

Ancient Monuments Laboratory
Report 47/97

WALL PAINTING CONDITION AUDIT,
FORT CUMBERLAND, HAMPSHIRE

T Manning
S Stewart

AML reports are interim reports which make available the results of specialist investigations in advance of full publication. They are not subject to external refereeing and their conclusions may sometimes have to be modified in the light of archaeological information that was not available at the time of the investigation. Readers are therefore asked to consult the author before citing the report in any publication and to consult the final excavation report when available.

Opinions expressed in AML reports are those of the author and are not necessarily those of the Historic Buildings and Monuments Commission for England.

Ancient Monuments Laboratory Report 47/97

WALL PAINTING CONDITION AUDIT, FORT
CUMBERLAND, HAMPSHIRE

T Manning
S Stewart

Summary

This condition audit of wall paintings at Fort Cumberland includes a wall painting record, general audit information, documentation of original materials and execution of the painting, and deterioration and damage including previously used materials and treatment, as well as proposals for treatment and monitoring strategies.

Authors' addresses :-

Ms T Manning
PAINTINGS CONSERVATION STUDIO
English Heritage
Inner Circle Regents Park
London
NW1 4PA

Ms S Stewart
PAINTINGS CONSERVATION STUDIO
English Heritage
Inner Circle Regents Park
London
NW1 4PA



Fort Cumberland Hampshire

The following report has been generated by the Wall Painting Section database. This archival system provides a computerised record of all wall paintings in English Heritage Historic Properties and is intended to comprehensively document the collection. Each report has been subdivided into four sections to present the data in a clear format. These include:

1 Wall Painting Record:

Includes a description of the site and paintings, as well as archival information, such as bibliographic references and photographic records.

2 General Audit Information:

Describes any monitoring undertaken and a synopsis of future conservation requirements.

3 Technique:

Documents the nature and condition of the original materials and execution of the painting which is described according to its stratigraphy and any related analysis.

4 Deterioration and damage, added materials, treatment:

Deterioration and damage lists the types of alterations which may have occurred, that is either deterioration (natural alterations such as cracking or delamination) or mechanical damage (such as graffiti).

Added Materials documents all non-original materials present on or within a painting. These may include naturally occurring substances (accretions, such as dirt and dust) or deliberately added materials (coatings, coverings and repairs).

Treatment documents previous interventions and proposed treatment and monitoring strategies.

Throughout each section, an area of painting is assigned a number between 1 and 4 which is intended as a general indication of present condition. These are: 1 good, 2 fair, 3 poor, 4 unacceptable.

This report is based on information gathered prior to March 1996 and does not include any changes in condition, further research or treatment undertaken after this date. Amended editions will be produced as necessary.

1 Wall Painting Record

Property name	FORT CUMBERLAND		
Region	South East	County	Hampshire
Location of painting	Detention cell		
Orientation	TO BE CONFIRMED		
Century 19 th	Date	Height (cm)	Width (cm)
Subjects included			
Graffiti			

Description

The vault of the detention cell contains remnants of incised graffiti, including inscriptions and representations of boats, dating to after c.1800.

A fuller description can be made pending further information about the site.

Photographic Record

needs to be checked

11/7/96 TM/SS colour slides

Bibliography

needs to be checked

2 General Audit Information

Property name	FORT CUMBERLAND	County	Hampshire
Region	South East		
Location	Detention cell		
Orientation	TO BE CONFIRMED		
Century 19th	Date	Height (cm)	Width (cm)
Auditor(s)	TM/SS	Start date 11/07/96	

Overall condition score **4**

Recommendations

Although this incised graffiti cannot be described as a wall painting (in that no applied paint layer exists) it is nevertheless a significant survival and worthy of preservation. Due to the density and compactness of the render layer, the condition of certain areas is fair. Nevertheless, despite the fact that the room is partially sheltered from the external environment, the interior is currently exposed to a persistent and unacceptable level of infiltration of liquid moisture. This is causing excessive salt crystallisation, general surface accretions, biodeterioration and consequently severe disruption of the render and overlying limewash layers.

Any options for treatment and overall presentation are therefore redundant until repairs have been undertaken to rectify the structural faults within the fabric of the building. In particular, an external stairway, which runs directly above, shows large cracks and losses which must be allowing the free passage of moisture direct to the room below.

Once this infiltration has been rectified and the environment partially stabilised treatment could then include:

- uncovering of patchy areas of overlying limewash which would aid in unifying the appearance of the wall surfaces as a whole and may reveal further graffiti. This is not recommended before the structure has been repaired as areas of limewash may presently be acting as a sacrificial layer for salt crystallisation.
- general maintenance, including dusting, removal of cobwebs and insect activity, removal of plants and debris
- removal of the salt crystallisation and general surface accretions
- removal of the extensive biodeterioration
- recording and documentation

[Approximate timescale: 2 conservators, 4-6 weeks].

3 Audit Information: Technique

Property name	FORT CUMBERLAND		
Region	South East	County	Hampshire
Location	Detention cell		
Orientation	TO BE CONFIRMED		
Century 19th	Date	Height (cm)	Width (cm)
Auditor(s)	TM/SS	Start date	11/07/96

Overall Condition Score **4**

Stratigraphy

Layer type	Support Layer	Specific condition Score	4
Thickness	cm		

Comments

Brick walls and vault. Thickness unknown. The pointing is failing throughout the lower walls.

Layer type	Render Layer 1	Specific condition Score	2
Thickness	cm		

Comments

There is probably only one render, consisting of a lime/sand mix. This is dark brown in colour, extremely hard with a very smooth finish and a coarse to medium aggregate content. Apparently, slag was found to have been used as a mortar component elsewhere in the building complex and it is possible that it is present here (pers.comm. J.Roebuck).

Layer type	Ground Layer 1	Specific condition Score	3
Thickness			

Comments

The main painted scheme is very damaged in certain areas. It appears to have been heavily abraded and smeared and has been softened and absorbed by an application of limewash over the central area. In several places the design survives only as a 'ghost' with the painted image apparently in reverse. To the southern side there are a few coarse edge repairs to the plaster panels.

Where the plasterer has attempted to brush excess repair plaster from the surface - presumably with a wet brush - the paint has been dissolved and smudged, indicating that the paint is water soluble. Visible colours include black, red, green, white, yellow and blue. The blue has a greyish hue and may be an optical blue mix of black and white.

4 Audit Information: deterioration and damage, added materials, treatment

Property name	FORT CUMBERLAND		
Region	South East	County	Hampshire
Location	Detention cell		
Orientation	TO BE CONFIRMED		
Century 19 th	Date	Height (cm)	Width (cm)

DETERIORATION AND DAMAGE

Deterioration phenomena

Type cracking

Location generally

Comments The source of the current infiltration would appear to be a long crack in the vault which must be allowing the ingress of moisture from the external stairway above the cell. There is also a large crack in the brickwork of the outer wall which may indicate movement.

Type staining

Location general staining and drip-marks

Comments Caused by persistent infiltration of liquid moisture. In areas this is deep brown/red in colour, presumably caused by the leaching of iron oxide from the brick support.

Type Alveolar deterioration

Location present throughout

Comments Presumably caused by repeated cycles of salt crystallisation.

Type general erosion

Location yellow limewash ground

Comments The yellow limewash ground through which the graffiti has been incised is generally very thin and abraded. However, very little delamination was noted.

ADDED MATERIALS

Accretions

Type biodeterioration

Location over doorway and lower walls

Comments extensive

Type surface 'veil'

Location general

Comments White 'veil' clearly associated with persistent infiltration. In areas this is so severe it has formed hard, dense 'stalactite' formations.

Type dirt

Location general

Comments

Type dust

Location general

Comments

Type cobwebs

Location throughout

Comments

Type salt efflorescences

Location general

Comments Fine veil in vault; fluffy efflorescences in pointing.

Type plants

Location floor and lower walls

Comments extensive

Coatings/Coverings

Type limewash

Location general

Comments The room has clearly been redecorated at various stages. However, these layers are now very patchy in appearance. No further decoration is apparent.

TREATMENT

Proposed Treatment

Type BIODETERIORATION REMOVAL **Date** 11/07/96

Person TM/SS

Comments Not only is the removal of the biodeterioration a necessary intervention to prohibit further deterioration of the render layer but would dramatically improve the appearance of the walls.

Type DUSTING **Date** 11/07/96

Person TM/SS

Comments General maintenance is necessary to remove dust, cobwebs and insect activity, plants and debris.

Type SALT REMOVAL **Date** 11/07/96

Person TM/SS

Comments Not only is the removal of the heavy salt incrustations a necessary intervention to prohibit further deterioration of the render layer but would dramatically improve the appearance of the walls.

Type STRUCTURAL REPAIRS **Date** 11/07/96

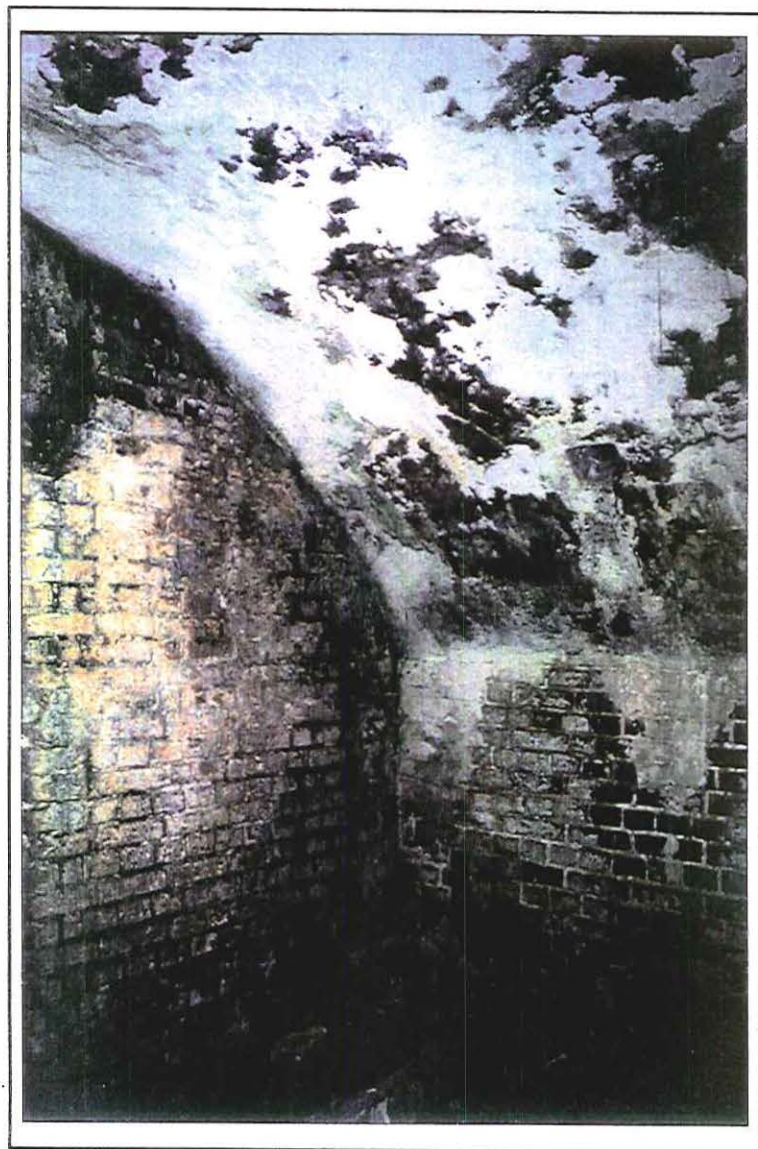
Person TM/SS

Comments The interior of the cell is suffering from persistent and highly damaging infiltration of liquid moisture, caused by structural failure in the vault above. This has to be rectified before any proposed treatment can be carried out.

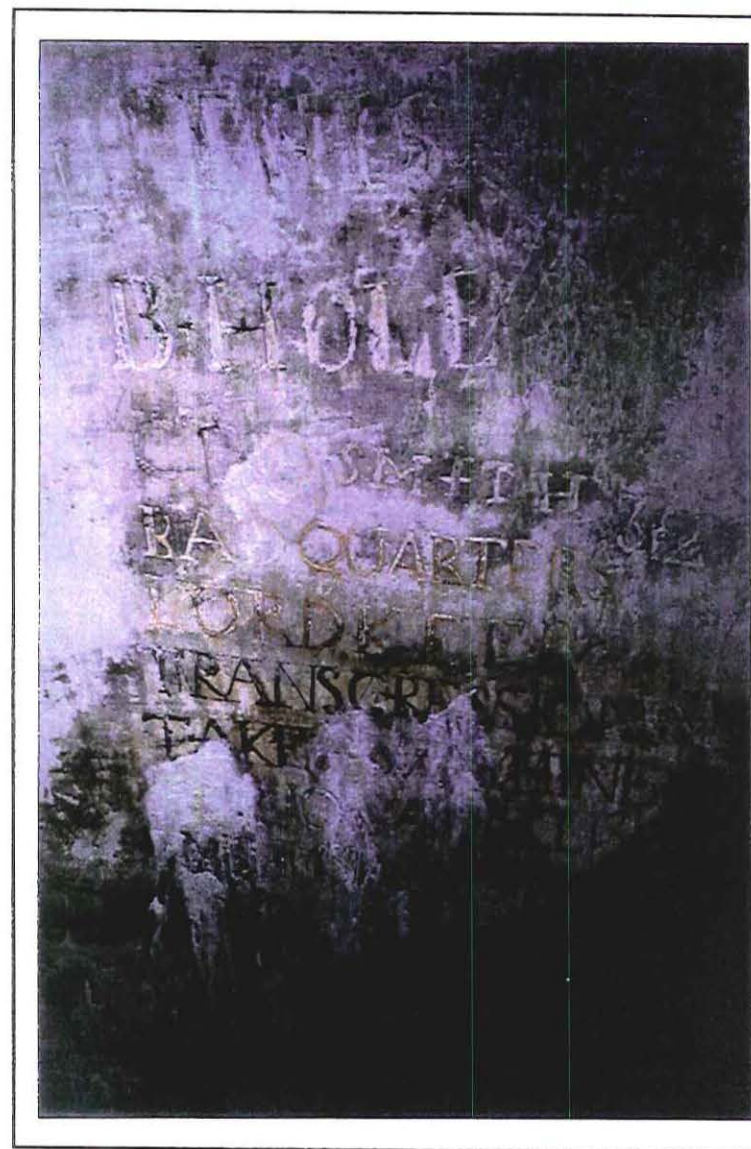
Type UNCOVERING **Date** 11/07/96

Person TM/SS

Comments The removal of overlying limewash could be undertaken at some stage which could reveal further graffiti.



Detention block, general view of corner with inscription



Detail, incised inscription