

Ancient Monuments Laboratory  
Report 27/97

WALL PAINTING CONDITION AUDIT,  
TILBURY FORT, ESSEX

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T Manning

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Summary

This condition audit of wall paintings at Tilbury Fort 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.

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## Tilbury Fort

Essex

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

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<b>Property name</b>	TILBURY FORT		
<b>Region</b>	Midlands	<b>County</b>	Essex
<b>Location of painting</b>	Dead House		
<b>Orientation</b>	WEST WALL		
<b>Century</b> 17 <sup>th</sup>	<b>Date</b>	<b>Height (cm)</b> 200	<b>Width (cm)</b> 450
<b>Subjects included</b>			
Figurative			
Figure(s), male			

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## Description

Tilbury Fort was designed by Sir Bernard de Gomme (1620-85), Charles II's Chief Engineer and Surveyor General of the Ordnance. The present buildings were constructed on the site of earlier fortifications constructed for Henry VIII in 1539.

The strategic importance of Tilbury was its situation on a narrow bend of the Thames opposite Gravesend (which was also fortified with gun batteries) which provided a strong position from which to defend London from marine incursion.

The Landport Gate (in which the Dead House is situated) is constructed in Portland Ashlar. The Dead House is a rectangular room over the gate passage. It has a pyramidal tile roof and two square unglazed windows, each with a pair of wooden shutters. (Saunders, 1990:10)

The Dead House is thought to have been used as a morgue and infirmary for patients with infectious diseases. The painting/graffitti is thought to date from the seventeenth century.

The wall paintings comprise red line drawings of 'the head and shoulders of a man in seventeenth-century dress, smoking a clay pipe, with a full tankard in his other hand. Also outlined in red paint is an eagle-like bird.' (Saunders, 1990:10)

## Photographic Record

29/6/94 EH 'current' contact photo files; no images of wall paintings. Images of graffitti requires search.

DOE negative search;

Tilbury Fort

11-12-59

A5417/1-5 'Wall paintings in Dead House Tilbury Fort'

## Bibliography

Saunders, A.D. 'Tilbury Fort, Essex', English Heritage Guide Book, London, first published by HMSO 1980, first published by English Heritage 1985, reprinted 1990.

## 2 General Audit Information

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<b>Property name</b>	TILBURY FORT	<b>County</b>	Essex
<b>Region</b>	Midlands		
<b>Location</b>	Dead House		
<b>Orientation</b>	WEST WALL		
<b>Century</b> 17th	<b>Date</b>	<b>Height (cm)</b> 200	<b>Width (cm)</b> 450
<b>Auditor(s)</b>	TM/JD	<b>Start date</b>	23/02/95

**Overall condition score**      **4**

### Recommendations

Structural repairs appear to be necessary.

The painted plaster requires urgent conservation treatment, but this work should be undertaken in conjunction with structural repairs. Removal of old unsuitable repairs is required, together with plaster consolidation, lime-based repairs and possibly cleaning.

[Timescale: 3 conservators, 1 month, as soon as possible].

### 3 Audit Information: Technique

<b>Property name</b>	TILBURY FORT		
<b>Region</b>	Midlands	<b>County</b>	Essex
<b>Location</b>	Dead House		
<b>Orientation</b>	WEST WALL		
<b>Century</b> 17 <sup>th</sup>	<b>Date</b>	<b>Height (cm)</b> 200	<b>Width (cm)</b> 450
<b>Auditor(s)</b>	TM/JD	<b>Start date</b> 23/02/95	

**Overall Condition Score      4**

**Stratigraphy**

<b>Layer type</b>	Support Layer	<b>Specific condition Score</b>	4
<b>Thickness</b>	40 cm		

**Comments**

Red brick walling. The site is exposed and damp. There are external cracks within and between many of the bricks. The pointing appears to be re-pointing rather than original; it contains coarse aggregate bound in a cement-type mortar.

<b>Layer type</b>	Render Layer 1	<b>Specific condition Score</b>	4
<b>Thickness</b>	2 cm		

**Comments**

The walls are plastered from floor level up to around 30 cm below the beams of the ceiling. This may suggest a lower lath/reed and plaster ceiling which has been removed. The render is an interesting mix which includes red brick, grey stone, chalk? and hair additives, probably in a lime binder. It is not clear whether the brick was included intentionally as a pozzolanic material or simply as a readily available aggregate.

<b>Layer type</b>	Ground Layer 1	<b>Specific condition Score</b>	4
<b>Thickness</b>			

**Comments**

A thin slightly pinkish limewash ground appears to be present.

<b>Layer type</b>	Paint Layer 1	<b>Specific condition Score</b>	4
<b>Thickness</b>			

**Comments**

Direct monochrome drawing, probably executed using red earth pigment (need analysis to confirm).

<b>Identified pigments</b>	<b>Colours</b>
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## 4 Audit Information: deterioration and damage, added materials, treatment

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Property name	TILBURY FORT		
Region	Midlands	County	Essex
Location	Dead House		
Orientation	WEST WALL		
Century 17 <sup>th</sup>	Date	Height (cm)200	Width (cm) 450

### DETERIORATION AND DAMAGE

#### Deterioration phenomena

**Type** delamination (render layer)

**Location** General.

**Comments** Extensive delamination of render and ground layers has occurred.

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**Type** salt activity

**Location** General.

**Comments** Severe deterioration has been caused by the presence of moisture and soluble salts. White veils, pustules, crusts and deposits of salt are present on the surface of the paint and ground layers. Powdering, delamination of render and disintegration of the render has occurred due to salt activity.

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**Type** cracking

**Location** Vertical - north side: diagonal - south of centre.

**Comments** Cracking may be the result of some structural movement but is probably more likely to be the product of delamination of the fragile render layer.

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#### Mechanical damage

**Type** nail holes

**Location** Noted on south side.

**Comments** Old nails are still present in the wall. These nails are corroded and rusting.

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**Type** graffiti

**Location** Especially north side.

**Comments** Incised graffiti appears to be of some age and therefore has historical interest.

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## ADDED MATERIALS

### Accretions

**Type** dirt

**Location** Surface.

**Comments** Considerable quantities of dirt are embedded in the painted surface which is dark, disfiguring and obscures the painting.

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**Type** dust

**Location** Surface.

**Comments** The room is extremely dusty and quantities of dust are adhering to the painted surface.

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**Type** cobwebs

**Location** Especially upper edge of render layer.

**Comments** Numerous cobwebs (many appear to be of some age) are present on the painted surface.

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### Coatings/Coverings

**Type** limewash

**Location** Noted on south side.

**Comments** Fragments remain of a 'grey' limewash coating which overlies the earlier painting. N.B. there is pencil graffiti over the 'grey' limewash on the south side of the wall. This graffiti appears to be relatively modern but its dating should be considered further.

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### Repairs

**Type** cement

**Location** South edge of wall, patches to centre and north side and at low level.

**Comments** Large and small repairs have been carried out in what appears to be an inappropriate cement-type mortar. Drips of what also appear to be a cement-type substance are present on the lower areas of the painting.

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**Type** modern plaster

**Location** Mainly upper edge, but also some small repairs.

**Comments** This mortar appears to be of lime gauged with a small part of cement. Unfortunately this mortar is very hard and therefore unsuitable.

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## TREATMENT

### Past Treatment

**Type** FILLS/REPAIRS INSERTION      **Date** 01/01/00

**Person** Unknown

**Comments** Repairs which appear to be lime gauged with a small amount of cement have been inserted at an unknown date. No record of this treatment has been found in the EH wall Painting Conservation records. The use of inappropriate hard mixes has failed to fully support and protect the original work.

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### Proposed Treatment

**Type** CLEANING      **Date** 23/02/95

**Person** TM/JD

**Comments** Cleaning could considerably improve the legibility and appearance of the paintings. If the original paintings are to be cleaned as part of conservation work it is vital to prevent immediate re-soiling of the paint layer by the large quantities of dust presently in the room.

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**Type** CONSOLIDATION      **Date** 23/02/95

**Person** TM/JD

**Comments** Plaster consolidation is required. Lime-based treatment would probably be utilised following analysis of the original mortar.

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**Type** FILLS/REPAIRS INSERTION      **Date** 23/02/95

**Person** TM/JD

**Comments** Many repairs are required to support vulnerable areas of original plaster.

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**Type** FILLS/REPAIRS REMOVAL      **Date** 23/02/95

**Person** TM/JD

**Comments** Unsuitable previous repairs should be carefully removed where practicable. Old repair mortar should be removed from the original plaster immediately, in order to prevent further deterioration from salts.

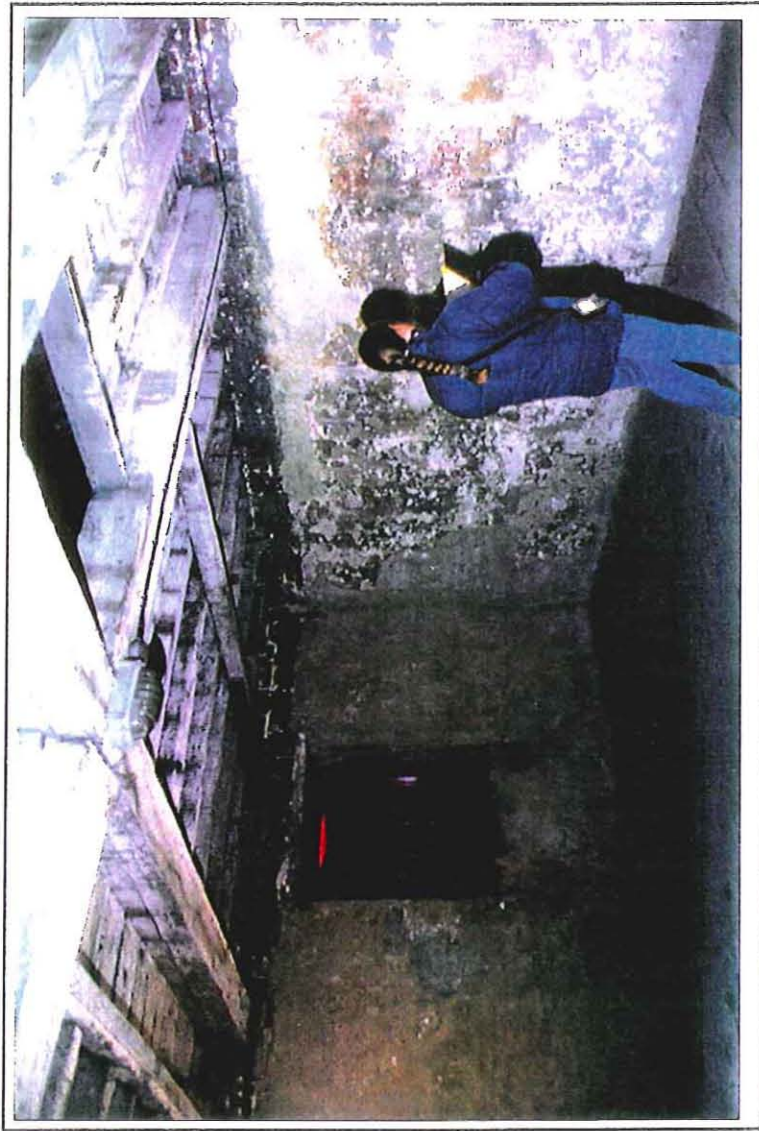
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**Type** STRUCTURAL REPAIRS      **Date** 23/02/95

**Person** TM/JD

**Comments** External cracking of the support appears to require treatment. This is the province of the regional inspector and their team. Detailed comments are beyond the scope of this report.

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Dead House, general view to southwest



West wall, detail, man with pipe