

# Manchester Art Gallery



MAG-BUT-08-XX-SH-A-31-0001  
Art Store 2 Window Repair Schedule  
May 2024



## Version history

Project name: Manchester Art Gallery

Project number: MAG-BUT-17-XX-SH-A-31-0001

Client: Manchester Art Gallery | Manchester City Council

| Rev: | Date:    | Status      | Name                        | Description                                           |
|------|----------|-------------|-----------------------------|-------------------------------------------------------|
| P01  | 19/04/24 | Preliminary | Hannah Bellerby   Architect | First Issue                                           |
| P02  | 17/05/24 | Preliminary | Hannah Bellerby   Architect | Revised general notes and WIN-010 and WIN-004 repairs |

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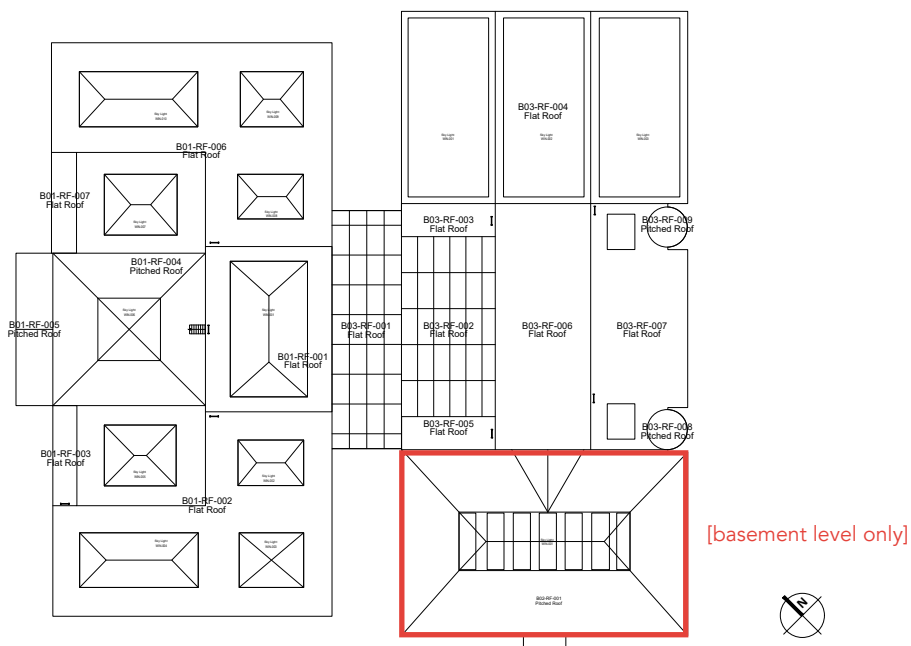
# Buttress

## Contents

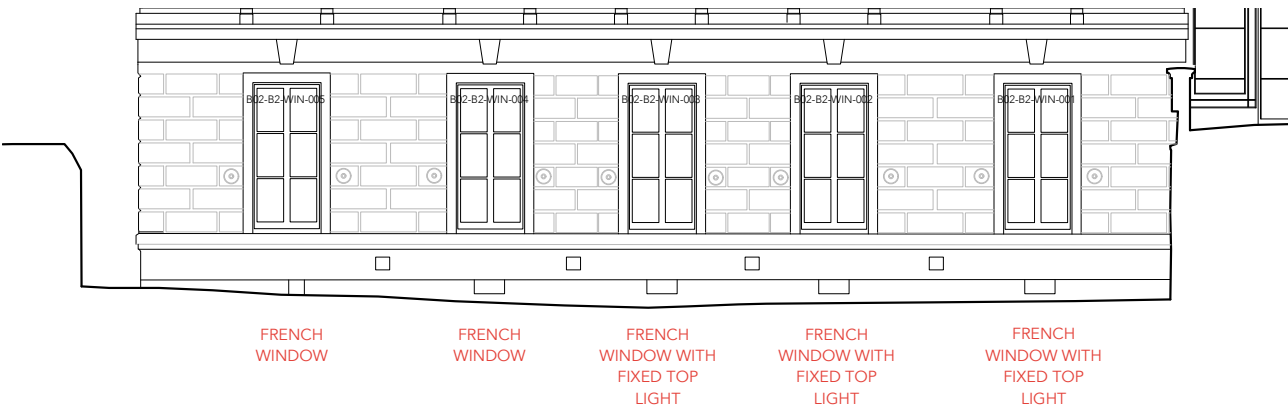
- 1.0 Location Drawings
- 2.0 Window Repairs General Notes
- 3.0 Type A: French Windows
- 4.0 Type B: French Windows with Fixed Top Light

### Location Plan

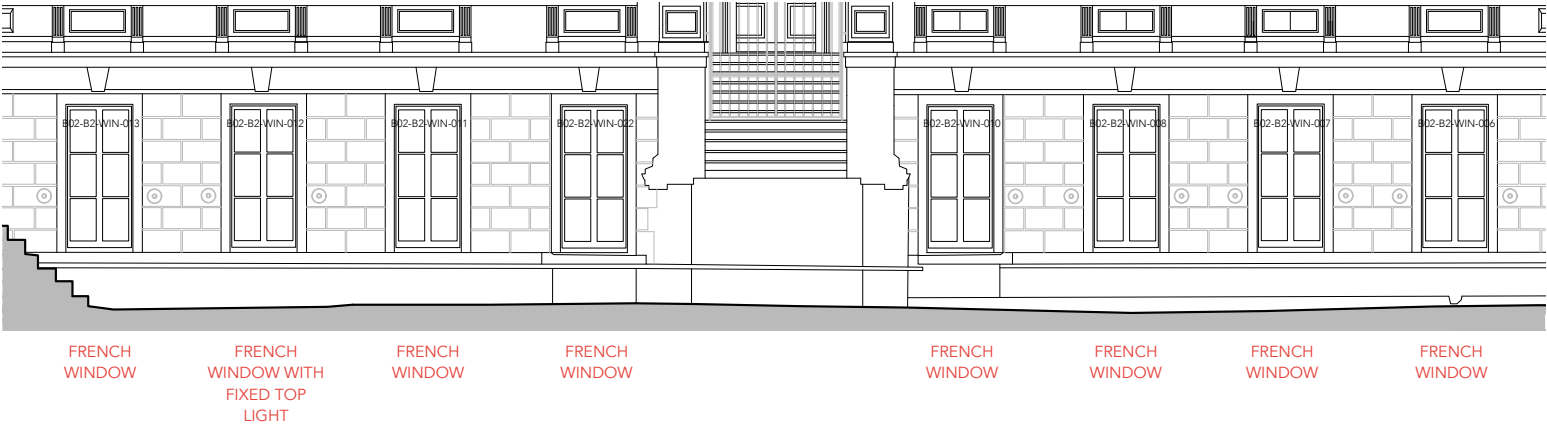
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1.0 Location Drawings



George Street Elevation



Princess Street Elevation

Note: No survey information for Back George Street elevation as lightwell is inaccessible

## 2.0 Window Repair General Notes

The following applies to all timber windows and shutters that are to be repaired, additional repairs will be documented by type in the following sections. Refer to individual window notes for repair allowances. All specification references refer to Phase 1 specifications MAG-BUT-XX-XX-SP-A-00-0001 and MAG-BUT-XX-XX-SP-A-00-0002. Repairs listed below are presented in order of application.

### 2.1 Cleaning and Preparation Refer to RS16.2

- Clean all components including frame, glass, panels and ironmongery where present.
- Shutters to be removed from windows to allow for repair and redecoration works to both items.
- Remove excess paint and prepare timber for decoration as M60/400 & 440. Allow sufficient tolerance for a new paint covering.

N.B. When removing paint the contractor is to take into account in their management procedures the possible presence of lead. Care must therefore be taken, particularly with grit blasting, to ensure that operatives are protected and that The Control of Lead at Work Regulations 2002 (CLAW) are adhered to. i.e. control of dust, good hygiene and safe disposal.

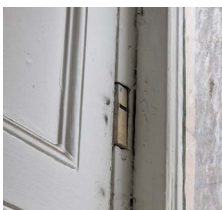
- Remove all existing beading and linseed putty from windows.

N.B. Repairs to window frames should be carried out in-situ (with the exception of WIN-004 and WIN-010)

- Remove any existing mastic sealant from window reveals.
- Remove ironmongery prior to undertaking the repair and decoration works including to shutters and reinstate once complete and dry.
- Windows to be cleaned following repair and redecoration works.
- Existing vibration monitors to be retained and protected during the works.

### 2.2 Timber repairs

- Apertures in timber (e.g. from previous fixings) to be filled and patched as RS16.2.8, including following the removal of redundant vibration sensors to all window frames (pictured below)



- Resin repairs to be undertaken at conservation joints to strengthen and prevent water ingress as RS16.2.7.
- Resin repairs to be undertaken to areas of decayed/ defective timber as required as RS16.2.7.
- Where area of decay is large and/or a resin repair is not suitable, splice repairs to be undertaken as RS16.2.6.
- New timber sections to be installed where existing sections are rotten/ failed as RS16.2.9.

### 2.3 Decoration

- Paint analysis to be undertaken prior to redecoration works to determine previous paint layers and colour schemes.
- Windows to be redecorated internally and externally, including frames, casements, beadings and cills as the following unless

otherwise stated:

- External  
Dulux Weathershield Quick Dry Exterior Satin: Apply 2no. coats as spec ref. M60/150B in colour to match existing (TBC)
- Internal  
Dulux Quick Dry Satinwood: Apply 2no. coats as spec ref. M60/150C in colour to match existing (TBC).
- Shutters to be redecorated to external face only in Dulux Quick Dry Satinwood as M60/150C in 'Natural Slate'.

## 2.4 Ironmongery/ Accessories

- Any ironmongery where present is to be retained, ensure operable and in good working order.
- Remove paint layers where present and clean & polish ironmongery (refer to 2.1 above for note on presence of lead paint) as M60/430.
- Reinstall fixings where missing to match existing.

## 2.5 Glass (windows only)

- Remove any existing plastic film from glass surfaces where present and clean face of glazing thoroughly to remove residue.
- Windows are to be made weather tight. Replacement of all beading with new hardwood beading bedded in DRY SEAL sealant as RS16.2.12. Refer to schedules on following pages for allowances.

## 2.6 Mastic (windows only)

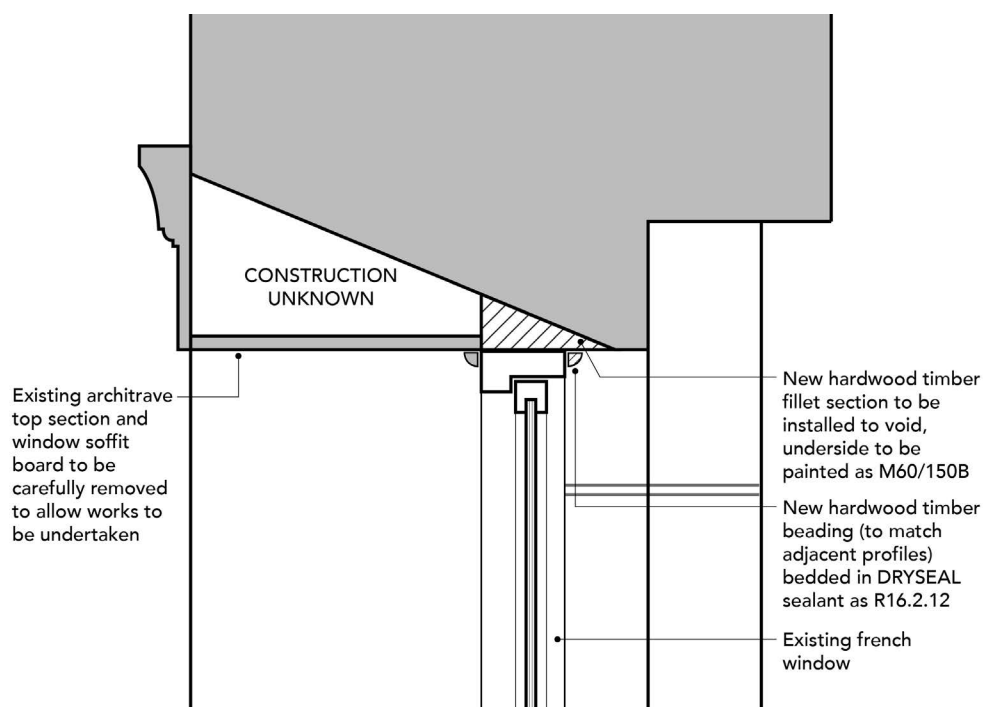
- Apply new burnt sand mastic as RS16.2.1 following repair and decoration works.

## 2.7 Assembly

- Reinstall shutters internally at existing fixing points.

## 2.8 Window Head Infill Detail

- The following detail is to be implemented ONLY where specified in the individual allowances in sections 3.0 and 4.0



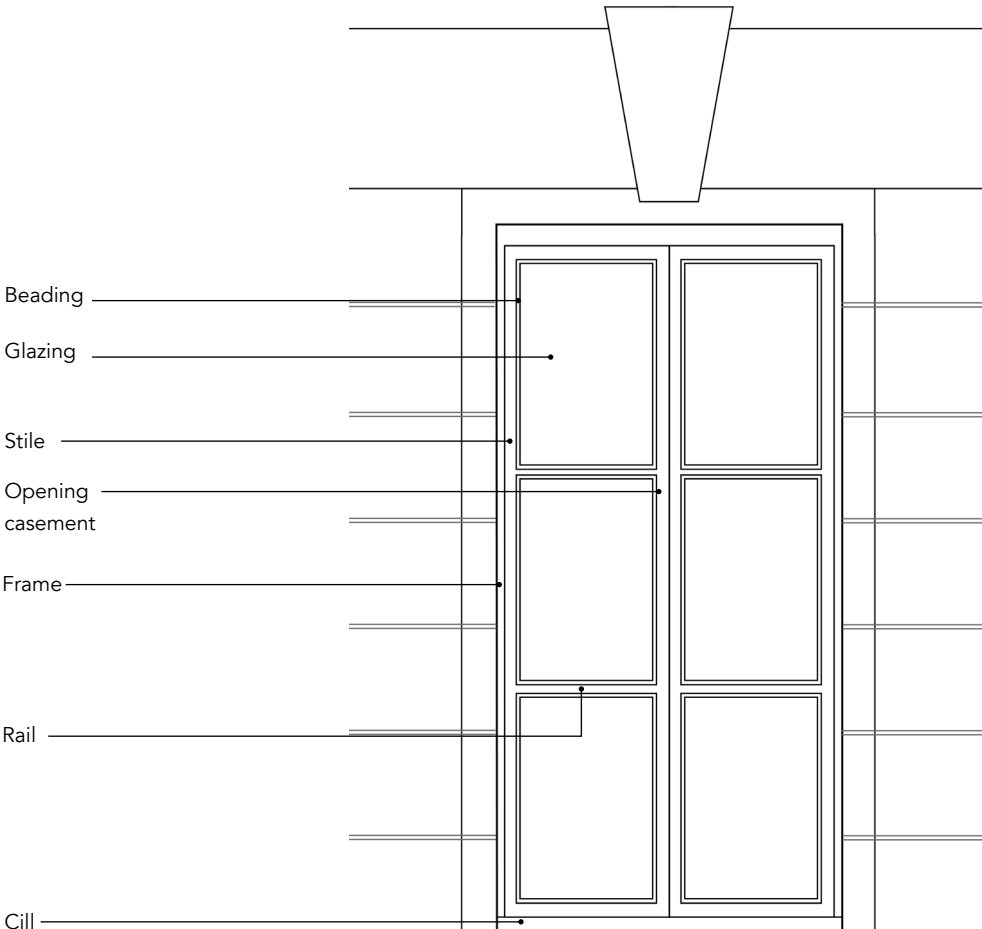
3.0 Type A: French Windows



Typical External Photograph



Typical Internal Photograph



Typical French Windows to Athenaeum  
Basement Drawing

| WINDOW DESCRIPTION       | Type A - French Window                                                                                         |                                                                                     |
|--------------------------|----------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| REPAIR ALLOWANCES        | B02-B2-WIN-024                                                                                                 |                                                                                     |
|                          |                               |    |
|                          | B02-B2-WIN-017                                                                                                 |                                                                                     |
|                          |                               |    |
|                          | B02-B2-WIN-016                                                                                                 |                                                                                     |
|                          |                              |   |
|                          | B02-B2-WIN-015                                                                                                 |                                                                                     |
|                          |                             |  |
|                          | B02-B2-WIN-014                                                                                                 |                                                                                     |
|                          |                             |  |
| IRONMONGERY/ ACCESSORIES | Refer to general notes. Shutters to B02-B2-WIN-024 have been recently refurbished.                             |                                                                                     |
| GLAZING                  | Refer to general notes. Existing window film on B02-B2-WIN-024 to be removed.                                  |                                                                                     |
| STRUCTURAL OPENING       | Refer to WP 14 phase 2 repair drawings<br>Existing vents present to window reveals externally, to be retained. |                                                                                     |

Repairs are based on allowances made in visual condition survey undertaken by TRC Contracts Ltd in June 2023

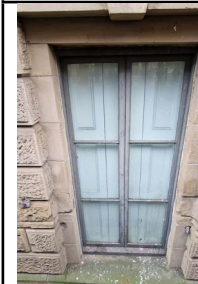
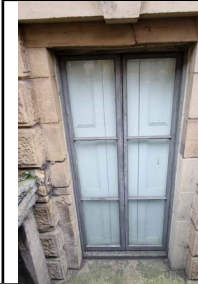
|                          |                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| WINDOW DESCRIPTION       | Type A - French Window                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                              |
|                          | B02-B2-WIN-005                                                                                                                                                      | <p>Approx. window size: 1120 x 2380mm</p> <ul style="list-style-type: none"><li>- 4no. 50mm conservation joint resin repairs</li><li>- 4no. 100mm conservation joint resin repairs</li><li>- 100cc resin repairs in 2no. locations</li><li>- 200cc resin repairs in 2no locations</li><li>- Replacement of all beadings in DRY SEAL putty (allow 14 linear metres)</li></ul> |
|                          |   |                                                                                                                                                                                                                                                                                                                                                                              |
| IRONMONGERY/ ACCESSORIES | Refer to general notes                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                              |
| GLAZING                  | Refer to general notes, no other glazing works proposed                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                              |
| STRUCTURAL OPENING       | Window head infill detail to be installed, refer to general notes section 2.8                                                                                       |                                                                                                                                                                                                                                                                                                                                                                              |

| WINDOW DESCRIPTION       | Type A - French Window                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                            |
|--------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| REPAIR ALLOWANCES        | B02-B2-WIN-004                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     | Approx. window size: 1120 x 2380mm<br><br>- 4no. 50mm conservation joint resin repairs<br>- 4no. 100mm conservation joint resin repairs<br>- 100cc resin repairs in 2no. locations<br>- 200cc resin repairs in 2no locations<br>- Replacement of all beadings in DRY SEAL putty (allow 14 linear metres)                                                                   |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |   |                                                                                                                                                                                                                                                                                                                                                                            |
|                          | B02-B2-WIN-010                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                     | Approx. window size: 1080 x 2380mm<br><br>- 4no. 50mm conservation joint resin repairs<br>- 4no. 100mm conservation joint resin repairs<br>- 100cc resin repairs in 6no. locations<br>- 200cc resin repairs in 4no locations<br>- 1no. 1000mm splice repair<br>- 2no. 200-500mm splice repairs<br>- Replacement of all beadings in DRY SEAL putty (allow 14 linear metres) |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |  |                                                                                                                                                                                                                                                                                                                                                                            |
| IRONMONGERY/ ACCESSORIES | Refer to general notes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                            |
| GLAZING                  | Refer to general notes, no other glazing works proposed                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                            |
| STRUCTURAL OPENING       | <p>Refer to Structural Engineer's report 14794-BKP-14-ZZ-TN-S-0003 for the proposed repairs to failed lintels and additional investigation works required.</p> <p>Windows and shutters are to be temporarily removed from reveals to facilitate works (following temporary propping installation). Repair works to lintel to be undertaken from the external side as far as is reasonably practicable. Following removal the contractor should provide a temporary secure infill to the window within the existing opening, ensuring no damage is caused to masonry reveals.</p> <p>Protection should be in place internally at all times during works to protect internal finishes. Where internal finishes are required to be removed to facilitate repair works, linings should first be recorded and photographed, parts labelled for identification and carefully dissassembled ensuring no damage is caused to the timber. Following repairs, windows to be reinstated to reveal and new mastic applied as general notes.</p> |                                                                                     |                                                                                                                                                                                                                                                                                                                                                                            |

Repairs are based on allowances made in visual condition survey undertaken by TRC Contracts Ltd in June 2023

|                          |                                                                                    |                                                                                    |
|--------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| WINDOW DESCRIPTION       | Type A - French Window                                                             |                                                                                    |
| REPAIR ALLOWANCES        | B02-B2-WIN-008                                                                     |                                                                                    |
|                          |   |   |
|                          | B02-B2-WIN-007                                                                     |                                                                                    |
|                          |   |   |
|                          | B02-B2-WIN-006                                                                     |                                                                                    |
|                          |  |  |
| IRONMONGERY/ ACCESSORIES | Refer to general notes.                                                            |                                                                                    |
| GLAZING                  | Refer to general notes.                                                            |                                                                                    |
| STRUCTURAL OPENING       | Refer to WP 14 phase 2 repair drawings.                                            |                                                                                    |

Repairs are based on allowances made in visual condition survey undertaken by TRC Contracts Ltd in June 2023

|                          |                                                                                                                          |                                                                                    |
|--------------------------|--------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| WINDOW DESCRIPTION       | Type A - French Window                                                                                                   |                                                                                    |
| REPAIR ALLOWANCES        | B02-B2-WIN-013                                                                                                           |                                                                                    |
|                          |                                         |   |
|                          | B02-B2-WIN-011                                                                                                           |                                                                                    |
|                          |                                         |   |
|                          | B02-B2-WIN-022                                                                                                           |                                                                                    |
|                          |                                        |  |
| IRONMONGERY/ ACCESSORIES | Refer to general notes.                                                                                                  |                                                                                    |
| GLAZING                  | Refer to general notes.                                                                                                  |                                                                                    |
| STRUCTURAL OPENING       | Refer to WP 14 phase 2 repair drawings.<br>No internal infill to be installed to B02-B2-WIN-022 (refer to WP08 drawings) |                                                                                    |

Repairs are based on allowances made in visual condition survey undertaken by TRC Contracts Ltd in June 2023

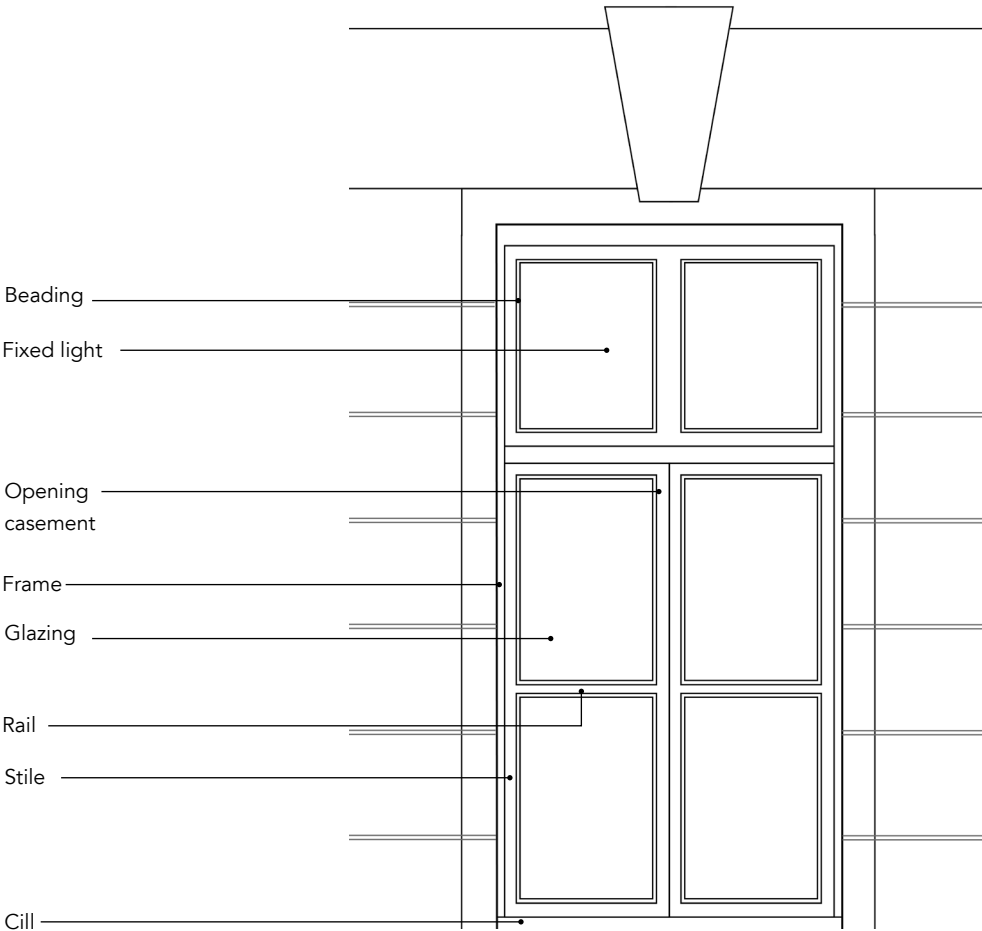
4.0 Type B: French Window with Fixed Top Light



Typical External Photograph

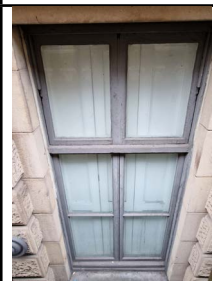


Typical Internal Photograph



Typical French Window with Fixed Top Light to Athenaeum Building Drawing

| WINDOW DESCRIPTION       | Type B - French Window with Fixed Top Light |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------------|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| REPAIR ALLOWANCES        | B02-B2-WIN-012                              |   <p>Approx. window size: 1120 x 2380mm</p> <ul style="list-style-type: none"> <li>- 4no. 50mm conservation joint resin repairs</li> <li>- 4no. 100mm conservation joint resin repairs</li> <li>- 100cc resin repairs in 6no. locations</li> <li>- 200cc resin repairs in 4no. locations</li> <li>- 2no. 200-500mm splice repairs</li> <li>- Replacement of all beadings in DRY SEAL putty (allow 14 linear metres)</li> </ul> |
|                          | B02-B2-WIN-001                              |   <p>Approx. window size: 1120 x 2380mm</p> <ul style="list-style-type: none"> <li>- 4no. 50mm conservation joint resin repairs</li> <li>- 4no. 100mm conservation joint resin repairs</li> <li>- 100cc resin repairs in 2no. locations</li> <li>- 200cc resin repairs in 2no. locations</li> <li>- Replacement of all beadings in DRY SEAL putty (allow 14 linear metres)</li> </ul>                                          |
| IRONMONGERY/ ACCESSORIES | Refer to general notes.                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| GLAZING                  | Refer to general notes.                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| STRUCTURAL OPENING       | Refer to WP 14 phase 2 repair drawings.     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| WINDOW DESCRIPTION       | Type B - French Window with Fixed Top Light                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| REPAIR ALLOWANCES        | B02-B2-WIN-003                                                                |   <p>Approx. window size: 1120 x 2380mm</p> <ul style="list-style-type: none"> <li>- 4no. 50mm conservation joint resin repairs</li> <li>- 4no. 100mm conservation joint resin repairs</li> <li>- 100cc resin repairs in 2no. locations</li> <li>- 200cc resin repairs in 2no. locations</li> <li>- Replacement of all beadings in DRY SEAL putty (allow 14 linear metres)</li> </ul> |
|                          | B02-B2-WIN-002                                                                |   <p>Approx. window size: 1120 x 2380mm</p> <ul style="list-style-type: none"> <li>- 4no. 50mm conservation joint resin repairs</li> <li>- 4no. 100mm conservation joint resin repairs</li> <li>- 100cc resin repairs in 2no. locations</li> <li>- 200cc resin repairs in 4no. locations</li> <li>- Replacement of all beadings in DRY SEAL putty (allow 14 linear metres)</li> </ul> |
| IRONMONGERY/ ACCESSORIES | Refer to general notes.                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| GLAZING                  | Refer to general notes.                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| STRUCTURAL OPENING       | Window head infill detail to be installed, refer to general notes section 2.8 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

Repairs are based on allowances made in visual condition survey undertaken by TRC Contracts Ltd in June 2023

# Buttress

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