

Brunswick Mill, Manchester (Grade II listed): Summary Statement of Window Condition 5 May 2021

1.0 Project background

i. Thank you for instructing us (SLHA) to undertake an overview condition survey of the windows for the Grade II listed Brunswick Mill, Manchester. A detailed planning permission and listed building consent application is currently being developed and will be submitted under the following application description:

"A full application for the refurbishment, repair and reconfiguration of Brunswick Mill to create commercial floorspace (Use Class E and Use Class F2) at the ground and first floors and 153 new homes (Class C3) together with redevelopment of land to the (north) of Brunswick mill to create two new buildings and 124 new homes (class C3) and commercial floorspace (Use Class E and Use Class F2) at the ground floor, together with roof top amenity space, car parking, access and servicing arrangements, landscaping, a new pedestrian access route to the Ashton Canal and other associated works. Listed Building Consent for alterations to Brunswick Mill as part of comprehensive proposals to refurbish, repair and repurpose the building for mix of commercial and residential uses."

- ii. The application includes works to reinstate windows to existing openings where they have been lost and replace the existing timber windows with new W40 powder coated aluminum Critall windows. Please refer to the below drawings and documents for detailed design of the proposed windows:
 - Hodder and Partners Planning and listed building consent drawing package.
 - Hodder and Partners Design and Access Statement
 - SLHA Heritage Statement

2.0 Window History

iii. The original windows to Brunswick Mill are expected to have been a fixed window with a possible central openable section, but this is not definitively known. It is believed that only one section of an original window survives from this period, on the south elevation of the entrance block (Figure 1). The window was not closely inspected during the survey due to access restrictions.



Fig. 1. The multi-pane upper section of this inner courtyard window is believed to be the only surviving section of original window to the mill.

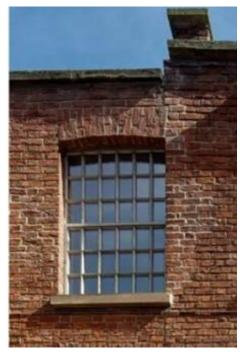


Fig. 1a. Fixed multi-pane window at Murrays Mill, Ancoats.

- iv. SLHA's research of the building and dating of the surviving windows is that the current windows date from the late 19th or early 20th century. Our survey suggests that there were predominantly four window types from this period, which are as follows:
 - a. Timber framed 6 pane windows with no openable panes (see Figure 2).
 - b. Timber framed 6 pane windows with a single middle pane hinged from the side (see Figure 3).
 - c. Timber framed 6 pane windows with the top two panes being hinged from below (see Figure 4).
 - d. Timber framed 3 over 2 over 2 pane windows with the tope 3 panes being hinged from below and single middle openable pane (see Figure 5)
 - e. Windows with glazed ventilation panels. (see Figure 6)
- v. The majority of the window openings do not have a surviving window and have been replaced with a timber plyboard, brick or concrete clockwork.



Figure 2 (left): Timber framed 6 pane window with no openable panes, and Figure 3 (right): With a single middle pane that is openable.



Figure 4 (left): 6 pane window with top two panes hinged at the bottom of the frame to be openable, and Figure 5 (right): 3 over 4 window.



Figure 6: Windows with ventilation louvre panels.



Figures 8 and 9: Internal view showing opening mechanism and window stay of windows with tilting top pane.



Figure 10: General view of the north elevation showing number of blocked up window openings.

3.0 Summary of Condition of surviving windows.

- i. SLHA have undertaken a review of the surviving windows and their condition as of March 2021, and have below provided a summary of their condition, common defects and repairs that would be required to bring them back into useable good condition.
- ii. The surviving timber windows are generally in poor condition, with a lack of maintenance being the biggest cause for deterioration in their condition, as well as inappropriate repair methods.
- iii. Most windows have completely lost their coatings of paint and the glazing putty has largely failed. The use of modern oil-based paints has also been used to some areas which has flaked and failed. Poorly applied glazing putty has also allowed water ingress and caused premature failure of the seal.
- iv. Many of the windows have had panes of glass replaced with a modern plate glass, are cracked, have had vents installed, covered with a timber plyboard or a corrugated plastic sheet.
- v. Some of the windows have suffered from timber decay, primarily due to the loss of paint coverings to the cill, but this issue only seemed to be to isolated areas. Further survey would be required to assess the extent of timber decay, which would require specialist access to be arrange.
- vi. The openable elements of windows have been predominantly painted or screwed shut and the survey did not attempt to open any of the windows due to the risk of instability in the glazing. Some of the windows have their original ironmongery, including opening mechanism and window stays. These mechanisms are an early example of this window type that was later adapted by metal window manufacturers such as Crittall.

- vii. The sealant between the window frame and brickwork, presumed to be a burnt sand mastic, looks to have largely failed across all the windows.
- viii. Internally a minority of windows survive with an internal timber cill, in particular to the west block. Most windows however have a brick cill which was originally plastered.



Figure 11: Typical condition of a surviving timber framed window with replaced / missing / broken panes, flaking paint and boarded over.



Figure 12: View of cill showing flaking paint, failed glazing putty and minor timber decay to cill.

4.0 Repair and replacement windows.

- i. Where new windows are to be inserted, these should be of an authentic design that should reflect the existing windows in their appearance, form and functionality, to ensure the windows reflect the industrial building typology.
- ii. Where it is proposed to repair the existing windows, we would recommend that all windows are removed and repaired on a workbench rather than in situ.
- iii. Rotten sections of timber need to be cut out and timber splice repairs undertaken. All flaking paint is to be stripped and all glazing putty cut out. New traditional glazing to match the surviving original glazing should be sourced and installed with new glazing putty. The windows would then need to be re-decorated (leaving exposed timber to the moveable faces of the timber) and reinstated. Externally, the junction between the timber frame and brickwork should be finished with a burnt sand mastic and internally with a chalk based caulk. Internal timber cills should be repaired where they survive.

5.0 Conclusion

- i. This summary statement of the condition of the surviving timber framed windows provides a concise current understanding of the windows history to Brunswick Mill.
- ii. The statement provides an overview of the condition of the windows and provides a summary of the necessary spectrum of repairs that would be required if they were to be brought back into good functional condition.
- iii. Where new windows are to be manufactured, these should be an authentic replication of the surviving windows to ensure that the known evidence of window form is retained and the building retains its industrial appearance.

Yours sincerely,

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For and on behalf of Heritage Architecture Ltd