



LINCOLN

CONSERVATION

Research and conservation of historic decorative schemes in the built environment

Project Name: Paint Analysis

Windows at 79 Mosley Street, Manchester

Date: March 2024

Ref: 2024/09

Client: M20 Property Group

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1.0: Introduction

- i) Lincoln Conservation were commissioned by James Pickles of M20 Property Group to examine 4no. paint samples removed from the interior and exterior faces of two window frames on the first floor of 79 Mosley Street, Manchester.
- ii) The property at 79 Mosley Street forms a part of the Grade II listed building '77 and 79 Mosley Street/14 & 16 Princess Street' and was constructed as a building housing shops, offices and warehouse spaces ca. 1870¹.
- iii) The four samples were removed on Nov. 20th 2023, by the client and sent to our lab at the University of Lincoln for cross sectional analysis to identify the historic paint schemes applied.

2.0: Method

- i) The samples were mounted in polyester resin and polished to reveal the stratigraphy of the historic paints, and examined in cross section under a high-powered binocular microscope

using both white light and ultra-violet illumination². White light identifies the number of layers present, their colours and dirt layers between coatings providing an indication of the number of times the surface has been painted. Ultra-violet light causes different types of paint to fluoresce in a characteristic manner³, helping to define the types of paint and varnishes applied.

- ii) Hi-resolution images (with scale) of annotated cross sections for both sample sites are included in section 3.0. Ultra-violet is displayed on the left, and reflected white light on the right.
- iii) Images of the sample locations are included in Section 4.0⁴, with concluding comment in Section 5.0.

¹ Historic England list entry 1271097: <https://historicengland.org.uk/listing/the-list/list-entry/1271097?section=official-list-entry>

² Leica DM2700M optical microscope with Leica DFC 450C camera and long wavelength (380 – 580nm) UV generator.

³ Danielle Measday (2017) *A summary of ultra-violet fluorescent materials relevant to Conservation*. The Australian Institute for the Conservation of Cultural Material.

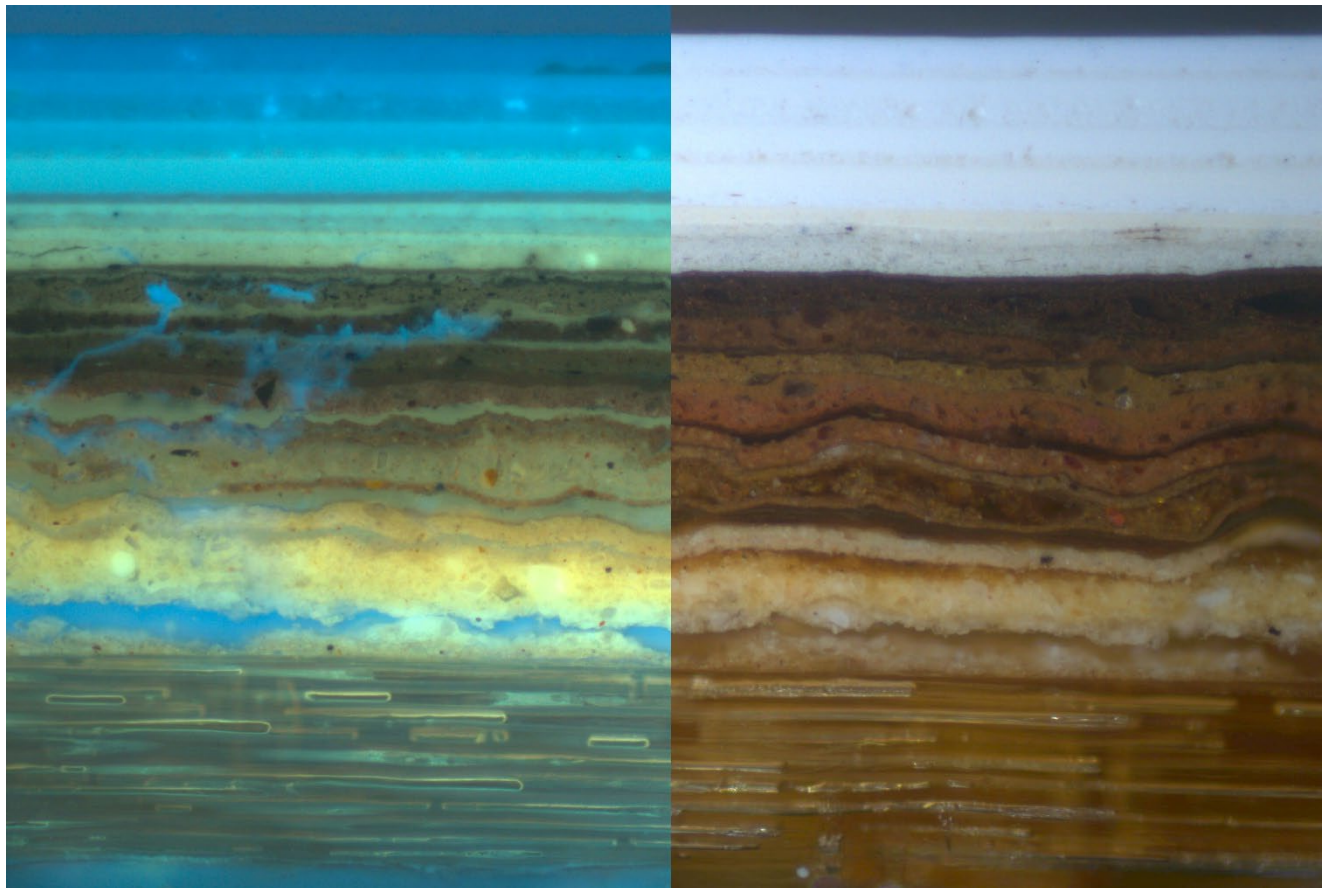
⁴ Image sources given in captions for each image. All other images were taken by Lincoln Conservation.

3.0: Results (photomicrographs X100 mag.)

3.1: Sample A (Exterior 1st floor window frame, 77A Mosley Street)

ULTRA-VIOLET

REFLECTED LIGHT



Schemes 11-14: Modern white alkyd/acrylic paints

Schemes 9 & 10: Grey lead/zinc oil paint, followed by cream zinc

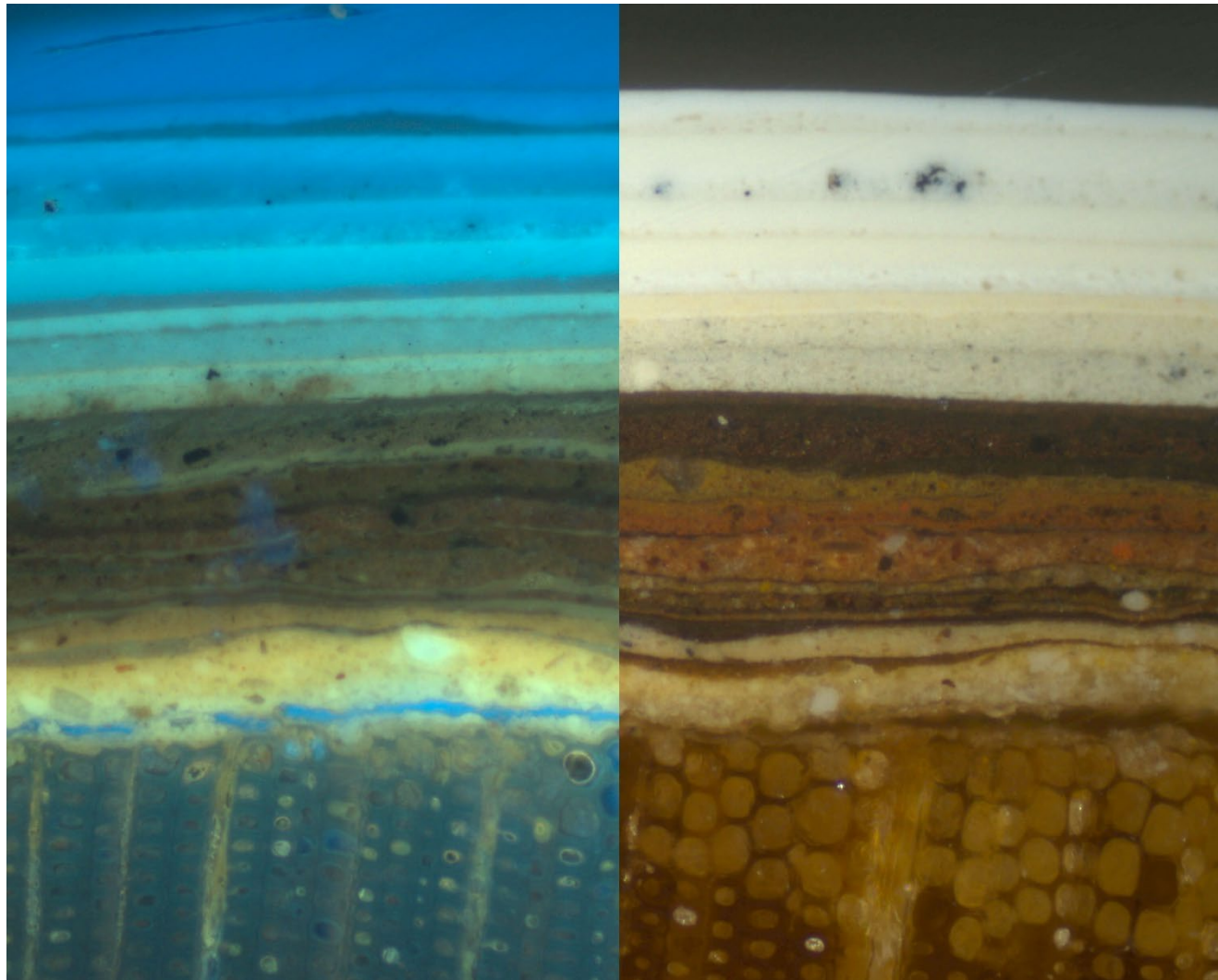
Schemes 4-8: Mid-brown, red-brown and dark brown faux-wood-graining (with varnish)

Schemes 1-3 (earliest): Light-coloured faux-wood-graining (with varnish)

3.2: Sample B (Interior 1st floor window frame, 77A Mosley Street)

ULTRA-VIOLET

REFLECTED LIGHT



Schemes 11-14: Modern white alkyd/acrylic paints

Schemes 9 & 10: Grey lead/zinc oil paint, followed by cream zinc

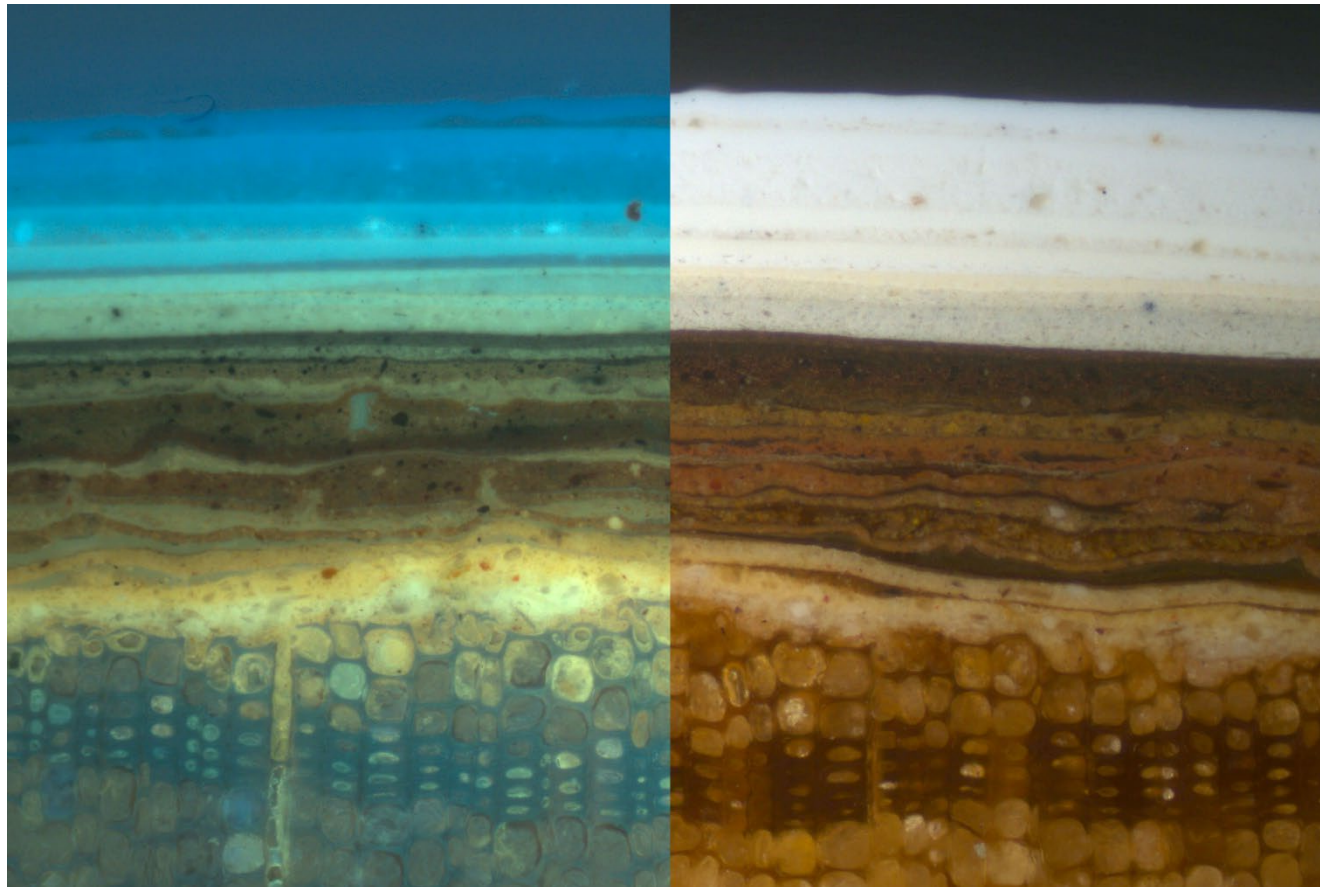
Schemes 4-8: Mid-brown, red-brown and dark brown faux-wood-graining (with varnish)

Schemes 1-3 (earliest): Light-coloured faux-wood-graining (with varnish)

3.3: Sample C (Exterior Lightwell window frame, 16 Princess Street)

ULTRA-VIOLET

REFLECTED LIGHT



Schemes 11-14: Modern white alkyd/acrylic paints

Schemes 9 & 10: Grey lead/zinc oil paint, followed by cream zinc

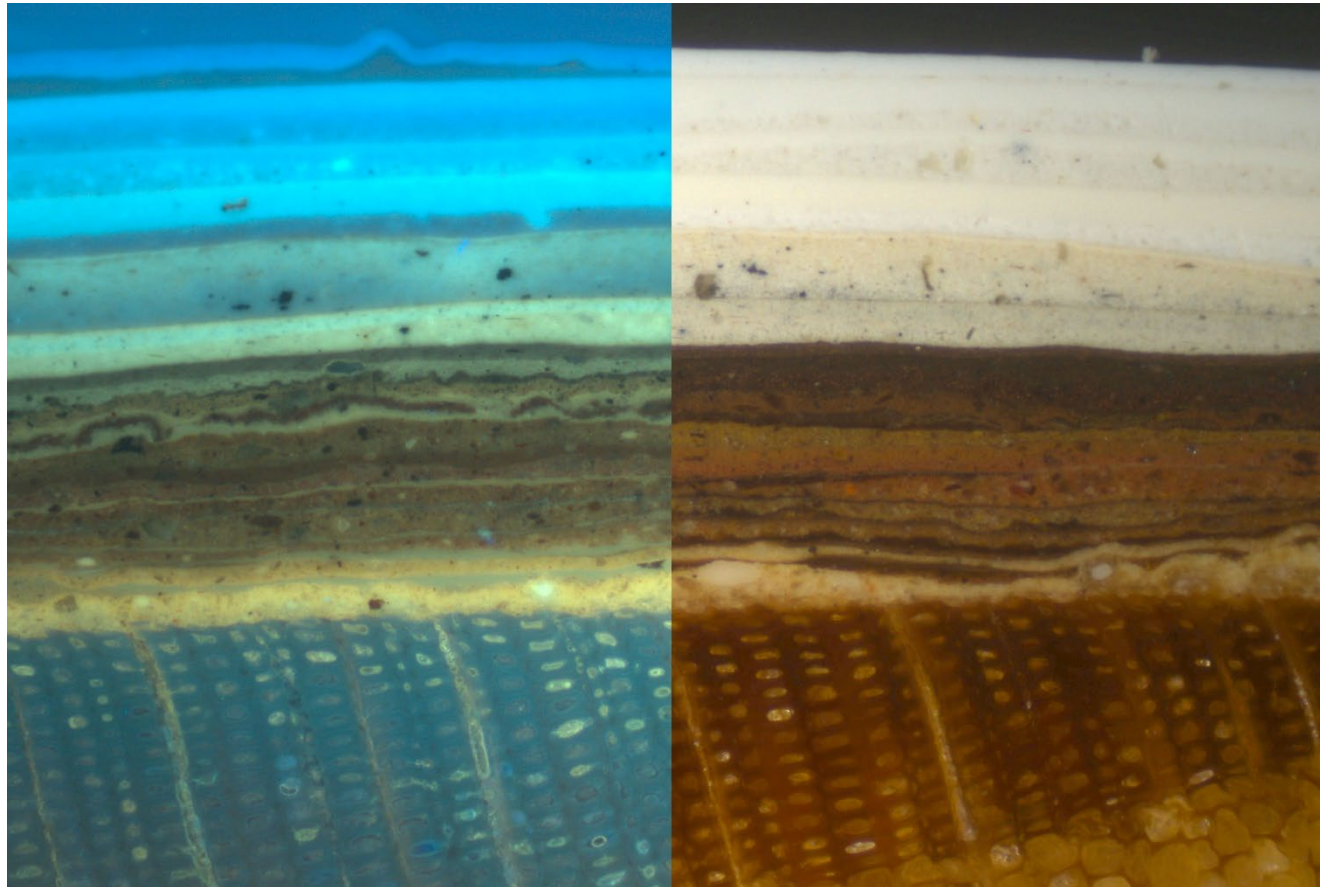
Schemes 4-8: Mid-brown, red-brown and dark brown faux-wood-graining (with varnish)

Schemes 1-3 (earliest): Light-coloured faux-wood-graining (with varnish)

3.4: Sample D (Interior Lightwell window frame, 16 Princess Street)

ULTRA-VIOLET

REFLECTED LIGHT



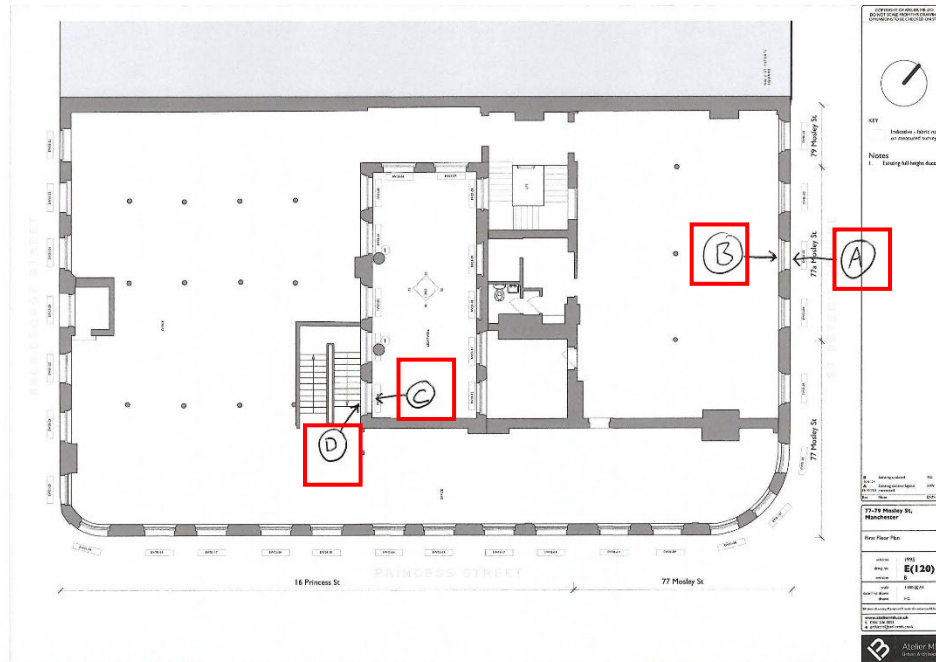
Schemes 11-14: Modern white alkyd/acrylic paints

Schemes 9 & 10: Grey lead/zinc oil paint, followed by cream zinc

Schemes 4-8: Mid-brown, red-brown and dark brown faux-wood-graining (with varnish)

Schemes 1-3 (earliest): Light-coloured faux-wood-graining (with varnish)

4.0: Images of the sample locations



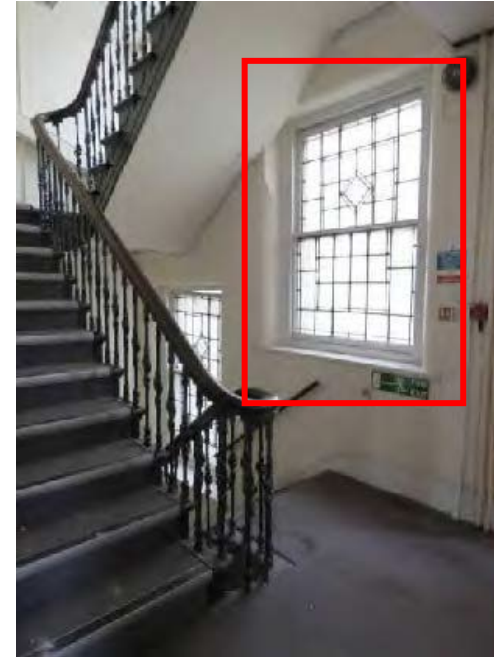
1: Plan of the first floor of 79 Mosley Street, showing all sample locations (image source: James Pickles, M20 Property Group)



2: 77-79 Mosley Street (image source: OBI Property, <https://obiproperty.co.uk/properties/79-mosley-street/>)



3: Detail of building, showing location of Samples A&B
(image source: Andrew Simpson 2019,
<https://chorltonhistory.blogspot.com/2020/01/the-three-stories-behind-no-79-mosley.html>)



4: Photographs of windows onto internal lightwell, showing location of Samples C&D.
(image sources: Heritage Statement for 79 Mosley Street, Stephen Levrant Architecture (left) and Internal Photographic Schedule for 79 Mosley Street, OBI Property (below))



5.0: Concluding remarks

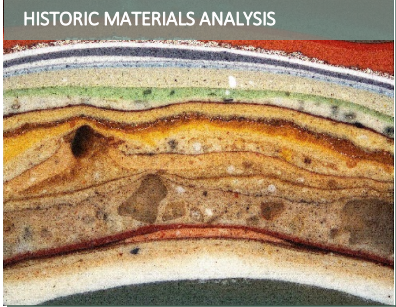
- i) The samples taken from the windows on the first floor of 79 Mosley Street all show identical paint stratigraphy. This suggests that all window frames on this floor have been treated identically on the exterior and interior faces for the whole of its history. It is likely (though not certain) that this would have extended to all similar window frames in the building.
- ii) The earliest decorative evidence is for faux-wood-graining in a light colour, possibly to reproduce the appearance of a light oak finish. This is consistent with popular decorative treatments for interior/exterior joinery in the mid-late 19th century, and may date to the original construction of the building ca. 1870. Wood-graining was often used to give cheaper softwoods (such as pine or spruce) the appearance of more expensive hardwoods (such as oak or mahogany). This treatment was not only cheaper than using the hardwoods themselves, but provided a protective coating for the wood surface, as typical wood-graining consisted of 3-4 layers (usually a basecoat, a topcoat, a 'figuring' layer applied with metal combs to give the appearance of woodgrain, and a tinted varnish).
- iii) The original wood-graining appears to have been renewed many times, first by more light-coloured graining, and then by

progressively darker (and sometimes redder) graining. This may be due to changes in fashion (the prevailing trends in woodwork later in the 19th century were for darker woods, such as mahogany or ebony), or may have been a practical response to the poor air quality in Manchester at the time, when the effects of air pollution would have been more readily apparent on lighter-coloured surfaces. As wood-graining continued in popularity up to the early 1900s, and then experienced a revival in the 1930s, it's possible that the second phase of wood-graining (Schemes 4-8) may cover the history of the building up to WW2.

- iv) The first schemes after the graining are a pale grey lead/zinc oil paint, followed by a cream zinc paint (Schemes 9 & 10). These may have been applied in the post-WW2 period, possibly when the building was extensively remodelled in 1955⁵. Either colour would be appropriate for the Art Deco style and colour scheme chosen for the 1955 interiors.
- v) The final schemes (Schemes 11 – 14) are all modern white alkyd or acrylic paints, and were likely applied during the more recent history of the building.
- vi) In the course of the analysis, lead was found in significant amounts in all of the graining layers (Schemes 1 – 8) and smaller amounts were also found in the post-War layers (Schemes 9 & 10). This should be taken into account if any

⁵ 'Heritage Statement: 79 Mosley Street', Stephen Levant Heritage Architecture Ltd. 2017

works are likely to disturb the paint layers on the windows of 79 Mosley Street, and the appropriate precautions should be taken to avoid any unnecessary risks to Health & Safety and to the environment.



HISTORIC MATERIALS ANALYSIS



HISTORIC INTERIORS



ARCHITECTURAL CERAMICS AND TILES



OBJECT CONSERVATION



DIGITAL HERITAGE



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