkyds applied to the original joinery elements. The modern schemes applied have been undertaken in rather murky pale cream coloured oilpaints, presumably in imitation of aged traditional lead white oilpaint colours.

Figure 4). Detail of the doorway to Lady Suffolk's Bedchamber



Figure 5). Sample no. Mar.Hi.Ho/MHB/2.17

Door architrave plinth block leading to Lady Suffolk's Bedchamber



Description of layers

Schemes 13-15, modern murky pale cream alkyd oilpaints

No schemes 11 or 12

Scheme 10, blued white lead oilpaint. (containing French ultramarine, post 1830)

Scheme 9, pale cream lead oilpaint

Schemes 7 & 8 return to plain lead white oilpaints

No scheme 6

Scheme 4, mid pink lead oilpaint

Schemes 2 & 3, both of these schemes are in plain lead white opts

The first two decorations applied to the architrave plinth blocks are both in dark red/brown lead oilpaints. The earliest of which is applied over a plain lead white undercoat. Both of these decorations are part of scheme 1. Presumably the second application was to repair damage to the plinth block.

Substrate
Softwood

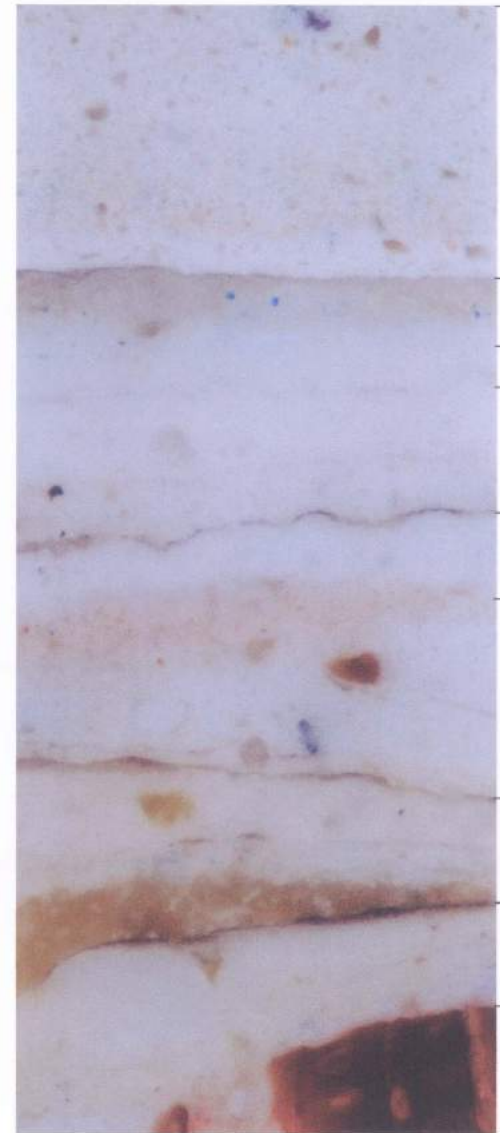
The dark red/brown seen in the sample above is a typically Palladian treatment commonly applied to skirting risers, plinth blocks and door leaves. The colour suggested mahogany or another exotic hardwood.

Figure 6). View from the Bedchamber through to the adjacent anteroom



Figure 7) Sample no. Mar.Hi.Ho/MHB/1.8

Shutter stile



Description of layers

Schemes 13 – 15, murky pale cream
modern alkyd oilpaint

No scheme 12

Scheme 10 pale blue lead oilpaint
(contains French ultramarine, post 1830)

Scheme 9, pale cream lead oilpaint

Schemes 6, 7 & 8, plain lead white oilpaint

Scheme 5 plain lead white oilpaint

Scheme 4 mid pink lead oilpaint

Schemes 2 & 3, two schemes of basic lead
white oilpaint

Original scheme of plain lead white oilpaint

Substrate
Softwood

Figure 8). Sample no. Mar.Hi.Ho/MHB/1.10

Shutter Panel Bed

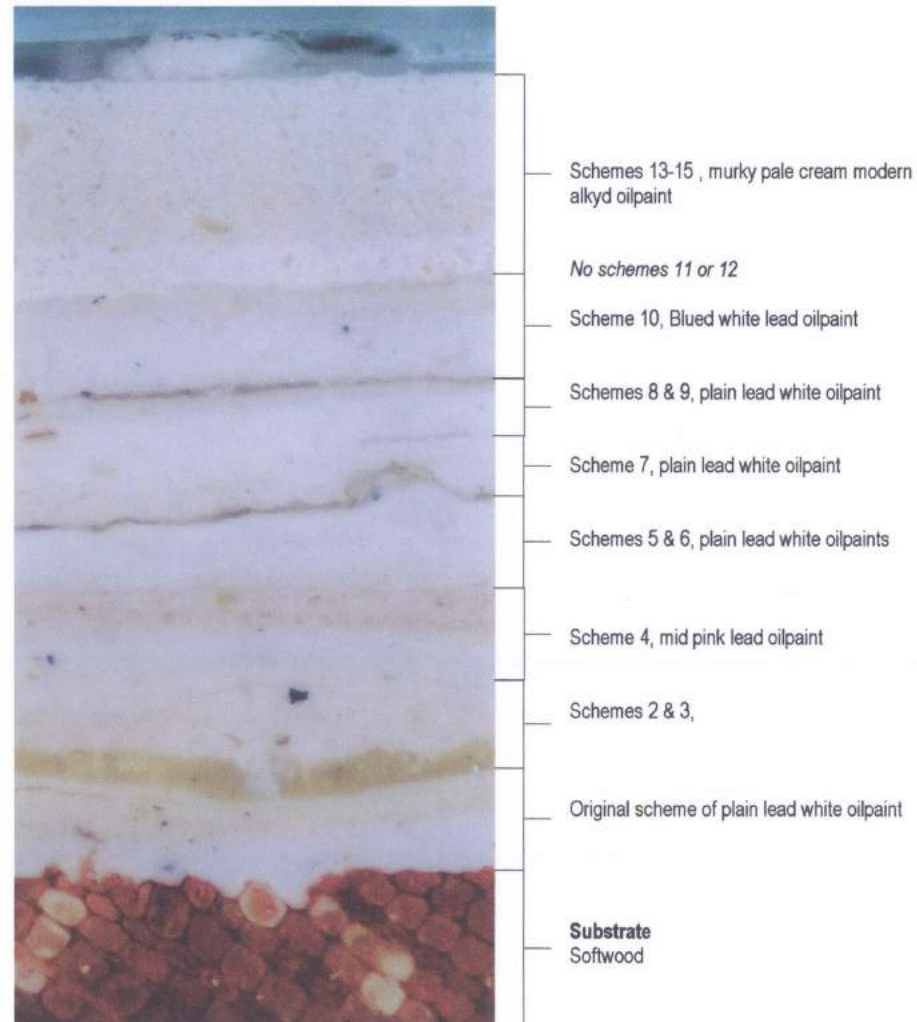
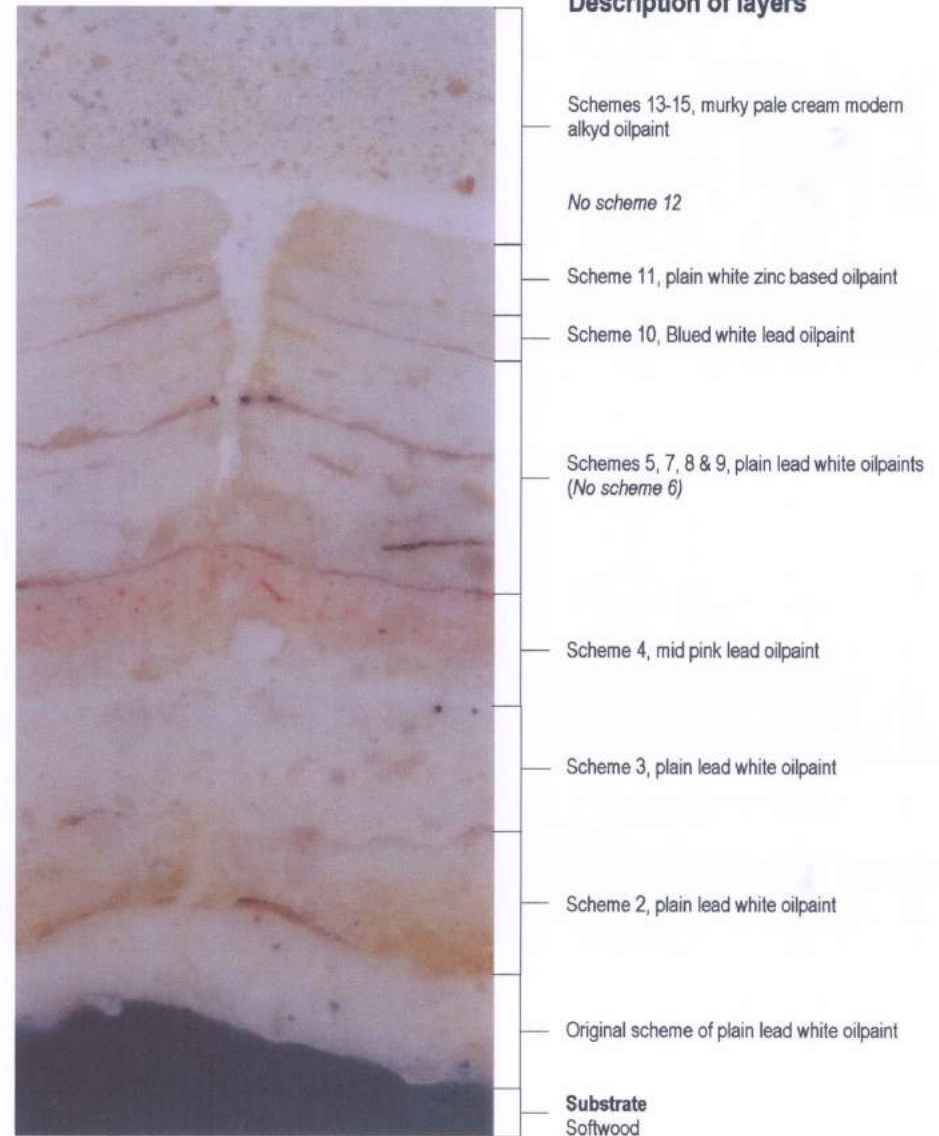


Figure 9). Sample no. Mar.Hi.Ho/MHB/3.34

Wall face window sash



2.0 The Exterior Elements

2.1) Decorative Scheme Current at Time of Sampling

The scheme current at time of sampling consisted of modern alkyd oilpaints. The joinery was painted plain white with modern yellow/cream (warm stone colour) applied to the render and composite elements.

Figure .10). . View of the South façade of Marble Hill House, showing the modern scheme as it appeared in February 2004



2.2). Research Findings & Conclusions

Evidence for a total of 27 schemes was identified on the exterior elements of the building. The earliest of these consisted of plain lead white oilpaint and this was identified on the north façade overdoor and on the representative window samples. Although the earliest evidence on the main door itself dates from scheme eight, it is also in a plain lead white oilpaint. This suggests that originally the joinery was all plainly painted. Lead white also occurs as the earliest phase on the render samples. Again this appears to be later but it may indicate that originally the architecture of the house was allowed to speak for itself and that the paint finishes applied were very plain, uniform lead white.

The chart illustrated in figure 11 records the full surviving decorative history of the house.

Figure 11). Chart detailing the surviving decorative history of the exterior elements of Marble Hill House, with suggested attributed dates

Element	NORTH FAÇADE OVERDOOR	REPRESENTATIVE EARLY WINDOW	NORTH FAÇADE MAIN DOOR	NORTH FAÇADE DOOR FRAME	SOUTH FAÇADE MAIN DOOR	SOUTH FAÇADE DOOR FRAME	RUSTICATED RENDER SAMPLES	UPPER WALLFACE RENDER SAMPLES	WINDOW SURROUND
Scheme no. Extant 2004 27)	Seven schemes of modern white alkyd oilpaint	Six schemes of modern white alkyd oilpaint	Seven schemes of modern white alkyd oilpaint	Seven schemes of modern white alkyd oilpaint	Seven schemes of modern white alkyd oilpaint	Seven schemes of modern white alkyd oilpaint	Six schemes of modern yellow/cream alkyd paints	Five schemes of modern yellow cream alkyd paints	Six schemes of modern yellow/cream alkyd paints
26)									
25)									
24)									
23)									
22)									
21) 1965-66		Mid stone coloured alkyd oilpaint					Mid stone coloured alkyd oilpaint	No scheme	Mid stone coloured alkyd oilpaint
20)	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Plain lead white oilpaint	Nine schemes of lead white oilpaints	Seven schemes of lead white oilpaints	Two schemes of lead white oilpaints Cementitious composite
19)	Pinky cream lead based oilpaint	Plain lead white oilpaint	Pinky cream lead based oilpaint	Pinky cream lead based oilpaint	Pinky cream lead based oilpaint	Pinky cream lead based oilpaint			
18)	Pale blue/green zinc based oilpaint	Plain lead white oilpaint	Pale blue/green zinc based oilpaint	Pale blue/green zinc based oilpaint	Pale blue/green zinc based oilpaint	Pale blue/green zinc based oilpaint			
17)	Mid yellow/green lead oilpaint	Plain lead white oilpaint	Mid yellow/green lead oilpaint	Mid yellow/green lead oilpaint	Mid yellow/green lead oilpaint	Mid yellow/green lead oilpaint			
16) Early C20th	Pale blue/green zinc based oilpaint with varnish over	Plain zinc white oilpaint	Pale blue/green zinc based oilpaint with varnish over	Pale blue/green zinc based oilpaint with varnish over	Pale blue/green zinc based oilpaint with varnish over	Pale blue/green zinc based oilpaint with varnish over			
15)	Pale blue/green lead oilpaint	Fifteen schemes of plain lead white oilpaint	Pale blue/green lead oilpaint	Pale blue/green lead oilpaint	Pale blue/green lead oilpaint	Pale blue/green lead oilpaint			
14)	Pale blue/green lead oilpaint		Pale blue/green lead oilpaint	Pale blue/green lead oilpaint	Pale blue/green lead oilpaint	Pale blue/green lead oilpaint			
13)	Mid yellow/green lead oilpaint		Mid yellow/green lead oilpaint	Softwood	Softwood	Softwood			
12)	Mid yellow/green lead oilpaint		Mid yellow/green lead oilpaint						
11)	Yellow/green lead oilpaint		Dark yellow/green lead oilpaint						
10)	Yellow/green lead oilpaint		Dark yellow/green lead oilpaint						
9)	Very dark yellow/green lead oilpaint		Very dark yellow/green lead oilpaint						
8) 1st scheme in evidence on the door	Plain lead white oilpaint		Plain lead white oilpaint						
7)	Blued white lead oilpaint			Softwood					
6)	Pale cream lead oilpaint								
5)	Mid cream lead oilpaint								
4)	Pale cream lead oilpaint								
3)	Plain lead white oilpaint								
2)	Plain lead white oilpaint								
1) Original scheme ?	Plain lead white oilpaint								
Substrate	Softwood	Softwood					Lime plaster	Lime plaster	

This chart records the full surviving decorative history of the exterior elements investigated. The evidence clearly shows that the original scheme applied to the overdoor and windows was of a plain lead white oilpaint. Although the first schemes on the door and render are later this are also plain lead white paints. This suggests that the original scheme may have been very basic, uniform lead white. The first colour scheme applied to the doors occurs in scheme 9. This is the first scheme of a green in a phase of ten schemes, before returning to a plain cream and white palette in scheme nineteen.

The current modern cream scheme is very similar to the original scheme

Figure 12). Exterior North façade, September 2003



The photograph above, (figure 12), shows the scheme current at time of sampling. This plain cream and white scheme is very similar to the original finish, although the evidence suggests that at that time the joinery and wallface elements were painted in the same lead white colour. At the present time the wallfaces are distinctly yellow/cream in tone and the joinery is brilliant white.

The sample seen on the right, (figure 13, shows the full surviving decorative history on the render samples. The similarity in tone throughout the buildings history is obvious.

Figure 13). Sample no. Mar.Hi.Ho/Ext/2.45

Exterior North elevation central block, first floor wallface render

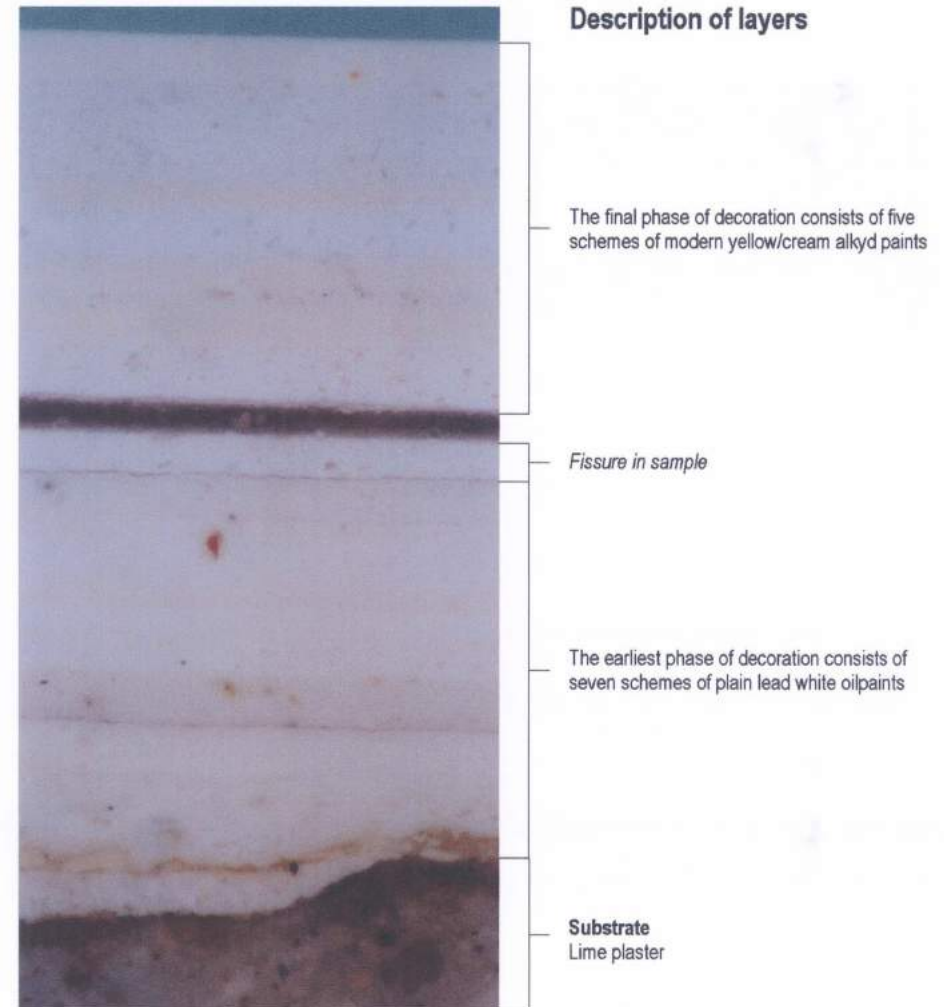
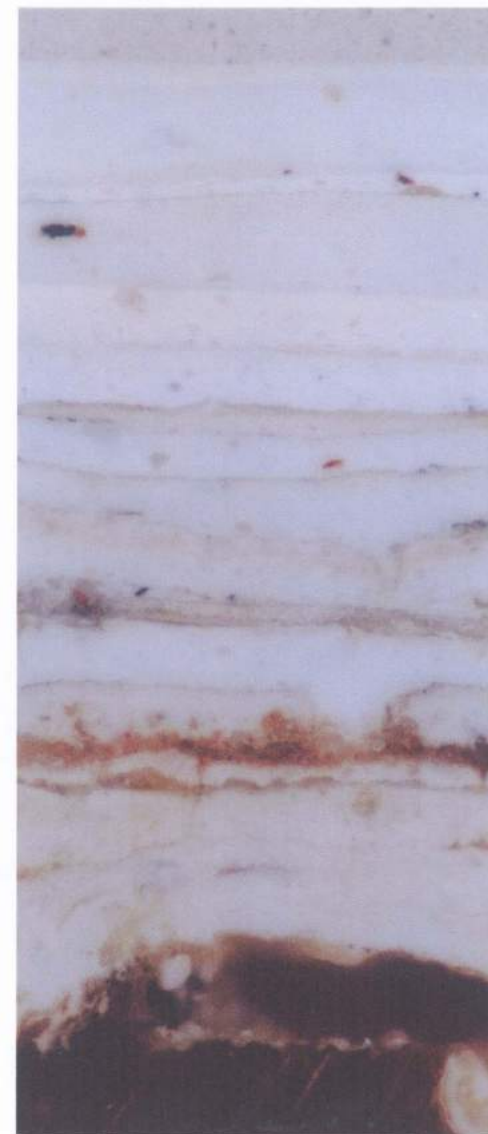


Figure 14). Exterior North façade, detail of the first floor central window



Figure 15). Sample no. Mar.Hi.Ho/Ext/2.44

Exterior North elevation central block, first floor exterior window joinery (representative)



Description of layers

— Scheme 21, modern mid stone coloured alkyd oilpaint. (schemes 22-27 in white alkyd oilpaints are not shown)

— Scheme 17-20.
Four schemes returning back to plain lead white oilpaint

— Scheme 16, a single scheme of plain zinc white oilpaint. This is distinctly early C20th in appearance

— Schemes 1 - 15
The first phase of decoration covers the major part of the buildings early history. The original intention of lead white windows was continued for a total of fifteen schemes. There is of course a slight variation on tone between these schemes, however it is unlikely that this was intentional.

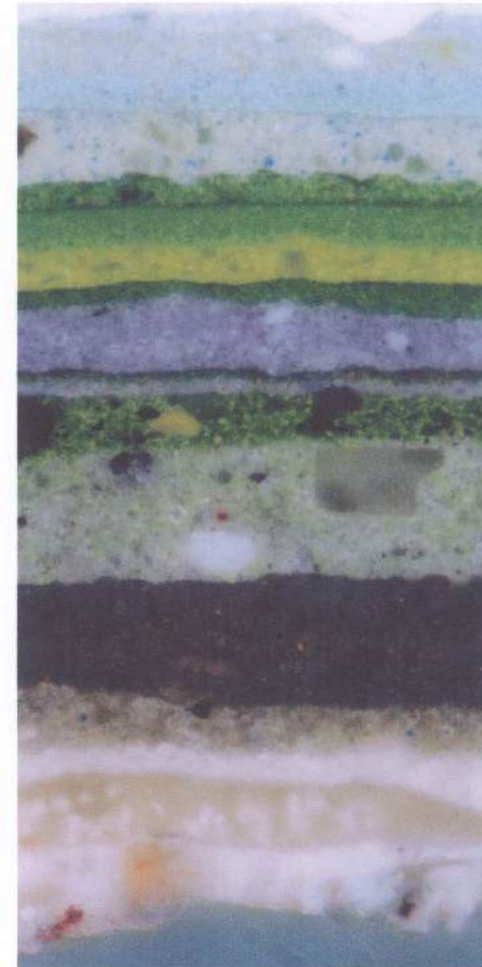
— **Substrate**
Softwood

Figure 16). Exterior North façade, Main Entrance Door



Figure 17). Sample no. Mar.Hi.Ho/Ext/1.40

Exterior North Façade Main Door



Description of layers

Later schemes not shown

Scheme 15, pale blue/green lead based oilpaint

Scheme 14, pale blue/green lead based oilpaint

Schemes 12 & 13, mid yellow/green lead based oilpaint

Schemes 10 & 11, two schemes dark yellow/green lead based oilpaint

Scheme 9, very dark yellow/green lead oilpaint

The earliest scheme in evidence on the door is scheme 8. This consists of plain lead white oilpaints.

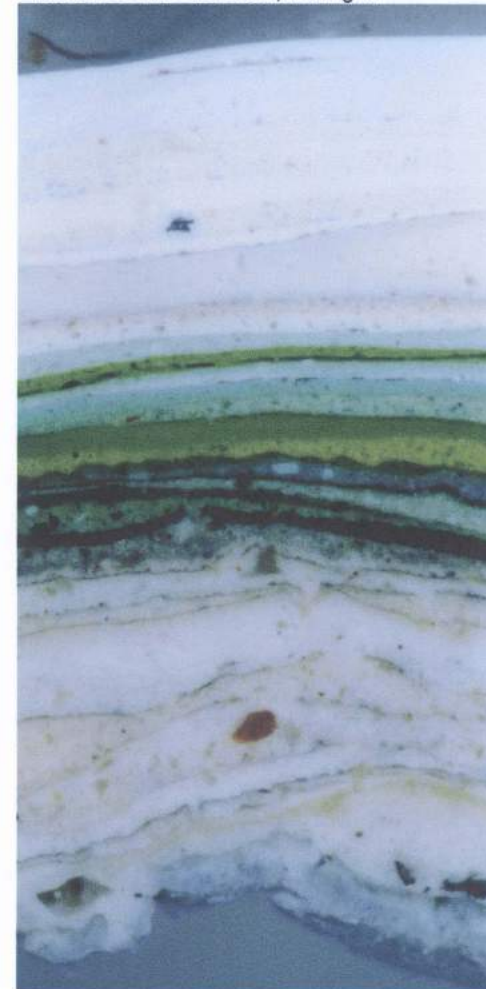
Substrate
Softwood (not shown)

Figure 18). Exterior South façade, main entrance door



Figure 19). Sample no. Mar.Hi.Ho/Ext/2.48

Exterior South Elevation, Fanlight



Description of layers

Seven schemes of modern white alkyd oilpaints

Scheme 20, plain lead white oilpaint

Scheme 19. Pinky cream lead based oilpaint

Schemes 9-18, various green lead oilpaint schemes as seen in figure 17 (previous page).

Schemes 1-8, all plain lead white oilpaints. These vary in tone from pale cream to a mid cream, however there is no distinct evidence for pigmentation. This suggests that the effect is due to contaminants within the oil drier and subsequent discoloration.
Scheme 7, blued white oilpaint (contains French ultramarine, post 1830)

Substrate

Lead (traces of oxidation)

APPENDICES

Appendix I Sample Location List/Cross-section Reference

MISS HOTHAM'S BEDCHAMBER, AND EXTERIOR ELEMENTS - MARBLE HILL HOUSE, TWICKENHAM

Sample Location List Cross-section Reference – 18th February 2004

Mar.Hi.Ho/MHB/1

1: Junction of wall face & architrave

2: Outer flat

3: Acanthus

4: Husk and reel

5: Outer fascia

6: Inner fascia

7: Bead and reel

8: Stile

9: Stile egg and dart (2)

10: Panel bed

Mar.Hi.Ho/MHB/2

11: Shutter Box (2)

Window architrave

Shutter

12: Stile

13: Egg and dart

14: Panel bed

15: Representative mouldings

16: Plinth block

17: Door detail, various

18: Egg and dart

19: Egg and dart to reveal

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20: Top flat

21: Upper acanthus

22: Large fascia

23: Large cyma

24: Bead and reel

Panel below window

Door architrave & door to Lady Suffolk's bedchamber

Door architrave and door revel to the anteroom

Dado rail

25: Dado wall face

26: Upper bead and reel

27: Large cyma

28: Large dart and floret

29: Riser

30: Above dado (South)

31: Above dado (North)

32: Cornice, representative

33: Ceiling bed, representative

34: Window sash

35: Chimney Breast corner husk and floret moulding

36: Chimney Breast, left hand side, junction of upper and lower wall face

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37: Rusticated render

38: Flat render to East end of central block

39: East side ground floor cill

Skirting

Wall face

Exterior North elevation

40: Main door

41: Central block, lead flashing

42: Central block, first floor reveal to East window

43: Central block, first floor render architrave to East window

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44: Central block, first floor exterior window joinery

45: Central block, first floor wall face render

46: Door frame to main door

47: Door

48: Glazed Fanlight

Exterior South elevation

Appendix II Material Analysis

MATERIAL ANALYSIS

The material analysis undertaken within this research was only at a minimum level. No positive pigment identification was undertaken. Where pigment names are given these are based upon visual identification only. If further clarification of these schemes is required, these pigments should be subjected to further material analysis.

The cross-sectional samples were viewed under both simulated daylight and ultraviolet illumination. This allowed the stratigraphy of the samples to be fully understood and provided an insight into the first appearance of schemes containing zinc compounds, which assisted with the dating of the layers.

Ultraviolet fluorescence was undertaken using an excitation filter of BP 340 – 380 nm wavelength. (Identification of metal driers and extenders within paint media)

Chemical spot testing was undertaken using Sodium sulphide ($\text{Na}_2\text{S} \cdot 9\text{H}_2\text{O}$) at 15% solution in distilled water. This chemical test identifies the presence of lead compounds within oilpaint films.

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