

Hutton + Rostron Environmental Investigations Limited

466-468 Moss Lane East: Window Condition Survey

Site note 3 for 27-28 February 2024, job no. 214-22

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1 INTRODUCTION

1.1 AUTHORITY AND REFERENCES

Hutton + Rostron Environmental Investigations Limited carried out a site visit to 466-468 Moss Lane East, Manchester on 27-28 February 2024 in accordance with instructions received from Michael Chisholm through acceptance of H+R Order Form reference 24.699 dated 20 February 2024 signed on behalf of Alumno Group. Drawings provided by ACAD Design & Surveys were used for the identification of structures. For the purpose of orientation in this report, the building was taken as facing north on to Moss Lane East

1.2 AIM

The aim of this survey was to investigate the construction and condition of all windows at 466-468 Moss Lane East

1.3 LIMITATIONS

This survey was confined to the accessible structures. Windows were surveyed from the interior of the building meaning that some external elements could not be reached for tactile examination. External photographs were taken of each window using a drone or digital camera to assist with inspection. The condition of concealed timbers may be deduced from the general condition and moisture content of the adjacent structure. Only demolition or exposure work can enable the condition of timber to be determined with certainty, and this destroys what it is intended to preserve. Specialist investigative techniques are therefore employed as aids to the surveyor. No such technique can be 100 per cent reliable, but their use allows deductions to be made about the most probable condition of materials at the time of examination. Structures were not examined in detail except as described in this report, and no liability can be accepted for defects that may exist in other parts of the building. We have not inspected woodwork or other parts of the structure which are covered, unexposed or inaccessible and we are therefore unable to report that any such part of the property is free from defect or, in the event that such part of the property is not free from defect, that it will not contaminate and/or affect any other part of the property. The contents of this report do not imply the adoption of the role of Principal Designer by H+R for the purposes of the Construction Design and Management (CDM) Regulations 2015

2 STAFF ON SITE AND CONTACTS

2.1 H+R STAFF ON SITE

Ellen Wise
Catherine Knowles
Kester Banks

2.2 PERSONNEL CONTACTED

Ian Roberts – Contracts Manager, GMI
Simon Barraclough – Senior Asbestos Consultant, Acorn Analytical Services
Tahir Ahmed

3 OBSERVATIONS

3.1 CONTEXT

466-468 Moss Lane East dates from c.1840. They were originally built as 2no. semi-detached town houses, however, they have subsequently been divided into self-contained flats at each floor level. The buildings are currently vacant, although it is understood that the flats have been occupied until very recently. The buildings are grade II listed (see Historic England List Entry Number 1197931)

3.2 ARRANGEMENT

There were 55no. windows in total across both buildings varying in age, design and material. The majority of the windows were non-original and thought to date from the second half of the twentieth century (post-World War Two). The main window types are set out below

3.2.1 Timber casements

The majority of the windows (~35no.) were timber casements with opening awnings or side-hung opening casements. These varied in size and age throughout the buildings. The timber casements were mostly single-glazed, however there were some double-glazed examples

3.2.2 Timber sashes

There were ~12no. timber sashes. These were primarily confined to the principal (north) elevation. Timber sashes were generally single-hung (with a fixed upper sash and sliding lower sash) and single-glazed. Some elements of the tripartite sash windows on the ground floor of the north elevation were thought to be historical however, both windows were heavily decayed and had been severely altered, comprising their original design and functionality

3.2.3 UPVC casements

There were ~6no. modern, double-glazed UPVC casements. These were generally found grouped together in individual flats, suggesting that they were installed as part of refurbishment and 'upgrading' works to specific flats

3.2.4 Timber fixed lights

There were 2no. fixed timber lights over the front doors to 466 and 468 Moss Lane East. These were thought to be original

3.3 WINDOW CONDITION

The construction and condition of each window is recorded in the *Schedule of window condition* in Attachment A. This should be read in conjunction with the *Accompanying key for schedule* in Attachment B

4 RECOMMENDATIONS

- 1 Since most of the windows are non-original and due to the extensive works required to repair damaged window units, it is the opinion of H+R that all windows at 466-468 Moss Lane East should be replaced with 'faithful reproductions' of the original window units. This will require desk-based research to determine what type of windows were originally installed and what the original window units looked like
- 2 If 'faithful reproduction' windows are going to be single-glazed, consideration should be given to installing separate secondary glazing units to provide an improved acoustic and thermal barrier to the interiors. It is the opinion of H+R that the installation of single-glazed window units with separate secondary glazing units is a sustainable and eminently repairable solution which offers far greater longevity than sealed double-glazed units
- 3 Separate consideration will need to be given to passive ventilation provision for the internal rooms as 'faithful reproduction' windows with secondary glazing units will not provide trickle ventilation to the interiors. This could instead be achieved through the installation of a Mechanical Ventilation with Heat Recovery (MVHR) system for the buildings

5 H+R WORK ON SITE

- 5.1** H+R inspected all windows at 466-468 Moss Lane East to determine their construction, operability and condition

6 INFORMATION REQUIRED BY H+R

- 6.1** H+R require copies of up-to-date lists of project personnel and contact lists as these become available

7 ADMINISTRATIVE REQUIREMENTS

- 7.1** H+R require formal instructions for further investigations and consultancy on this project
- 7.2** H+R require confirmation of distribution of digital and printed copies of reports and site notes

Appendix A

REF	ELEV	FLOOR	UNIT	WINDOW TYPE	MAT	DIMENSIONS (MM)	OPERABILITY	RELEASE	EASE	REHANG	BALANCE	RENEW	RE-ALIGN	ELEMENTS TO REPAIR	ELEMENTS TO REPLACE	PREVIOUS REPAIRS	GLAZING & PUTTY	FURNITURE	DECORATION	ADDITIONAL COMMENTS	PHOTO REFERENCE
E.2.1	E	2	1	4x3 pane timber casement with 1no. opening awning	Timber	~1040x925mm	Partially operable - awning is binding on frame		Awning					-	-	-	Double-glazed. Window putty is in serviceable condition	1no. modern chrome casement stay to awning	Decoration is in serviceable condition		Fig. 1
E.2.2	E	2	2	2x2 pane timber casement with 1no. opening awning	Timber	~1325x1410mm	Operable	-	-	-	-	-	-	The base of both jambs and the central mullion are decayed and should be repaired with timber splice repairs	Timber sill is decayed for full length and should be replaced		Single-glazed. Window putty is beyond the end of its service life and should be renewed	1no. modern casement stay to awning. Casement stay is misaligned making window difficult to lock shut and should be realigned . 1no. modern restrictor has been fitted to prevent full opening of window	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 2
S.2.3	S	2	3	Modern UPVC window with 1no. opening awning	UPVC	~955x970mm	Operable	-	-	-	-	-	-	-	-	-	Double-glazed	-	-	External sealant around the window has been crudely installed and is unsightly	Fig. 3
S.2.4	S	2	4	Modern UPVC window with 1no. opening awning	UPVC	~1315x1150mm	Inoperable - locking mechanism moves but does not engage meaning window cannot be unlocked	-	-	-	-	Awning	-	-	-	-	Double-glazed	-	-		Fig. 4
S.2.5	S	2	5	Modern UPVC window with 1no. opening awning	UPVC	~1340x1195mm	Partially operable - awning is difficult to close properly and lock	-	-	-	-	-	-	-	-	-	Double-glazed. Desiccant beads are visible in glazing unit suggesting glazing seals have failed	-	-	Window is a poor fit for opening. Additional UPVC strips have been installed around window to cover gaps between window unit and opening	Fig. 5
S.2.6	S	2	6	Modern UPVC window with 1no. opening awning	UPVC	~955x1035mm	Partially operable - awning is catching in frame and is difficult to operate	-	-	-	-	-	-	-	-	-	Double-glazed. Desiccant beads are visible in glazing unit suggesting glazing seals have failed	-	-	Window is a poor fit for opening. Additional UPVC strips have been installed around window to cover gaps between window unit and opening	Fig. 6-7
W.2.7	W	2	7	4x4 pane timber casement with 1no. opening awning	Timber	~13670x1375mm	Partially operable - awning is binding on transom		Awning					-	-	-	Double-glazed	2no. modern chrome casement stays to awning	Window has been painted with a modern, film forming paint which is in serviceable condition however is inappropriate for a timber window. Consideration should be given to stripping back current decoration and redecorating with an appropriate moisture vapour permeable paint		Fig.8
W.2.8	W	2	8	4x3 pane timber casement with 1no. opening awning	Timber	~1050x935mm	Partially operable - awning is binding on frame and will not close fully		Awning					-	-	-	Double-glazed	1no. modern chrome casement stay to awning	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 9
N.1.1	N	1	1	Single-hung 6 over 6 timber sash with fixed upper sash and sliding lower sash	Timber	~2240x1215mm	Partially operable - lower sash does not run parallel to frame				Lower sash			Outer lining is decayed at base and should be repaired with a timber splice repair . Corresponding parting bead is decayed at base and should be repaired with a timber splice repair			Single-glazed. Window putty is beyond the end of its service life and should be renewed	2no. metal handles to lower sash which have been painted with a modern film-forming paint. 1no. modern sash lock	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint	Holes have been drilled in frame for electrical cables to pass through	Fig. 10
N.1.2	N	1	2	Single-hung 6 over 6 timber sash with fixed upper sash and sliding lower sash	Timber	~2240x1175mm	Partially operable - lower sash is binding in frame		Lower sash		Lower sash		Lower sash	Both outer linings are decayed at base and should be repaired using timber splice repairs	Timber sill is decayed for full length and should be replaced		Single-glazed. 2no. panes to lower sash are cracked and should be replaced . Window is beyond the end of its service life and should be renewed	2no. metal handles to lower sash which have been painted with a modern film-forming paint. 1no. modern sash lock	Window has been painted with a modern, film forming paint which is trapping moisture resulting in decay to timber elements. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 11-12
N.1.3	N	1	3	Single-hung 6 over 6 timber sash with fixed upper sash and sliding lower sash	Timber	~2170x1165mm	Partially operable - lower sash does not stay open					Lower sash	Lower sash		Timber sill is decayed for full length and should be replaced		Single-glazed. Window putty is at the end of its service life and should be renewed	2no. metal handles to lower sash which have been painted with a modern film-forming paint. 1no. modern sash lock	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 13
N.1.4	N	1	4	Single-hung 6 over 6 timber sash with fixed upper sash and sliding lower sash	Timber	~2215x1195mm	Operable						Lower sash	There is decay to the base of both inner and outer linings which should be repaired with timber splice repairs	Timber sill is decayed for the full length and should be replaced . Both stiles to the upper sash are decayed and should be replaced . Allowance should also be made for replacement of the upper meeting rail		Single-glazed. 1no. pane to the lower sash is cracked and should be replaced . Window putty is beyond the end of its service life and should be renewed	2no. metal handles to lower sash which have been painted with a modern film-forming paint. 1no. modern sash lock	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 14-15
N.1.5	N	1	5	4x3 pane timber casement with 1no. opening awning	Timber	~1310x1035mm	Partially operable - awning is binding on window frame		Awning					-	-	-	Single-glazed. Window putty is at the end of its service life and should be renewed	1no. modern metal casement stay which has been painted with a modern, film-forming paint	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 16

REF	ELEV	FLOOR	UNIT	WINDOW TYPE	MAT	DIMENSIONS (MM)	OPERABILITY	RELEASE	EASE	REHANG	BALANCE	RENEW	RE-ALIGN	ELEMENTS TO REPAIR	ELEMENTS TO REPLACE	PREVIOUS REPAIRS	GLAZING & PUTTY	FURNITURE	DECORATION	ADDITIONAL COMMENTS	PHOTO REFERENCE	
S.1.6	S	1	6	2x2 pane timber casement with 1no. opening awning	Timber	~1685x940mm	Partially operable - awning is binding on window frame		Awning					There is decay to the base of both jambs and to the base of the central mullion which should be repaired using timber splice repairs . There is suspected decay to the base of both stiles and the central mullion to the awning. Allowance should be made for repair of both stiles and the central mullion with timber splice repairs	Timber sill is decayed for full length and should be replaced . Bottom rail to awning is decayed for full length and should be replaced		Single-glazed	1no. modern metal casement stay to awning. The casement stay does not match one of the pins meaning the window cannot be properly locked shut. Casement stay should be replaced with a working stay which can be locked shut	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 17-19	
E.1.7	E	1	7	1x4 pane timber casement with 1no. opening awning	Timber	~1785x385mm	Partially operable - awning is binding on window frame		Awning					There is a previous putty repair to the base of the south jamb which has been crudely formed and should be replaced with a proper timber splice repair	Timber sill is decayed for full length and should be replaced . Allowance should also be made for full replacement of the lower transom		Single-glazed. Window putty is at the end of its service life and should be renewed	1no. modern metal casement stay	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 20-21	
E.1.8	E	1	8	2x2 pane timber casement with 1no. opening awning	Timber	~1725x1410mm	Inoperable - awning has been fixed shut with screw	Awning						There is localised decay to the timber sill and base of the north jamb at the joint between the sill and jamb. Both elements should be repaired with a timber splice repair . The joint between the bottom rail of the awning and the central mullion has opened			Single-glazed. Window putty is beyond the end of its service life and is missing in several locations. Window putty should be renewed	1no. modern metal casement stay. Casement stay is misaligned with its locking pins so window cannot be locked. Locking pins should be realigned to allow casement stay to be locked	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 22-24	
S.1.9	S	1	9	2x2 pane timber casement with 1no. opening awning	Timber	~1805x1005mm	Operable	-	-	-	-	-	-	The timber sill is decayed at the east end and should be repaired using a timber splice repair . Allowance should also be made for repair to the base of the east jamb using a timber splice repair		-	Double-glazed. There was condensate in all double-glazing units, suggesting glazing seals have failed. Double-glazing units should be replaced	1no. modern metal casement stay	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 25-26	
S.1.10	S	1	10	2x2 pane timber casement with 1no. opening awning	Timber	~2225x1190mm	Inoperable due to poor condition of window							There is decay to the base of the mullion to the awning. There is decay to the base of both stiles to the awning. The west stile has been previously repaired with putty. 2no. L-shaped metal surface plates have been fixed to the awning at the joint between the stiles and bottom rail to reinforce the joint. The awning should be replaced in a like-for-like manner	There are timber splice repairs to the base of both jambs, suggesting previous timber decay in this location. Splice repairs are poorly executed - consideration should be given to replacing them with more appropriate repairs		Single-glazed. Both panes to awning have been completely smashed. 1no. pane is cracked. 3no. panes should be replaced . Window putty is beyond the end of its service life and should be renewed	1no. modern metal casement stay has been partially pulled off. Casement stay should be replaced	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint	This window should be secured and boarded as a matter of urgency to prevent unauthorised entry to the building and ingress by pests such as pigeons	Fig. 27-29	
S.1.11	S	1	11	Modern UPVC window with 1no. opening awning	UPVC	~2260x1205mm	Partially operable - awning falls closed, suggesting mechanism requires adjustment	-	-	-	-	Awning	-	-	-	-	Double-glazed	-	-	Window is a poor fit for opening. Additional UPVC and timber strips have been installed around window to cover gaps between window unit and opening	Fig. 30	
S.1.12	S	1	12	Modern UPVC window with 1no. opening awning	UPVC	1760x1000mm	Operable	-	-	-	-	-	-	-	-	-	Double-glazed	-	-	Window is a poor fit for opening. Additional UPVC and timber strips have been installed around window to cover gaps between window unit and opening	Fig. 31	
W.1.13	W	1	13	4x4 pane timber casement with 1no. opening awning	Timber		Operable	-	-	-	-	-	-	-	-	-	Double-glazed	2no. modern metal casement stays to awning	Window has been painted with a modern, film forming paint which is in serviceable condition however is inappropriate for a timber window. Consideration should be given to stripping back current decoration and redecorating with an appropriate moisture vapour permeable paint		Fig. 32	
W.1.14	W	1	14	4x1 pane timber casement	Timber	WINDOW HAS BEEN BOARDED OVER INTERNALLY AND WAS THEREFORE NOT ACCESSIBLE FOR SURVEY																Fig. 33
W.1.15	W	1	15	4x3 pane timber casement	Timber	WINDOW HAS BEEN BOARDED OVER INTERNALLY AND WAS THEREFORE NOT ACCESSIBLE FOR SURVEY																Fig. 34

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W.1.16	W	1	16	4x3 pane timber casement with 1no. opening awning	Timber	~1575x955mm	Not tested - window is locked and key not present therefore operability cannot be tested	-	-	-	-	-	-	Timber sill is decayed at south end and should be repaired with a timber splice repair. Allowance should be made for repair of the south jamb with a timber splice repair			Single-glazed. A plastic vent has been installed to 1no. pane to awning. Window putty is at the end of its service life and should be renewed	1no. modern metal casement stay and retrofitted window lock	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 34
N.G.1	N	G	1	Single-hung 6 over 6 timber sash with fixed upper sash and sliding lower sash	Timber	~1600x1015mm	Partially operable - lower sash is binding in frame, preventing full opening							Both outer linings are decayed at the base and should be repaired using timber splice repairs . There is decay to the base of the lower stile on the west side which should be repaired using a timber splice repair. Allowance should be made for repair of the bottom rail of the awning with a timber splice repair	Timber sill is decayed for full length and should be replaced		Single-glazed. 1no. pane to the lower sash is cracked and should be replaced . Window putty is at the end of its service life and should be renewed	2no. modern handles to the lower sash and 3no. sash locks (only one of which is operable). Redundant sash locks should be removed	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 35
N.G.2a	N	G	2a	Former single-hung 2 over 3 sash converted into timber casement with 1no. opening awning	Timber	~2815x500mm	Operable	-	-	-	-	-	-	Both lower stiles to former sliding sash are decayed at the base and should be repaired with timber splice repairs . The sill and base of the outer lining at the west end are decayed and should be repaired using timber splice repairs	Bottom rail of the former sliding sash is decayed for full length and should be replaced. Allowance should be made for replacement of timber sill		Single-glazed. Window putty is beyond the end of its service life and should be renewed	1no. modern casement stay to awning. Casement stay has been fixed to 2no. timber batons which, in turn, are fixed to the meeting rail of the former sliding sash	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint	Window forms tripartite window with N.G.2b and N.G.2c. There is an internal partition wall between N.G.2a and N.G.2b.	Fig. 36-44
N.G.2b	N	G	2b	Single-hung 6 over 9 timber sash with fixed upper sash and sliding lower sash	Timber	Opening for N.G.2b and N.G.2c = ~2805x1780mm / Window N.G.2b = ~2805x1205mm	Inoperable - both sash cords have snapped							There is localised decay at the joints between the sill and both inner linings which should be repaired with timber splice repairs	Staff bead is decayed for full length and should be replaced. Allowance should be made for replacement of the timber sill, and timber splice repair to both outer linings		Single-glazed. Window putty is beyond the end of its service life and is missing in several locations. Window putty should be renewed	2no. metal handles to lower sash and 1no. modern sash lock	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint	Window forms tripartite window with N.G.2a and N.G.2c. There is an internal partition wall between N.G.2a and N.G.2b	Fig. 36-44
N.G.2c	N	G	2c	Former single-hung 2 over 3 sash converted into timber casement with 1no. opening awning	Timber	Opening for N.G.2b and N.G.2c = ~2805x1780mm / Window N.G.2b = ~2805x500mm	Operable	-	-	-	-	-	-	The base of the east lower stile is missing and has been crudely repaired with putty. This should be replaced with a proper timber splice repair . The base of both inner linings and both staff beads are decayed and should be repaired with timber splice repairs . The west outer lining is decayed and should be repaired using a timber splice repair	The timber sill is decayed for the full length and should be replaced . The bottom rail of the former sliding sash is decayed for the full length and should be replaced		Single-glazed. Window putty is beyond the end of its service life and should be renewed	1no. modern casement stay to awning. Casement stay has been fixed to 2no. timber batons which, in turn, are fixed to the meeting rail of the former sliding sash	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint	Window forms tripartite window with N.G.2a and N.G.2b	Fig. 36-44
N.G.3	N	G	3	12no. pane fixed timber casement situated above front door to 466 Moss Lane East	Timber	-	-	-	-	-	-	-	-	-	-	-	Single-glazed	-	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 45
N.G.4	N	G	4	12no. pane fixed timber casement situated above front door to 468 Moss Lane East	Timber	-	-	-	-	-	-	-	-	-	-	-	Single-glazed	-	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 46
N.G.5a	N	G	5a	Single-hung 2 over 3 sash with fixed upper sash and sliding lower sash	Timber	Opening for N.G.5a and N.G.5b = ~2800x1775mm / Window N.G.5a ONLY = ~2800x575mm	Inoperable - lower sash has been fixed shut with screws to prevent operability	Lower sash							Allowance should be made for replacement of the timber sill. There is decay to all elements of the fixed upper sash as well as multiple previous putty repairs which are crudely formed. The fixed upper sash should be replaced	There are 2no. previous timber splice repairs to the stiles of the lower sash. The timber panel between windows N.G.5a and N.G.5b has been previously repaired with a timber splice repair. Holes have been drilled in the timber panel presumably to provide ventilation to the interior	Single-glazed. Window putty is beyond the end of its service life and should be renewed	-	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint	Window forms tripartite window with N.G.5b and N.G.5c	Fig. 47-51

REF	ELEV	FLOOR	UNIT	WINDOW TYPE	MAT	DIMENSIONS (MM)	OPERABILITY	RELEASE	EASE	REHANG	BALANCE	RENEW	RE-ALIGN	ELEMENTS TO REPAIR	ELEMENTS TO REPLACE	PREVIOUS REPAIRS	GLAZING & PUTTY	FURNITURE	DECORATION	ADDITIONAL COMMENTS	PHOTO REFERENCE
N.G.5b	N	G	5b	Former single-hung 6 over 9 timber sash converted into timber casement with 1no. opening awning	Timber	Opening for N.G.5a and N.G.5b = ~2800x1775mm / Window N.G.5b ONLY = ~2800x1190mm	Partially operable - awning cannot be fully closed due to position of previous sash lock. This presents a security risk to the building							The west outer lining is decayed at the base and should be repaired using a timber splice repair	The east outer lining between windows 5b and 5c is decayed at the window head and should be replaced	There was 1no. previous timber splice repair to the west stile of the lower sash	Single-glazed. 1no. pane to lower sash is cracked and should be replaced . Plastic vents have been fitted to 2no. panes in the awning. Window putty is beyond the end of its service life and should be renewed	2no. modern metal casement stays to awning which have been painted with a modern film forming paint. Casement stays are misaligned and should be realigned to allow window to be locked shut	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint	Window forms tripartite window with N.G.5a and N.G.5c. There is a internal partition wall between N.G.5b and N.G.5c	Fig. 47-51
N.G.5c	N	G	5c	Former single-hung 2 over 3 sash converted into timber casement with 1no. opening awning	Timber	~2800x595mm	Not tested - retrofitted window lock is locked and key is not present therefore operability could not be tested	-	-	-	-	-	-	There is localised decay to the base of the inner lining to the east which should be repaired using a timber splice repair . There is decay to the window head at the east end which should be repaired using a timber splice repair . Allowance should be made for repair of adjoining timber elements	Allowance should be made for replacement of the timber sill		Single-glazed. A vent has been fitted to 1no. pane to the awning. Window putty is beyond the end of its service life and should be renewed	1no. modern metal casement stay which has been painted with a modern, film-forming paint. 1no. retrofitted window lock.	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint	Window forms tripartite window with N.G.5a and N.G.5b. There is a internal partition wall between N.G.5b and N.G.5c	Fig. 47-51
N.G.6	N	G	6	Single-hung 6 over 6 timber sliding sash with fixed upper sash and sliding lower sash	Timber	~1655x970mm	Inoperable			Lower sash			Lower sash	There is localised decay to the bottom rail and stiles of the lower sash at the joints which should be repaired using timber splice repairs	Allowance should be made for replacement of the sill		Single-glazed. A vent has been fitted to 1no. pane to the awning. Window putty is beyond the end of its service life and should be renewed	2no. modern handles to the lower sash which have been painted with a modern, film-forming paint. 1no. sash lock has been painted with a modern, film-forming paint. Sash cords have been painted with a modern, film-forming paint	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 52
S.G.7	S	G	7	2x2 pane timber casement with 1no. opening awning	Timber	~1690x1000mm	Inoperable - retrofitted window lock is locked and key is not present	-	-	-	-	-	-	There is localised decay to the base of both jambs which should be repaired with timber splice repairs	Timber sill is decayed for full length and should be replaced . Transom is decayed for full length and should be replaced		Single-glazed. Window putty is beyond the end of its service life and should be renewed	1no. modern metal casement stay which has been painted with a modern, film-forming paint. 1no. retrofitted window lock.	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 53-54
E.G.8	E	G	8	3x1 pane timber casement with 1no. opening awning	Timber	~1445x325mm	Operable	-	-	-	-	-	-	-	-	-	Single-glazed with frosted grazing. Window putty is in serviceable condition	1no. modern metal casement lock has been installed to awning in the position of a casement stay	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint	Timber sill is concealed underneath tiling for shower therefore is at risk of decay	Fig. 55-56
E.G.9	E	G	9	2x2 pane timber casement with 1no. opening awning	Timber	~1980x1470mm	Inoperable - awning has been fixed shut	Awning						-	-	There are 3no. previous timber splice repairs to the jambs and mullion	Single-glazed. Vent has been fitted to 1no. pane to the awning. Window putty is beyond the end of its service life and is missing in several locations. Window putty should be replaced	2no. modern metal casement stays to awning. Redundant pins for previous casement stays are present and should be removed . 1no. retrofitted window lock	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 57-58
S.G.10	S	G	10	2x2 pane timber casement with 1no. opening awning	Timber	~1665x925mm	Not tested - retrofitted window lock is locked and key is not present therefore operability could not be tested	-	-	-	-	-	-	The east stile of the awning is decayed at the base and should be repaired with a timber splice repair . There is decay to the mullion of the awning which should be repaired using a timber splice repair . There is decay to the base of both jambs and the mullion. Allowance should be made for timber splice repairs in these locations	Timber sill is decayed for full length and should be replaced . The bottom rail of the awning is decayed for the full length and should be replaced . Transom is decayed for full length and should be replaced		Single-glazed	1no. modern metal casement stay to awning. 1no. retrofitted window lock	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 59
S.G.11	S	G	11	4x2 pane timber casement with 2no. opening awnings	Timber	~2800x1560mm	Not tested - retrofitted window locks are locked and keys are not present meaning operability cannot be tested	-	-	-	-	-	-	There is localised decay to the base of both jambs and the mullion which should be repaired using a timber splice repair . There is localised decay to the bottom rail and east stile of the east awning at the joint which should be repaired using timber splice repairs . There is localised decay to the bottom rail and west stile of west awning at the joint which should be repaired with timber splice repairs	Timber sill is decayed for full length and should be replaced		Single-glazed. Window putty is beyond the end of its service life and is missing in several locations. Window putty should be renewed	2no. modern metal casement stays and 2no. retrofitted casement locks (one to each awning)	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 60-61

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S.G.12	S	G	12	4x4 pane timber casement with 2no. opening awnings	Timber	~2790x1580mm	Partially operable - east awning is operable / west awning is binding in frame and does not lock properly, creating a security risk to the building		West awning					There is localised decay to the timber sill and base of the west jamb at the joint between the sill and jamb which should be repaired using timber splice repairs . The base of the mullion is decayed above a previous splice repair. The previous repair should be removed and the mullion repaired with 1no. new timber splice repair . The lower transom is decayed at the outer ends and should be repaired with timber splice repairs . Both stiles to the west awning are decayed at the base and should be repaired with timber splice repairs	The bottom rail of the west awning is decayed for the full length and should be replaced		Single-glazed. Window putty is beyond the end of its service life and should be renewed	2no. modern chrome casement stays (one to each awning)	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 62
S.G.13	S	G	13	2x2 pane timber casement with 1no. opening awning	Timber	~1685x930mm	Partially operable - awning is binding on window frame		Awning					The base of both jambs and the central mullion are decayed and should be repaired with timber splice repairs	Timber sill is decayed for full length and should be replaced . The sill has ben covered with 2no. timber batons. The bottom rail to the awning is decayed for the full length and should be replaced	There are multiple previous putty repairs to the window frame which have been crudely formed. Consideration should be given to replacing these with proper timber splice repairs	Single-glazed. 1no. pane is cracked and should be replaced	1no. modern casement stays to awning	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 63
W.G.14	W	G	14	4x3 pane timber casement with 1no. pane opening awning	Timber	~1790x1010mm	Operable	-	-	-	-	-	-	The base of both jambs are decayed and should be repaired using timber splice repairs . The base of the north mullion is decayed and should be repaired using timber splice repairs. There is decay to the south mullion which should be repaired using a timber splice repair	Timber sill is decayed for full length and should be replaced	The base of the south mullion has had a previous timber splice repair which has been crudely formed. Consideration should be given to replacing this with a more appropriate timber splice repair	Single-glazed. Window putty is beyond the end of its service life and is missing in several locations. Window putty should be renewed	1no. modern chrome casement stay to awning	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 64
W.G.15	W	G	15	4x4 pane timber casement with 1no. opening awning	Timber	~1980x1480mm	Inoperable - awning is seized in a partially open position within frame	Awning	Awning					-	-	-	Double-glazed	2no. modern chrome casement stays to awning	Window has been painted with a modern, film forming paint which is in serviceable condition however is inappropriate for a timber window. Consideration should be given to stripping back current decoration and redecorating with an appropriate moisture vapour permeable paint	Window is a poor fit for opening. There is a significant amount of filler between the south jamb and reveal of opening	Fig. 65
W.G.16	W	G	16	2x1 pane timber casement with 1no. opening awning	Timber	~1285x370mm	Operable - awning is restricted by metal bars attached to the window	-	-	-	-	-	-	The sill is decayed at the north end and should be repaired using a timber splice repair			Double-glazed with frosted glass. Window putty is beyond the end of its service life and should be renewed	1no. modern metal casement stay to awning	Window has been painted with a modern, film forming paint which is in serviceable condition however is inappropriate for a timber window. Consideration should be given to stripping back current decoration and redecorating with an appropriate moisture vapour permeable paint		Fig. 66
W.G.17	W	G	17	2x2 pane timber casement with 1no. opening awning	Timber	~1100x965mm	Partially operable - awning is binding on frame. Awning is restricted by metal bars attached to the window		Awning					There is localised decay at the joints between the sill and both jambs which should be repaired using timber splice repairs . Allowance should be made for timber splice repairs to the stiles and mullion of the awning	The bottom rail of the awning is decayed for full length and should be replaced . Timber sill is suspected decayed for full length however could not be reached for tactile examination. Allowance should be made for replacement of sill		Single-glazed. Window putty is beyond the end of its service life and should be renewed	1no. modern metal casement stay to awning	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 67
N.B.1	N	B	1	2x3 pane timber casement with 1no. opening awning	Timber	~1100x915mm	Operable	-	-	-	-	-	-	-	-	-	Double-glazed. Window putty is in serviceable condition	1no. modern metal casement stay to awning	Window has been painted with a modern, film forming paint which is in serviceable condition however is inappropriate for a timber window. Consideration should be given to stripping back current decoration and redecorating with an appropriate permeable paint		Fig. 68
W.B.2	W	B	2	2x2 pane timber casement with 1no. side hung opening casement	Timber	~1080x725mm	Operable	-	-	-	-	-	-	Base of both jambs are decayed and should be repaired with timber splice repairs	Timber sill is decayed for full length and should be replaced		Double-glazed. Window putty is in serviceable condition	1no. modern chrome casement stay and 1no. modern UPVC style locking mechanism. Locking mechanism is misaligned, making window difficult to lock shut. Locking mechanism should be adjusted to improve operability	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 69
N.B.3	N	B	3	2x3 pane timber casement with 1no. opening awning	Timber	~1165x1030mm	Partially operable - awning is binding on window frame		Awning					-	-	-	Double-glazed. Window putty is in serviceable condition	2no. modern chrome casement stays to awning	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 70

REF	ELEV	FLOOR	UNIT	WINDOW TYPE	MAT	DIMENSIONS (MM)	OPERABILITY	RELEASE	EASE	REHANG	BALANCE	RENEW	RE-ALIGN	ELEMENTS TO REPAIR	ELEMENTS TO REPLACE	PREVIOUS REPAIRS	GLAZING & PUTTY	FURNITURE	DECORATION	ADDITIONAL COMMENTS	PHOTO REFERENCE
N.B.4	N	B	4	2x3 pane timber casement with 1no. opening awning	Timber	~1090x1085mm	Partially operable - awning is binding on window frame		Awning					-	-	-	Double-glazed	2no. modern chrome casement stays to awning	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 71
E.B.5	E	B	5	2x2 pane timber casement with 1no. side hung opening casement	Timber	~1140x760mm	Inoperable - handle to locking mechanism is missing meaning window cannot be unlocked	-	-	-	-	-	-	-	-	-	Double-glazed	1no. modern chrome casement stay and 1no. modern chrome locking mechanism. Handle to locking mechanism is missing, meaning window cannot be unlocked. Locking mechanism should be replaced	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 72
N.B.6	N	B	6	2x3 pane timber casement with 1no. opening awning	Timber	~1120x970mm	Operable	-	-	-	-	-	-	-	-	-	Double-glazed.	2no. modern chrome casement stays to awning	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 73
E.B.7	E	B	7	2x3 pane timber casement with 1no. opening awning	Timber	~1010x1095mm	Operable	-	-	-	-	-	-	-	-	-	Double-glazed. Window putty is in serviceable condition	2no. modern casement stays to awning	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 74
S.B.8	S	B	8	2x4 pane timber casement with 1no. side-hung opening casement to east	Timber	~855x1155mm	Partially operable - casement is binding in frame		Casement					-	-	-	Double-glazed	1no. modern chrome casement stay with 1no. modern chrome locking mechanism	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 75
S.B.9	S	B	9	2x4 pane timber casement with 1no. side-hung opening casement to west	Timber	~855x1200mm	Operable	-	-	-	-	-	-	-	-	-	Double-glazed. Window putty is in serviceable condition	1no. modern chrome casement stay with 1no. modern chrome locking mechanism	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 76
W.B.10	W	B	10		Timber	~1005x1095mm	Partially operable - casement stays are binding on casement causing mechanical wear to frame	-	-	-	-	-	-	-	-	-	Double-glazed. Window putty is in serviceable condition	2no. modern chrome casement stays to awning. Casement stays should be relocated to stop binding and mechanical wear	Window has been painted with a modern, film-forming paint which is inappropriate for a timber window and is flaking. Decoration should be stripped back and window redecorated with an appropriate moisture vapour permeable paint		Fig. 77

Appendix B

ACCOMPANYING KEY FOR SCHEDULE

The following paragraphs provide explanatory detail to be read in conjunction with the contents of the *Schedule of window condition* in Attachment A

1 RECOMMENDATIONS TO RESTORE OPERABILITY

The operability of windows across the buildings was variable. To restore operation, several related tasks may need to be undertaken with their application dependent on the condition of individual window units and their respective issues. It should be noted that all recommendations provided in the table are indicative as they are based on the results of non-destructive surveys undertaken by H+R. All works should be undertaken by contractors experienced in refurbishing historic windows in tandem with their practical recommendations, which may require a greater or lesser extent of work than is described here

For tendering purposes, remedial tasks are outlined in the attached table under the section entitled Works to Restore Operability and separated into the following methods:

1. Release: As a first action, some units require the breaking of paint seals at the junction of movable elements, or the removal of fixings, which were retarding function. In some cases, this will be sufficient to restore operability without requiring further remedial works described below
2. Ease: Metal casements and timber sash panels seized within their linings. Timber sashes affected by dimensional changes in timber (and not subject to mechanical fixing in-situ) should be removed from the window opening. Excess timber to the sash can be planed and refinished before reinstalling the sash into the aperture. This may also include the removal of excessive layers of paint which contribute to the dimensional change. Metal casements should be stripped of excessive overpainting to surfaces where they contact mullions, transoms and stiles to improve function. Some adjustment of hinges may be required
3. Rehang: Sashes that close or open of their own accord indicate that either pulley cords are not of the correct length, or that the weights are inadequate (too heavy, too light etc.). Cords should be loosened and readjusted to ensure proper closure, and/or sashes weighed accurately with weights adjusted/replaced if necessary. If cords require replacement, then diameters should match existing and a durable brand chosen for replacement, such as Polybraid cord by Everlasto®
4. Balance: Sash panels that do not run parallel within the aperture are likely to be mis-weighted, meaning that weights are unevenly distributed within linings. Sashes should be accurately weighed and weights reduced, added to, or replaced depending on the severity of the issue
5. Renew: Sash mechanisms seized because of irreparable damage or significant overpainting may require the replacement of pulley wheels and plates. This may also require the replacement of corresponding cords and weights
6. Re-align: Upper and Lower sash meeting rails are generally misaligned due to excessive layers of impermeable paint to the window head and sill and/or dropping of the Upper sash. The stripping of these paint layers by rubbing back to sound material prior to redecoration, and the removal of debris will be required. If these methods do not prove sufficient to restore alignment, the re-seating of sash fasteners may be necessary. The addition of timber packing wedges to raise fasteners is preferred to cutting into partnered meeting rails to lower them

2 RECOMMENDATIONS TO RESTORE CONDITION

Works to restore condition should be undertaken in tandem with works to restore operability to avoid the need for further adjustment in the future

It should be noted that it may be more practical to replace decayed elements of timber sashes as opposed to carrying out splice repairs. This will depend on the severity and extent of the decay, as some elements are easier to replace than others. For example, decay to the lining material is more suited to repairs due to the necessity to remove significant amounts of the frame structure to enable its replacement. For tendering purposes, remedial tasks are outlined in the attached table under the section entitled Works to Restore Condition and separated into the following methods:

1. Elements to Repair: Areas of identified decay and order damage to timber elements to be cut back to sound timber and repaired using a suitable scarf joint detail in timber of the same or similar species
2. Elements to Replace: Window elements suffering from structurally significant decay or that could be more practically repaired by the replacement of structures listed in the table

Appendix C



Fig 1:

Window E.2.1; showing general view



Fig 2:

Window E.2.2; showing general view



466—468 Moss Lane East, Manchester

Photographs
27-28 February 2024

Hutton + Rostron Environmental Investigations Ltd (A SOCOTEC COMPANY)

The Manor House, Market Place, Mottram-in-Longdendale, Greater Manchester SK14 6JD
Tel: 01457 761427 email: manchester@handr.co.uk



Fig 3:

Window S.2.3; showing general view



Fig 4:

Window S.2.4; showing general view



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Fig 5:

Window S.2.5; showing general view



Fig 6:

Window S.2.6; showing general view



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Fig 7:

Window S.2.6; showing close up view of desiccant beads within glazing unit



Fig 8:

Window W.2.7; showing general view



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Fig 9:

Window W.2.8; showing general view



Fig 10:

Window N.1.1; showing general view



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Fig 11:

Window N.1.2; showing general view



Fig 12:

Window N.1.2; showing timber decay to outer lining and sill



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Fig 13:

Window N.1.3; showing general view



Fig 14:

Window N.1.4; showing general view



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Fig 15:

Window N.1.4; showing timber decay to upper sash



Fig 16:

Window N.1.5; showing general view



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Fig 17:

Window S.1.6; showing general view



Fig 18:

Window S.1.6; showing timber decay to bottom rail of awning



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Fig 19:

Window S.1.6; showing non-matching pins to casement stay, preventing casement stay from being locked shut



Fig 20:

Window E.1.7; showing general view



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Fig 21:

Window E.1.7; showing previous putty repair to south jamb timber decay



Fig 22:

Window E.1.8; showing general view



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Fig 23:

Window E.1.8; showing screw used to fix awning shut



Fig 24:

Window E.1.8; showing casement stay misaligned with pins, preventing stay from being locked shut



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Fig 25:

Window S.1.9; showing general view



Fig 26:

Window S.1.9; showing condensate within the glazing unit



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Fig 27:

Window S.1.10; showing general view



Fig 28:

Window S.1.10; showing timber decay to mullion awning and missing glazing. Note; L-shaped metal surface plate to awning joints



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Fig 29:

Window S.1.10; showing broken glass from awning glazing



Fig 30:

Window S.1.11; showing general view



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Fig 31:

Window S.1.12; showing general view



Fig 32:

Window W.1.13; showing general view



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Fig 33:

Window W.1.14; showing general view



Fig 34:

Windows W.1.15 and W.1.16; showing general view



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Fig 35:

Window N.G.1; showing general view



Fig 36:

Windows N.G.2a, N.G.2b and N.G.2c;
showing general view



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Fig 37:

Window N.G.2a; showing general view from interior. Note partition wall between windows N.G.2a and N.G.2b



Fig 38:

Window N.G.2a; showing arrangement of timber batons to allow fixing of casement stay



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Fig 39:

Windows N.G.2b and N.G.2c; showing general view from interior



Fig 40:

Window N.G.2b; showing snapped sash cord



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Fig 41:

Window N.G.2b; showing decay to outer lining



Fig 42:

Window N.G.2c; showing decay to sill



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Fig 43:

Window N.G.2c; showing previous putty repair



Fig 44:

Window N.G.2c; showing where former sliding sash has been cut to form timber casement



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Fig 45:

Window N.G.3; showing general view



Fig 46:

Window N.G.4; showing general view



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Fig 47:

Window N.G.5a, N.G.5b and N.G.5c;
showing general view



Fig 48:

Window N.G.5a and N.G.5b; showing
general view from interior



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Fig 49:

Window N.G.5a; showing severe decay to awning (former fixed sash)



Fig 50:

Window N.G.5b; showing previous timber splice repair



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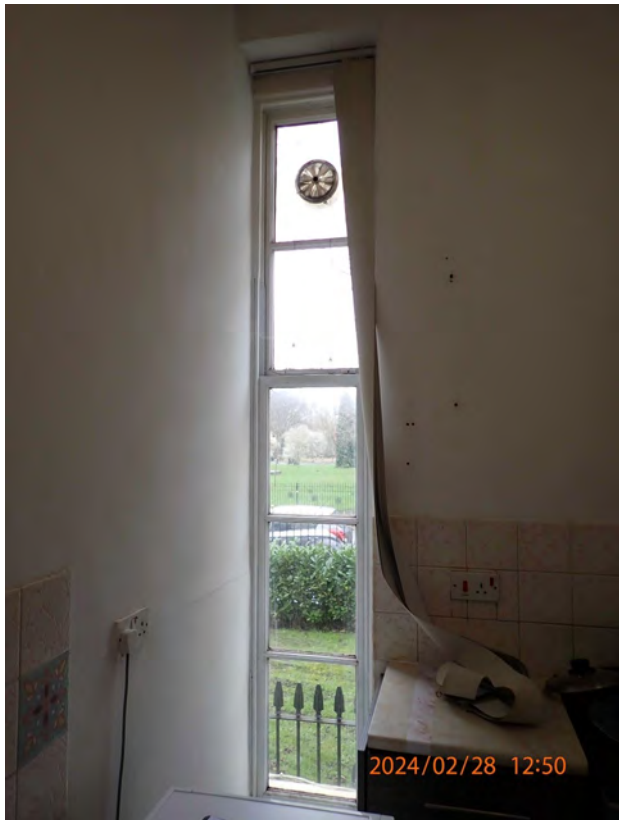


Fig 51:

Window N.G.5c; showing general view from interior. Note partition wall between windows N.G.5b and N.G.5c



Fig 52:

Window N.G.6; showing general view



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Fig 53:

Window S.G.7; showing general view



Fig 54:

Window S.G.7; showing timber decay to jamb and sill



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Fig 55:

Window E.G.8; showing general view

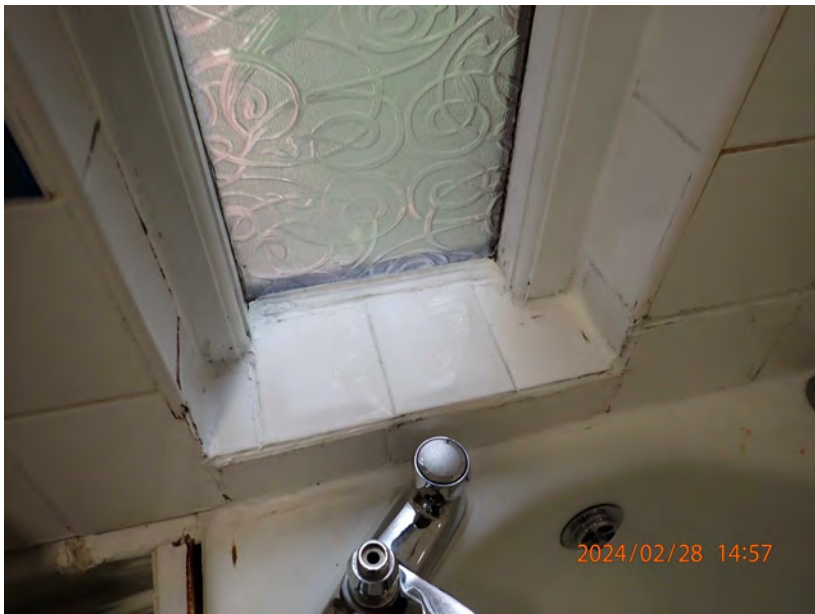


Fig 56:

Window E.G.8; showing timber sill concealed under tiling in bathroom, increasing risk of decay



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Fig 57:

Window E.G.9; showing general view



Fig 58:

Window E.G.9; showing timber splice repair to mullion



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Fig 59:

Window S.G.10; showing general view



Fig 60:

Window S.G.11; showing general view



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Fig 61:

Window S.G.11; showing timber decay to mullion and sill



Fig 62:

Window S.G.12; showing general view



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Fig 63:

Window S.G.13; showing general view. Note timber batons fixed to decayed sill. Note extensive putty repairs to window frame



Fig 64:

Window W.G.14; showing general view



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Fig 65:

Window W.G.15; showing general view



Fig 66:

Window W.G.16; showing general view



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Fig 67:

Window W.G.17; showing general view. Note decay to bottom rail



Fig 68:

Window N.B.1; showing general view



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Fig 69:

Window W.B.2; showing general view



Fig 70:

Window N.B.3; showing general view



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Fig 71:

Window N.B.4; showing general view



Fig 72:

Window E.B.5; showing general view



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Fig 73:

Window N.B.6; showing general view



Fig 74:

Window E.B.7; showing general view



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Fig 75:

Window S.B.8; showing general view



Fig 76:

Window S.B.9; showing general view



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Fig 77:

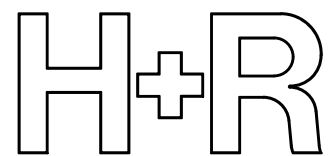
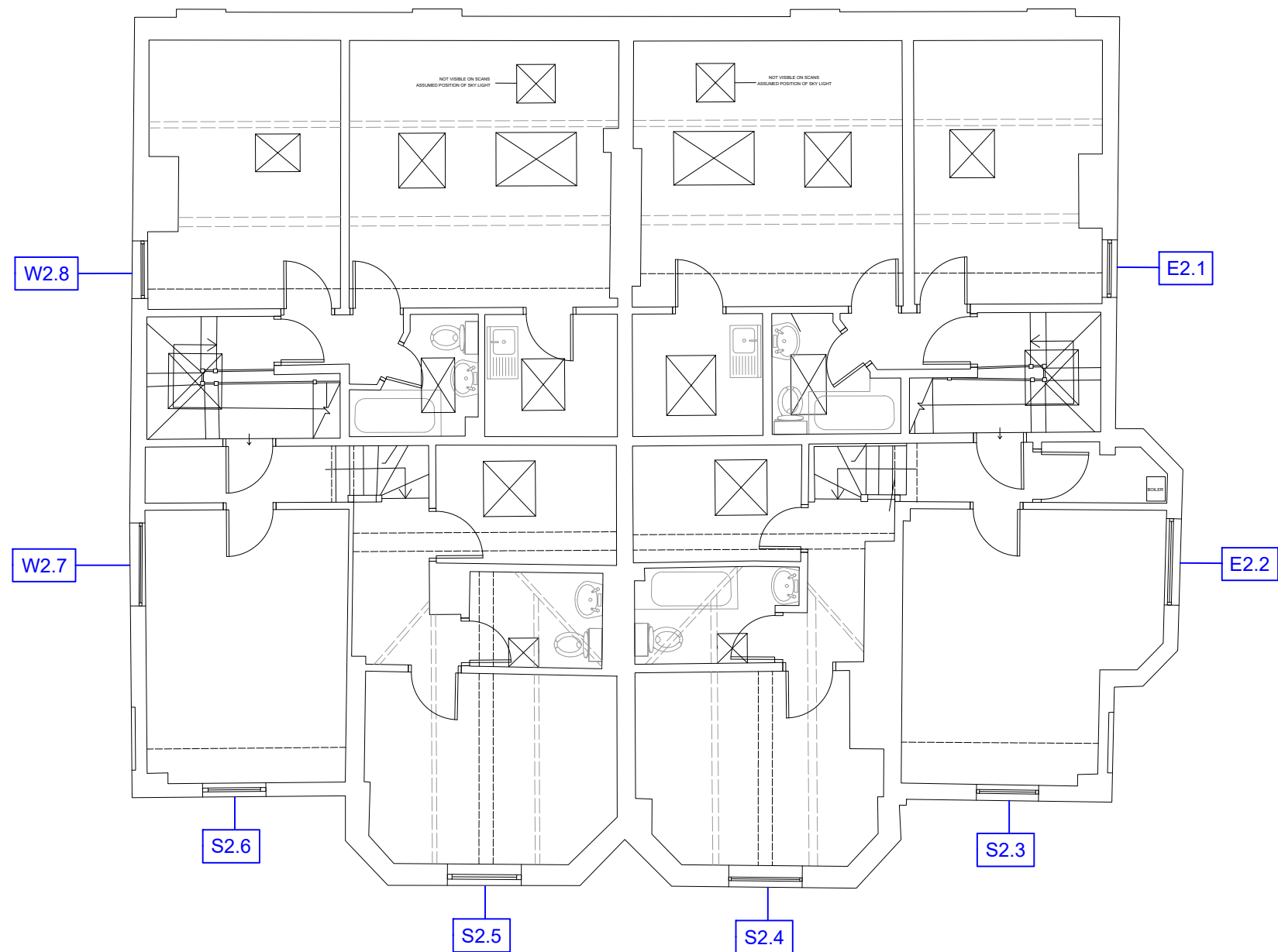
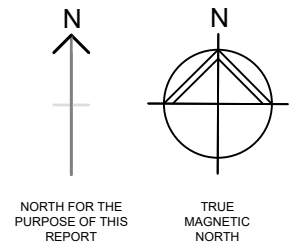
Window W.B.10; showing general view



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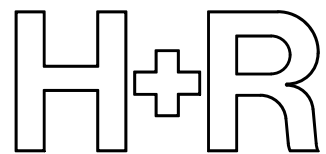
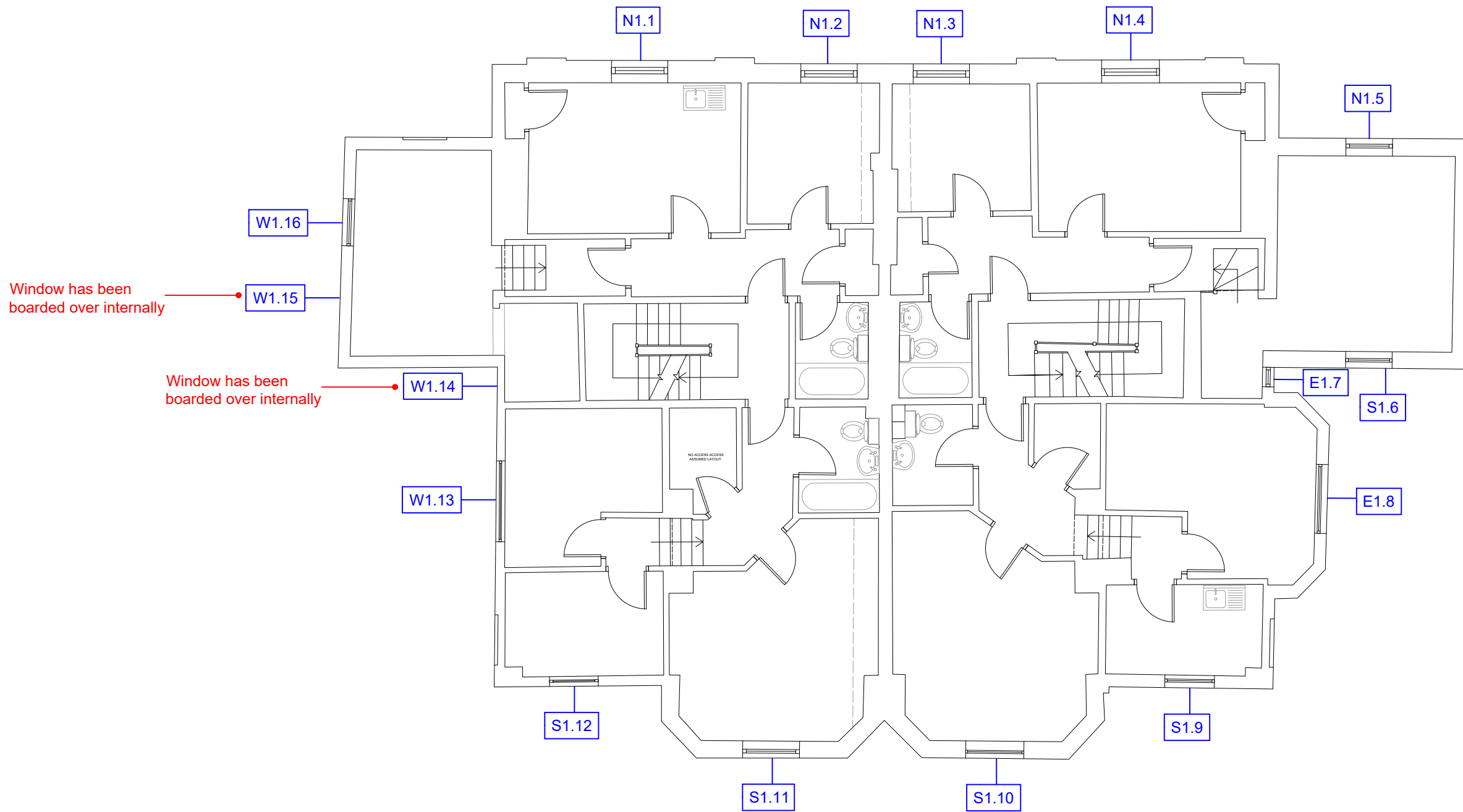
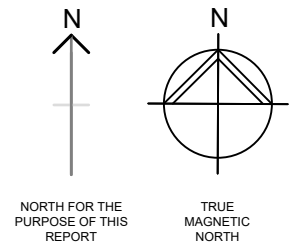
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Appendix D



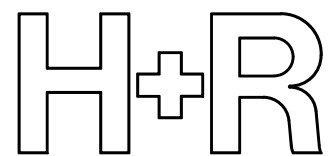
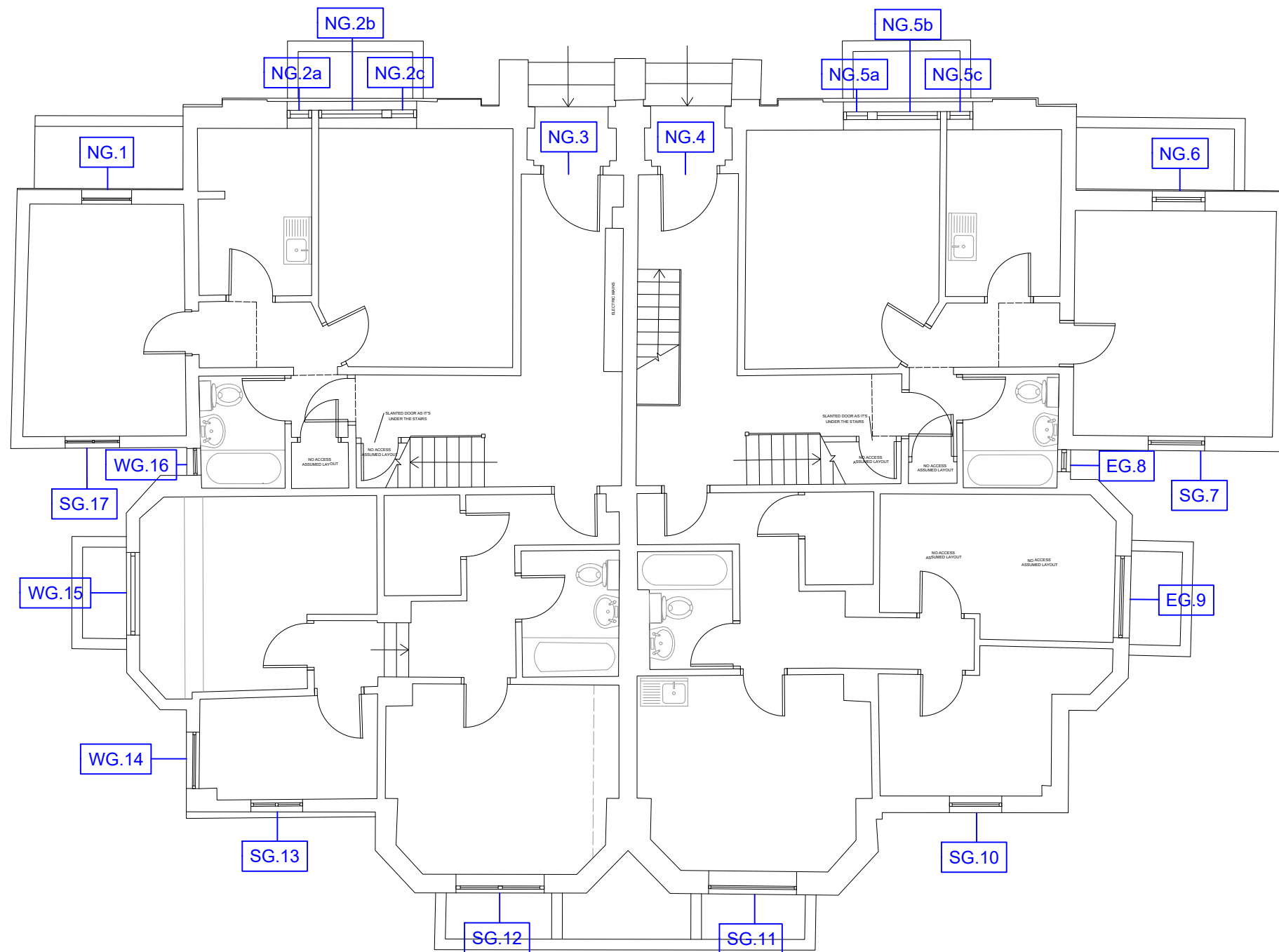
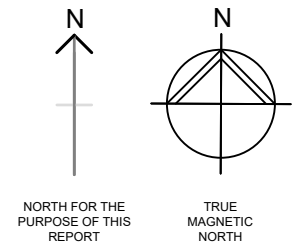
466-468 Moss Lane East, Manchester - Second Floor
Window Condition Survey
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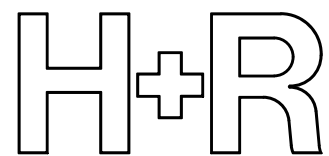
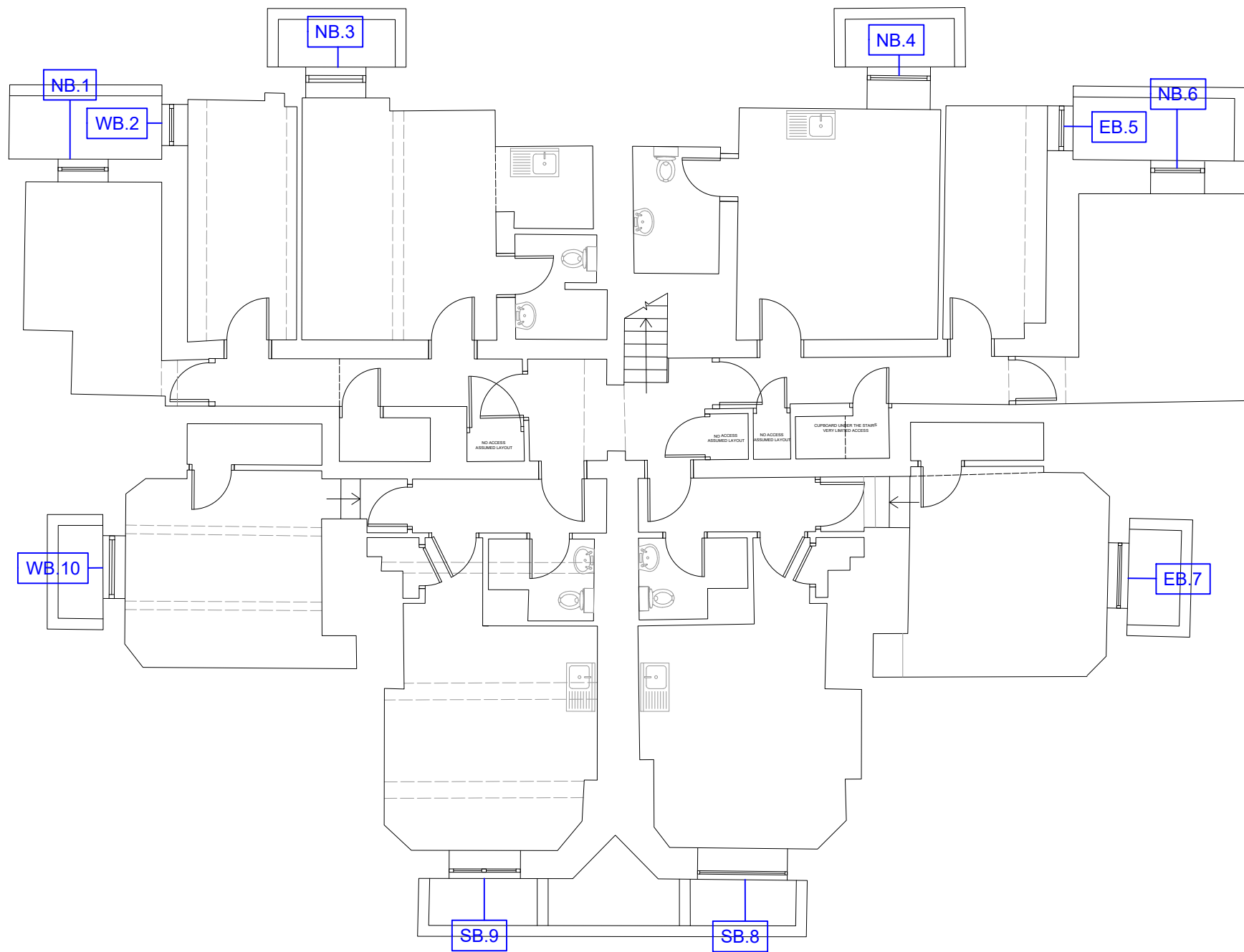
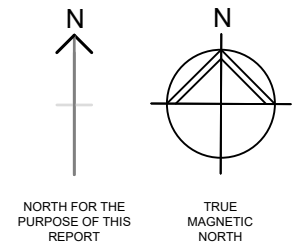
466-468 Moss Lane East, Manchester - First Floor
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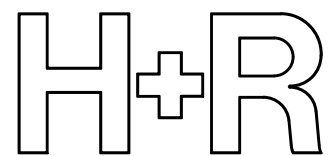
466-468 Moss Lane East, Manchester - Ground Floor
Window Condition Survey
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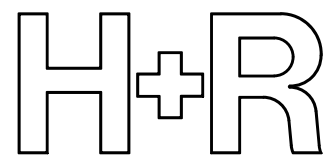
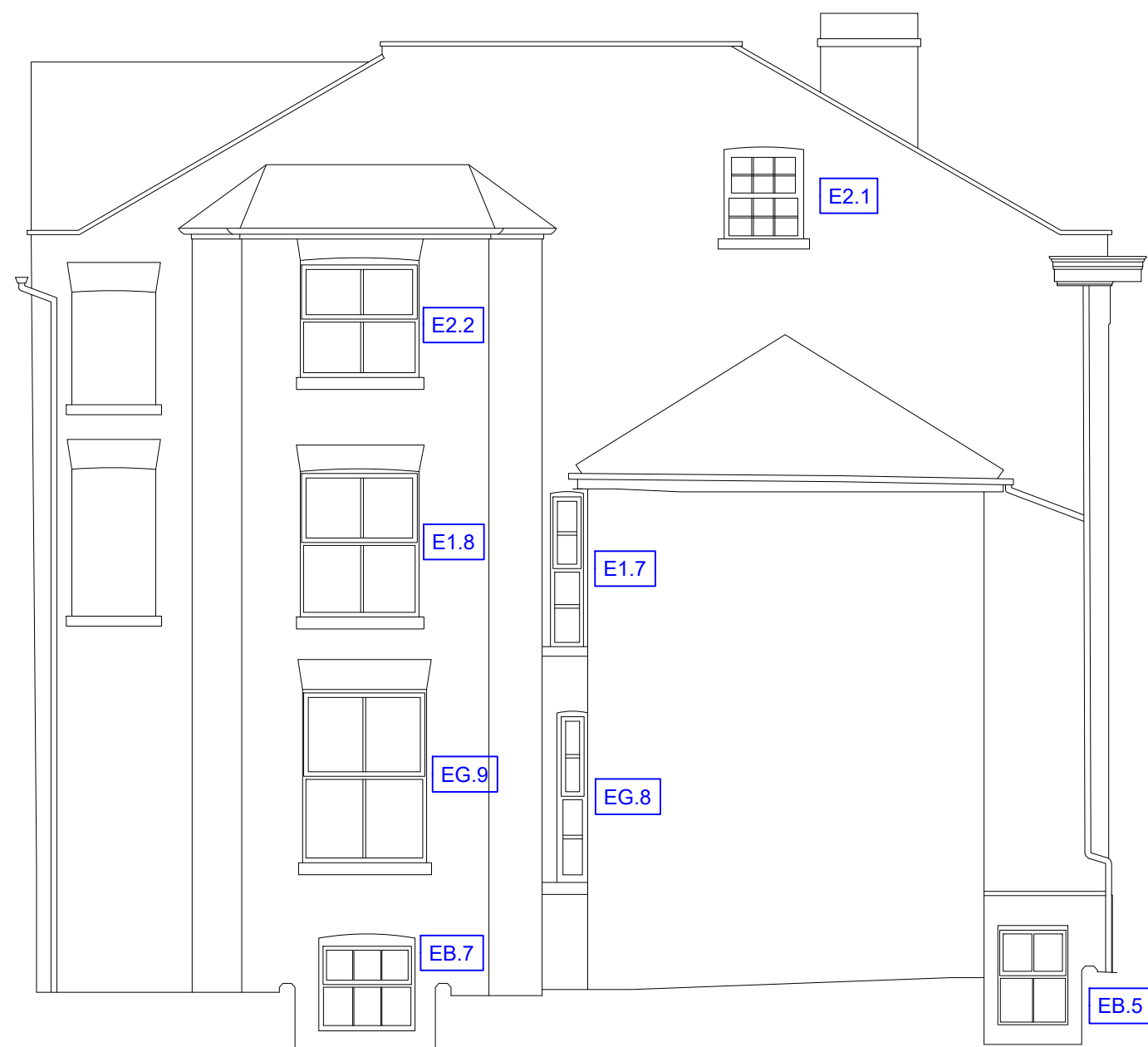
466-468 Moss Lane East, Manchester - Basement
Window Condition Survey
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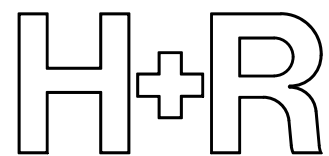
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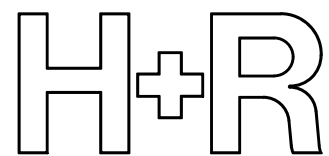
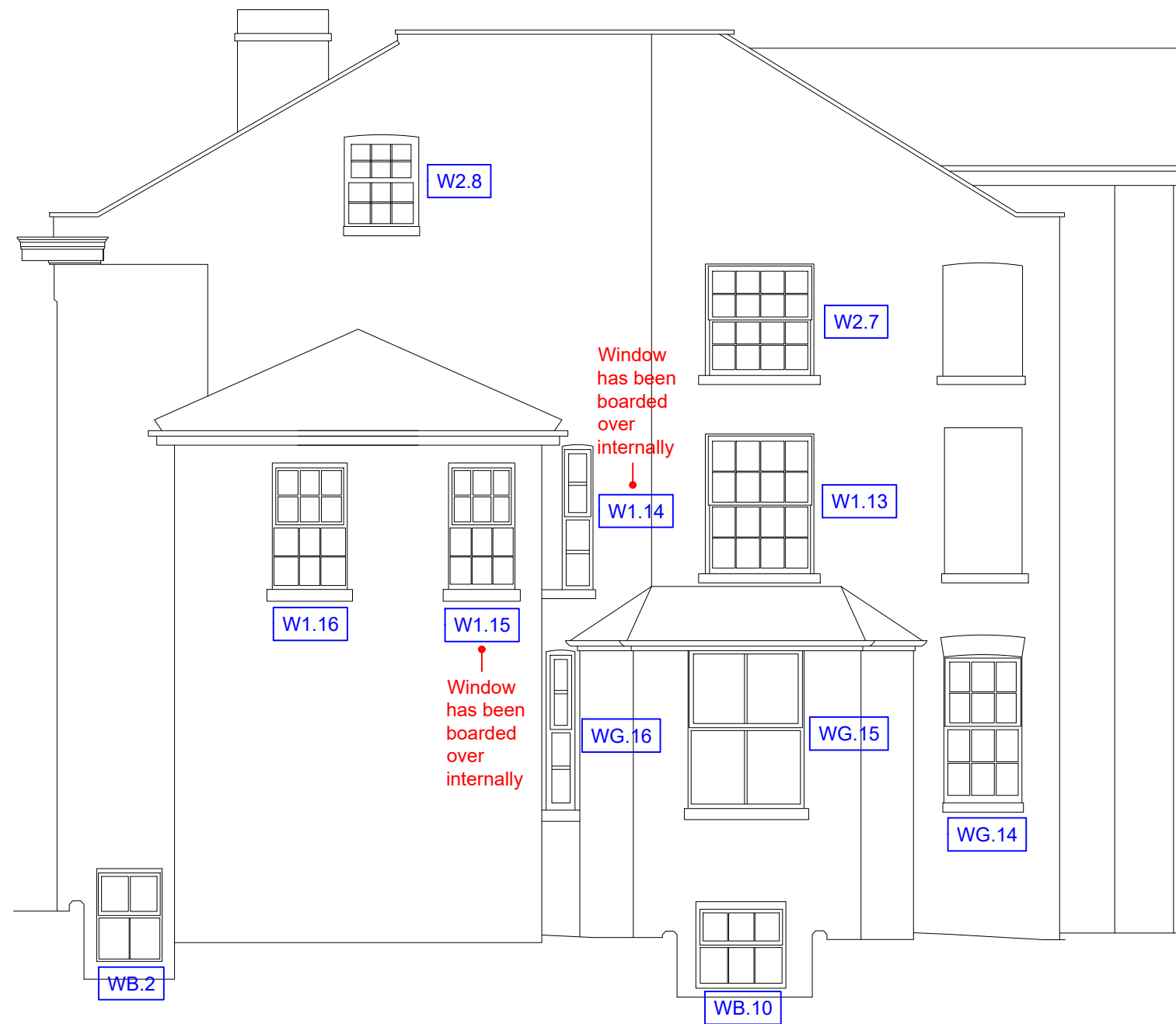
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