

# STOKES HOUSE, HAM STREET



## Heritage, Design and Access Statement Planning Application

Strip off the modern non-breathable paint from damaged brickwork on the western two storey block of Stokes House and apply a traditional breathable lime render

Stokes House  
Ham Street,  
Richmond  
TW10 7HR

August 2024

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## Introduction

Stokes House is a semi-detached Georgian three storey, five bedroom home, built circa 1760 and originally owned by the Dysart Estate, sitting on a plot of approximately half an acre within a large walled garden, with mature yew and box hedging, herbaceous borders, many roses and interesting trees and shrubs. Off-street parking, car-port and indoor swimming pool. The building is a Building of Townscape Merit and is not a statutory listed building, but it is within the boundaries of the Ham House Conservation Area - CA 23. There are currently several existing TPOs on site, these have been considered with the proposal.

This document outlines our proposal to strip off the modern non-breathable paint from damaged brickwork on the western two storey block of Stokes House and apply a traditional breathable lime render. This will be implemented alongside the approval that has recently been granted for the applications 23/3452/HOT and 24/1351/HOT, which involves the replacement of the swimming pool with a new extension to the kitchen and living spaces for the house and updating the western fenestration.



Fig. 01: Site location plan showing outline of site at Stokes House, Ham



*Fig. 02: Aerial photograph showing outline of site at Stokes House, Ham*

## **Assessment of the site and surrounding area**

The existing property sits between Back Lane and Ham Street. Originally called Stokes Hall, the building was split into two properties, currently they are interwoven at the party wall, now named Stokes House and Bench House. Located centrally in Ham, close to Ham Common, the property has dual access, with the main pedestrian access from Ham Street and pedestrian & vehicle access from Back Lane.

The Georgian property is believed to have been constructed circa 1760. The earlier parts of the building are a combination of white painted brick and white render with the modern extension containing the swimming pool in standard facing brick, with the outer boundary wall facing Ham Street in painted modern cement render. It is situated in Ham within the boundaries of the Ham House Conservation Area - CA 23.



*Fig. 03 Bench House, Ham Street*



*Fig. 04 Stokes House Entrance, Ham Street*



*Fig.05 Gate Entrance, Back Lane*

The site has two main entrances, the primary one (to the east) with which the address is associated, has a pedestrian door directly onto Ham Street (Fig.04). There is also a vehicle/pedestrian entrance via Back Lane (Fig.05) to the west, allowing for additional access to the house via the front door, from this side.

### **Conservation Area**

Stokes House sits within the Ham House Conservation Area No.23. First designated in 16.09.1975 and extended in 07.09.1982 and 03.09.2007.

## Building of Townscape Merit

The property is locally listed as a Building of Townscape Merit (BTM)

83/02237/BTM Stokes House, Ham Street, Ham, Surrey TW10 7HR

HPR - HAM, PETERSHAM, RICHMOND RIVERSIDE - 05/09/1983 : Ham, Ham Street, Ham TW10 7HR

## Existing property

### Heritage

The analysis of historic maps and images reveals that Stokes House was originally a single structure named Stokes Hall before it was divided in 1972 into Bench House and Stokes House. These maps indicate that the majority of the original building included both what we now know as Stokes House and Bench House, along with a modern swimming pool extension.

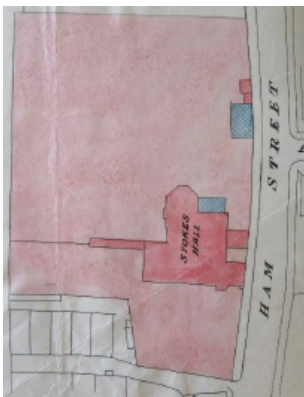


Fig.06 - 1899 Plan



Fig.07 - 1958 Map



Fig.08 - 1982 OS Map

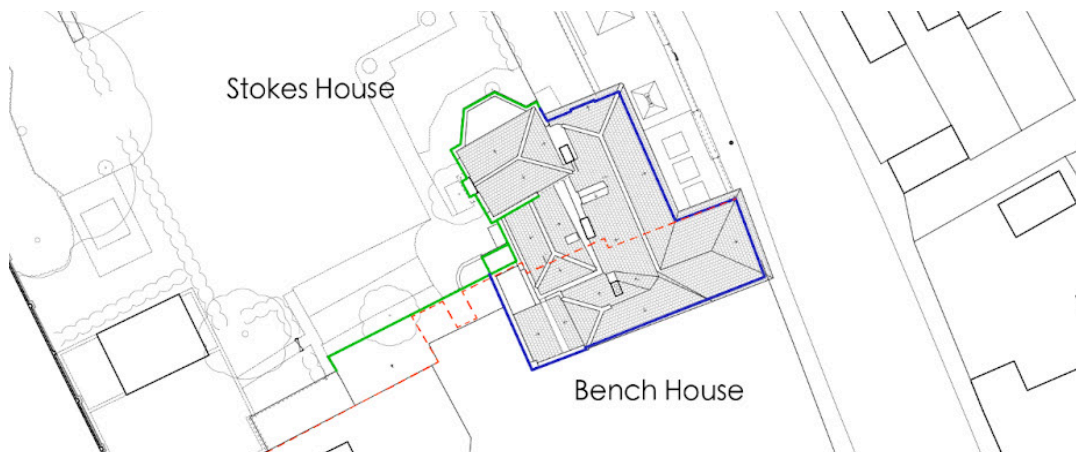


Fig.09 - Painted brick indicated in green; Render indicated in blue

The precise evolution of the external finishes of this building is unclear. Today, when examining the two properties, it is evident that the render covers the entirety of Bench House, extending into the three-storey section of Stokes House. However, at this junction, the render is interrupted; the lower section of the bay retains render, which then transitions to painted brick and cement.

Based on the evidence from the maps and images, we conclude that the entire building may have initially been lime-rendered as originally the brickwork would never have been painted. Over time, sections were likely stripped away, exposing bricks that may have been damaged in the process. As a quick fix to maintain the overall aesthetic, the exposed bricks and damaged areas were cemented and painted over, which account for the irregular patches of render and brick observed today. Even if these walls were not originally rendered the exposed brick has clearly

deteriorated, had to have had significant repairs carried out, and has had to be painted in order to create an acceptable appearance.

### Analysis of the Exterior Walls Condition at Stokes House

The exterior walls of Stokes House currently exhibit significant deterioration, particularly on the northern and western elevations, which encompass the bay of the main house. These wall surfaces are obscured by multiple layers of modern, non-breathable paint. If the walls were repointed in the past with cement, this could lead to spalling of the bricks. Bricks are designed to absorb moisture and release it through their natural pores, but the application of non-breathable paint and cement pointing prevents this process. Consequently, trapped water remains within the bricks, and in colder temperatures, this moisture can freeze, causing the surface of the bricks to deteriorate or spall. This phenomenon may explain the cement patches observed on the walls.

Over the past 50 years, repeated layers of non-breathable paint have hidden the true appearance of the bricks, resulting in a flattened and unappealing façade. Additionally, the walls show signs of distress, with patches of cement render applied to areas where the underlying brickwork has failed. Unfortunately, this remedial work has not effectively addressed the root causes of deterioration and, in some cases, may have exacerbated it, contributing to the overall decline in the condition of the façade.

Signs of moisture infiltration are evident, as the paint has begun to bubble in several locations, while the disintegration of the façade indicates a loss of the bricks' waterproofing qualities. The modern elasticised paint layers have effectively eliminated the breathability of the structure, further harming the underlying fabric.

The images and diagrams provided illustrate the current state of the elevations, highlighting various areas of disrepair. Addressing these issues is critical not only for the preservation of Stokes House's architectural integrity but also for maintaining its contribution to the local townscape.

### Area 1 - Western Elevation encompassing the front entrance to Stokes House

*Detail shows: significant cement patches around the front entrance door. Bricks splitting at the parapet level and the deterioration of brick and cement around the windows*

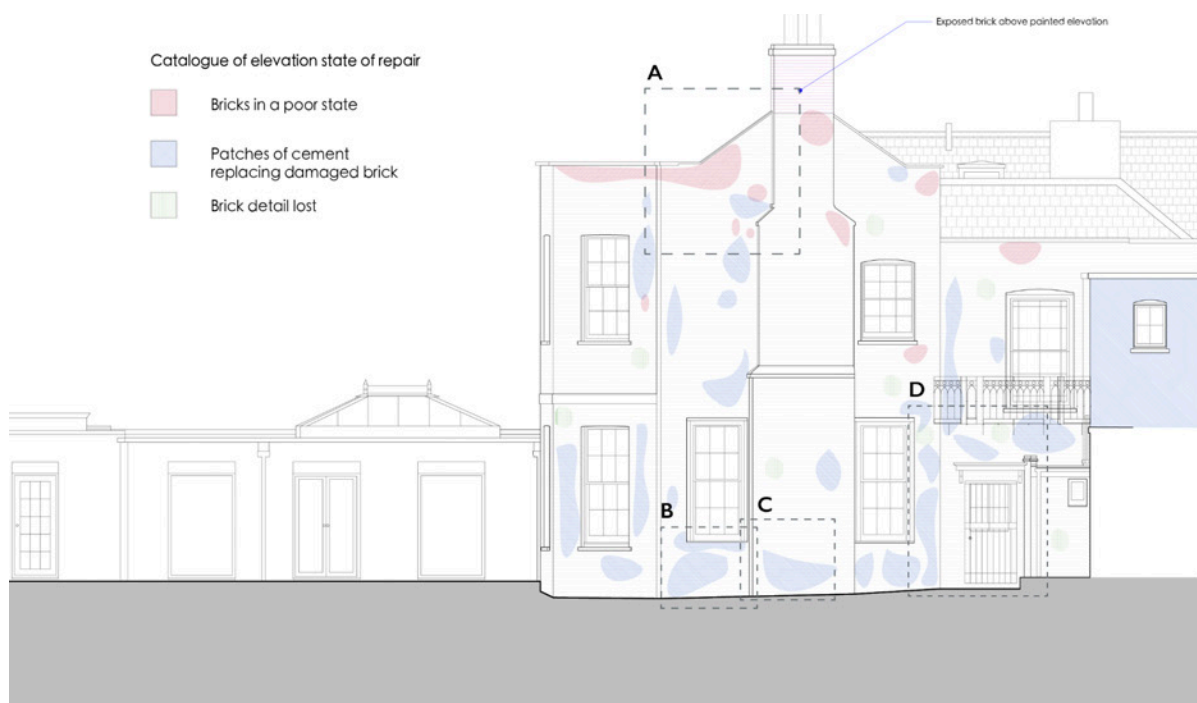


Fig.10: Existing Western Elevation - Diagram.





### Area 2 - Northern Elevation encompassing the Main Bay section and boundary wall to Stokes House

Detail shows: the bubbling near the top towards the parapet area. Poor bricks around the window and significant brick damage on the boundary wall areas.



Fig.11: Existing Northern Elevation - Diagram



E



F



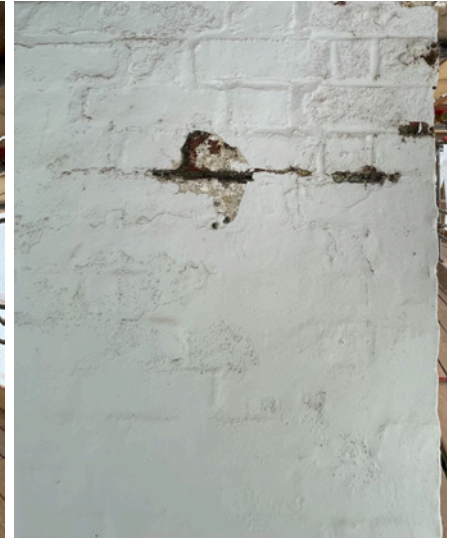
G



H



J



K



L



M

## Planning History

### Stokes House Applications

Previous applications have been granted and the proposal would be carried out in conjunction with these approvals - 24/1351/HOT and 23/2452/HOT.

## Development of the Design

### Proposal for Lime Rendering the Building

Upon evaluating the current state of the building, it's evident that the bricks are in poor condition, and the exterior is showing signs of significant deterioration. The application of modern non-breathable paint was initially a response to damaged bricks that were not functioning as they should. However, removing the paint is likely to cause additional harm to the bricks. Our assessment suggests that removing the existing paint and cement from the bricks will cause further damage and jeopardise the waterproofing and overall integrity of the structure. We are therefore of the view that repainting in a breathable paint is not an option and will not result in a satisfactory result. Instead we are proposing to remove the paint to allow the walls to breathe properly, and then to apply a lime render to the newly exposed brickwork. This will be breathable and enhance the appearance of the house.

This proposal will provide significant protective benefits. Lime render utilises a lime mortar in a unique way. Instead of serving merely for pointing or bedding masonry, it is applied as a breathable outer layer, preserving the structural integrity of the building. This timeless render has been utilised to safeguard buildings due to its natural properties.

This render is a blend of traditional lime, selected sands, and aggregates, mixed with clean water to achieve the desired consistency. It is a completely natural, breathable, and eco-friendly building product. It contains no artificial additives, plasticisers, or cement.

Due to its nature, lime render is not only sympathetic to the underlying structure but also offers a breathable alternative to traditional cement, which can trap moisture and lead to further damage. This breathability is crucial for mitigating potential damp issues, ensuring the longevity and durability of the building's facade.

We believe that lime rendering is the most appropriate course of action for restoring and protecting the exterior of the building while maintaining its historical character and enhancing its visual appeal.

*Included at the end of this document in the appendices is an image of a test sample of the lime render application and the Lime Render Specification.*

## Conclusion

The assessment of the exterior walls of Stokes House reveals significant deterioration, particularly in the wall elevations of the main house's northern and western faces as well as other walls and the chimney stack. These elevations are currently obscured by multiple layers of modern, non-breathable paint, which have compromised the natural aesthetic of the painted brick, resulting in a flattened appearance that detracts from the building's character.

Moreover, the walls are exhibiting visible signs of distress, with patches of cement render applied to areas where the underlying brickwork has failed. Unfortunately, this remedial work has not addressed the root causes of deterioration, leading to further decline in the façade's condition. We have observed areas where the paint has begun to bubble due to moisture infiltration, while evidence of disintegration indicates a loss of the waterproofing qualities of the bricks.

Given the current state of deterioration, it is evident that attempts to remove the existing paint and cement could further jeopardise the waterproofing, structural integrity and appearance of the walls. Therefore, we propose the removal of the paint and cement, making good the areas of decay and the application of lime render to the exterior walls, mirroring the treatment of the three-storey section of the house. This approach aims to enhance the

aesthetic cohesion of the façade while providing essential protective benefits. This breathability is vital for mitigating potential damp issues and ensuring the longevity and durability of Stokes House's exterior.

The long term benefits of the lime render mean that future maintenance is minimal and ensures the integrity of the building for the pleasure of the occupants and the surrounding area. To repaint the structure would be detrimental to the building and require maintenance more regularly. The long term improvement to the appearance of the building will result in a significant enhancement to the surrounding conservation area.

In conclusion, we believe that the application of lime rendering is the most suitable solution for restoring and safeguarding the exterior of Stokes House. This method respects the building's historical character while enhancing its visual appeal, ultimately contributing to the preservation of this significant asset within the local architectural landscape. Our diagram analysis further emphasises the extensive areas of deterioration, reinforcing the need for immediate action.

For these reasons, and the reasons set out within this report, we believe our application should be supported by the local authority, and we look forward to their favourable response.

## Drawings

1939.01.03.Exg.001	Site Location
1939.01.03.Exg.002	Existing Block Plan
1939.01.03.Exg.061	Existing West Elevation BB
1939.01.03.Exg.063	Existing North Elevation EE
1939.03.03.PlN.06.002	Proposed Block Plan
1939.03.03.PlN.06.061	Proposed West Elevation BB
1939.03.03.PlN.06.063	Proposed North Elevation EE

## Appendices

*Chalk white lime render - sample panel*





# THE LIME CENTRE

The Lime Centre Ltd, Hazeley Road, Morestead, Winchester, Hampshire SO21 1LZ  
Tel: 01962 713636 | [info@thelimecentre.co.uk](mailto:info@thelimecentre.co.uk) | [www.thelimecentre.co.uk](http://www.thelimecentre.co.uk)

## Product Name: Ecomortar

- Ecomortar is a pre-blended lime render with a natural patina in a range of colours, made with natural hydraulic lime.
- St Astier Ecomortar can be applied onto brick, stone and flint with one or two base coats and a finish coat.
- Ecomortar has high vapour exchange qualities resulting in a breathable render.
- Ideal for historic buildings.

### Lime Binder

Ecomortar Coarse and Finish are St Astier NHL3.5.

### Sand Grading

Ecomortar Base coat

M= 2.5mm

Ecomortar Finish

TF= 1.3mm

### Colour

Full range – see Render Colour Chart.  
(Sample colour biscuits available)

### Packaging

25kg bags. Store in a cool dry place and use within 8 months.

### Coverage

Coarse (Base Coat) 25kg will cover approx. 1.5m<sup>2</sup> at 10mm.

Finish 25kg will cover approx. 3.5m<sup>2</sup> at 4mm.

### Surface Preparation

Remove dust, surface contaminants and loose or friable existing render. Where necessary consolidate or dub out any deep holes with Ecomortar Coarse and key. Ensure masonry is not water proofed or painted, DO NOT apply PVA. Dampen the surface with a mist spray in sufficient quantity to reduce excess suction.

### Mixing/Water Addition

Add the whole bag of premix into a drum or forced action mixer, carefully avoiding creating excessive dust. Add 3.5 - 4.5 litres of clean water per bag. Mix for at least 10 minutes using drum mixer or use a mechanical whisk for 3 minutes. Stand for 10 minutes then mix again for 3 minutes adding further water, if required, to achieve workable consistency.

### Application

#### Ecomortar Base Coat

Applied in one coat of 15mm on straight walls in unexposed locations. Applied in two coats up to 20mm for uneven walls or exposed locations.

Reinforcement should be used on backgrounds that may move, e.g. all corners of openings, or at junctions of dissimilar materials, in some cases the whole surface is meshed.

Fibre mesh (9mm x 10mm) is embedded into the first basecoat by applying in 2 passes with the mesh trowelled in between passes. Fibre mesh overlaps at no less than 100mm. The mesh can be doubled up at corners, around openings with pieces being trowelled with plaster against the surface before application of the basecoat and further mesh.

Each coat must be scratched to give a good mechanical key before further coats are applied. Dampen down the surface prior to coating. A second Ecomortar Coarse coat maybe applied after the previous has adequately cured, usually 3-7 days. Ensure it is thinner than the first. Key the final coat of Ecomortar Coarse whilst still green with a nail or devil float before applying the topcoat of Ecomortar Finish.

#### Ecomortar Finish

Apply Ecomortar Finish once the base coats have had sufficient time to cure; usually 4 -7 days. Ecomortar Finish should be applied to a straight, flat, dampened surface in one or two passes up to a maximum of 5mm. Each pass or layer of Ecomortar Finish should be



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The Lime Centre Ltd, Hazeley Road, Morestead, Winchester, Hampshire SO21 1LZ  
Tel: 01962 713636 | info@thelimecentre.co.uk | www.thelimecentre.co.uk

applied while the first pass is still damp but has had time to "pull in". Avoid over working. Use only a light mist spray if applying water to the surface of the finishing coat. Finish with wooden float and leave open textured or dress with a sponge to close off and reveal the aggregate texture.

**Temperatures:** above 5°C and below 30°C.

## Curing

Prevent all coats from drying out too rapidly. Lightly spray each coat with water if it is hot or the product is drying out too quickly. Protect from adverse conditions such as frost, rain and wind, ideally using a fully sheeted scaffold when outside.

## Performance

Product type	Eco Mortar C & F NHL 3.5	Eco Mortar C&F with NHL2/ WP with NHL 3.5
Compressive strength N/mm <sup>2</sup> 28 days	1.9	1.5
Compressive strength N/mm <sup>2</sup> 91 days	3.6	3.0
Flexural Strength N/mm <sup>2</sup> @28 days	0.5 to 1.0	0.2 to 0.5
Elasticity module MPa	5000	4000
Vapour exchange Gm air x m <sup>2</sup> x hour x mmHg	0.85	0.89 WP 0.85
Capillary water absorption kg (m <sup>2</sup> .min <sup>0.5</sup> )	1-2	2-3

## Decoration

Ecomortar is a coloured render and does not require decoration but can be decorated with limewash or mineral paint.

Allow approx. 3 to 7 days drying time before decorating with Limewash.

Allow approx. 24 days drying time before decorating with mineral paint.

When decorating use mineral paints. Contact The Lime Centre for further advice or information about the full range of mineral paints.

## Bulk Density

**Average Bulk Density:**  
Dry:1400kg/m<sup>3</sup>: +/-100



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**CHAUX ET ENDUITS DE SAINT ASTIER**

**La Jarthe**

**24110 Saint-Astier**

**05**

**EN 998-1**

**Coloured rendering mortar (CR)**

Reaction to fire:	Class A1
Compressive strength:	CS 1
Adhesion:	$\geq 0,3$ N/mm <sup>2</sup> -FP:
Water absorption:	ABC
Water vapour permeability:	W0
Thermal conductivity:	$\mu 0,15$ (Tabulated Value)
Durability:	0,66 (Tabulated Value) No mandated level

#### **Hazard Statements:**

- Causes skin irritation.
- Causes serious eye damage.
- May cause respiratory irritation.

#### **Precautionary Statements:**

- Keep out of reach of children.
- Wear protective gloves/protective clothing/eye protection/ face protection.
- In case of contact with eyes, rinse carefully with clean water for several minutes. In relevant cases, take out contact lenses if possible. Seek professional assistance for a Doctor (Hospital).
- If in contact with skin wash abundantly with soap and water.
- Avoid breathing dust/spray.
- If inhaled remove person to fresh air and keep at rest in a position comfortable for breathing.
- Dispose of contents via conventional waste management facilities. Before disposal NHL lime should be made inert by wetting to induce hardening and bags should be completely emptied

#### **Control Measures:**

- Corrosive to brass and aluminium.
- Keep away from strong oxidising agents.
- Prevent alkaline run off from entering storm drains.

[www.thelimecentre.co.uk](http://www.thelimecentre.co.uk)