5. The proposals

5.1 Introduction to external proposals

The proposals for Norman Shaw North seek to deliver substantial and essential fabric and structural conservation repairs, building enhancements and an improved immediate landscape, benefiting access and logistics for site and Parliamentary use.

5.1.1 Courtyard roof

5.1.1.1 A new glazed roof is proposed above the courtyard at Fifth Floor level. A self-service restaurant facility and associated seating and informal meeting space is provided within the newly created space.

5.1.1.2 The new courtyard roof will provide more usable space by enclosing an external area. It will decrease the amount of heat loss through historic windows and walls, through the reduction of external envelope.

5.1.1.3 The proposals are intended to preserve the legibility and reading of the courtyard elevations and roof line beyond, which are as significant in their contribution to the building as the well known external facades.

5.1.2 Envelope conservation and fabric improvements

5.1.2.1 The changes to the external envelope have been carefully considered to ensure, on balance, 'heritage gains' achieved by thermal improvements, repairs and adaptations for future use outweigh any amendments to historic fabric.

5.1.2.2 Where possible, areas that have already been affected by past renovations have been prioritised in respect of new interventions. The external condition survey report and supporting material summarise that the building, is considered to be in a fair structural condition though generally the overall maintenance standard is considered to be poor.

5.1.2.3 Essential building conservation work is proposed to put the overall envelope, roof, walls, windows and doors into an improved state of repair. This includes comprehensive roof repair, including slates, leadwork and underlying substrate / structure, repair and renewal of rainwater goods and asphalt gutters, dormer structure repair and leadwork replacement, stonework and brickwork repairs, including to chimneys as well as conservation cleaning.

5.1.2.4 Building enhancements include chimney reconstruction, improvements to roof access at the courtyard-facing eaves, improvment to the 1950's attic extension and repair and refurbishment of the north elevation.

5.1.3 Landscape

5.1.3.1 The landscape in the immediate vacinity of the building is re-set to provide level thresholds and a considered resolution between the building and the Estate. The west and north elevation landscape is simplified and addresses the current level constraints, and wider logistics requirements, concurrrent with improving the setting of the building. These works will necessitate local external drainage and existing services manholes modifications to align with new levels.

5.1.3.2 Requirements for building disconnections and provision of new utilities connections will require external trenching and local connections to existing buildings within the Estate.

5.1.3.3 The east forecourt, facing the Embankment, is retained as a garden amenity and enhanced with a revitalised planting scheme.

5.2 Introduction to internal proposals

5.2.1 Refurbishments and accommodation

5.2.1.1 The internal refurbishment works include all levels of the building and comprise all types of spaces. The main functions; office and meeting areas, ancillary spaces, staff areas and plant/services spaces, remain generally in the same locations but are upgraded with reference to BCO guidance.

5.2.1.2 Allocation of functions within these spaces has gone through a process of rigorous design scrutiny to ensure Parliamentary standards accord with the existing rooms as far as is practicably possible, thus minimising any need to adapt existing fabric.

5.2.2 Courtyard

5.2.2.1 The newly unlocked courtyard space and Ground Floor terrace will provide level access and break-out space from the adjacent offices. Lost by the installation of the temporary cabins, the original oculus will be replaced to reinstate the central focal point whilst allowing daylight to reach the internal basement spaces below.

5.2.2.2 The new openings, linings, railings and new roof structure will have a consistent material language in order to distinguish contemporary interventions from the historic fabric. Dark metal is proposed to complement the warm tones of the surrounding Portland stone and red brick and references the existing metalwork.

5.2.3 Typical office floor plate

5.2.3.1 Two building cores are located in the east and west wings, each containing lifts, an even distribution of WC accommodation, a tea point and an area for rising services. Print hubs are located at each side of the floor plate, and break out spaces for informal meetings are at the end of corridor spaces.

5.2.4 Typical cellular office space

5.2.4.1 The proposals seek to recover existing interior features as much as possible, such as mouldings and skirtings, architraves and cornices, doors and fire places as part of the repair, refurbishment and renewal of the interior spaces.

5.2.5 Circulation corridors

5.2.5.1 The main circulation corridors comprise a significant, intact remaining element of Shaw's original design. New cross corridor fire doors, replacing the modern non-compliant timber and glass doors, are fully glazed and make reference to the original corridor proportions, including glazed overpanels.

5.2.6 Passenger lifts

5.2.6.1 The proposals allow for the strip out of all existing lifts and replacement with new, arranged in two core areas which will also serve the basement area for the first time. The current passenger lifts installed during the 1970s refurbishment are at the end of their life and are insufficient for modern user requirements and numbers. New lift cores in the east and west wings provide a balanced distribution and improves access into and through the building.

5.2.7 Plant areas

5.2.7.1 The main plant within the building will be replaced. New risers areas have been carefully located throughout the building to optimise services. Wherever possible, risers have been located in areas of prior refurbishment and negligible significance, to avoid damage to original fabric.

5.2.7.2 A new enclosure is placed adjacent to the north elevation, in the area of the historic lost structure and co-incident with the area of facade repair. The enclosure design responds to the scale of the lost volume and is detailed in a manner to give it substance and identity.

5.3 Conservation-led design approach

5.3.1 The proposals illustrated seek to preserve the special interest of Norman Shaw North and provide a high standard of accommodation for Parliament. A conservation-led design approach will inform the repair of existing fabric and the sensitive insertion of new interventions.

5.3.2 The commitment to, and undertaking of a conservation-led approach, as supported and outlined by Donald Insall Associates, will ensure that the development of details and specifications will be robust and thorough, incorporating review with all significant stakeholders to arrive at design solutions that are appropriate, minimise loss of fabric, restore fabric if beneficial and in the case of new interventions, reversible where possible.

5.4 Overview of proposals

External elevation repairs to address defects recorded in external condition survey. Facades to be cleaned

Corridor spaces to be repaired and redecorated throughout. Arched ceilings to be revealed where possible

Existing timber and glazed screens removed to create open arches into courtyard restaurant space. New reveals to openings. Integration of ventilation

Central courtyard oculus reinstated and courtyard re-set to provide level access to adjacent floor levels.

Basement slab modified to accommodate plant and services distribution and ancillary areas

Five chimneys to be re-constructed to conceal and integrate new ventilation requirements - remaining three repaired and refurbished

Existing slate roof to be repaired and made good. Existing slate to be re-used as far as possible

Thermal improvements to roof envelope

Access improvements to roof in combination with integration of new ventilation requirements

Remodelled cores to provide accessible passenger lifts, WC's, tea point and service risers

Proposed new fully glazed diagrid roof, with perimeter drainage and natural ventilation capacity

Refurbishment and realignment of existing courtyard RWP arrangement. Integration of lighting and speakers

Two existing openings modified to create new 'front door' and level access building entrance

Existing roof replaced to provide terrace with level access to adjacent corridor space.

Proposed courtyard axonometric view

5.5 Courtyard roof

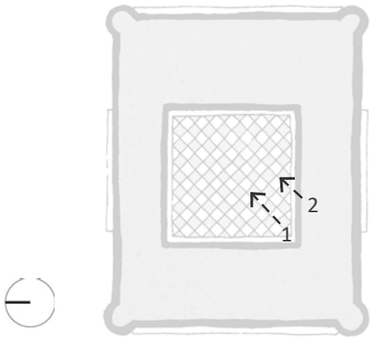
5.5.1 Fifth Floor level

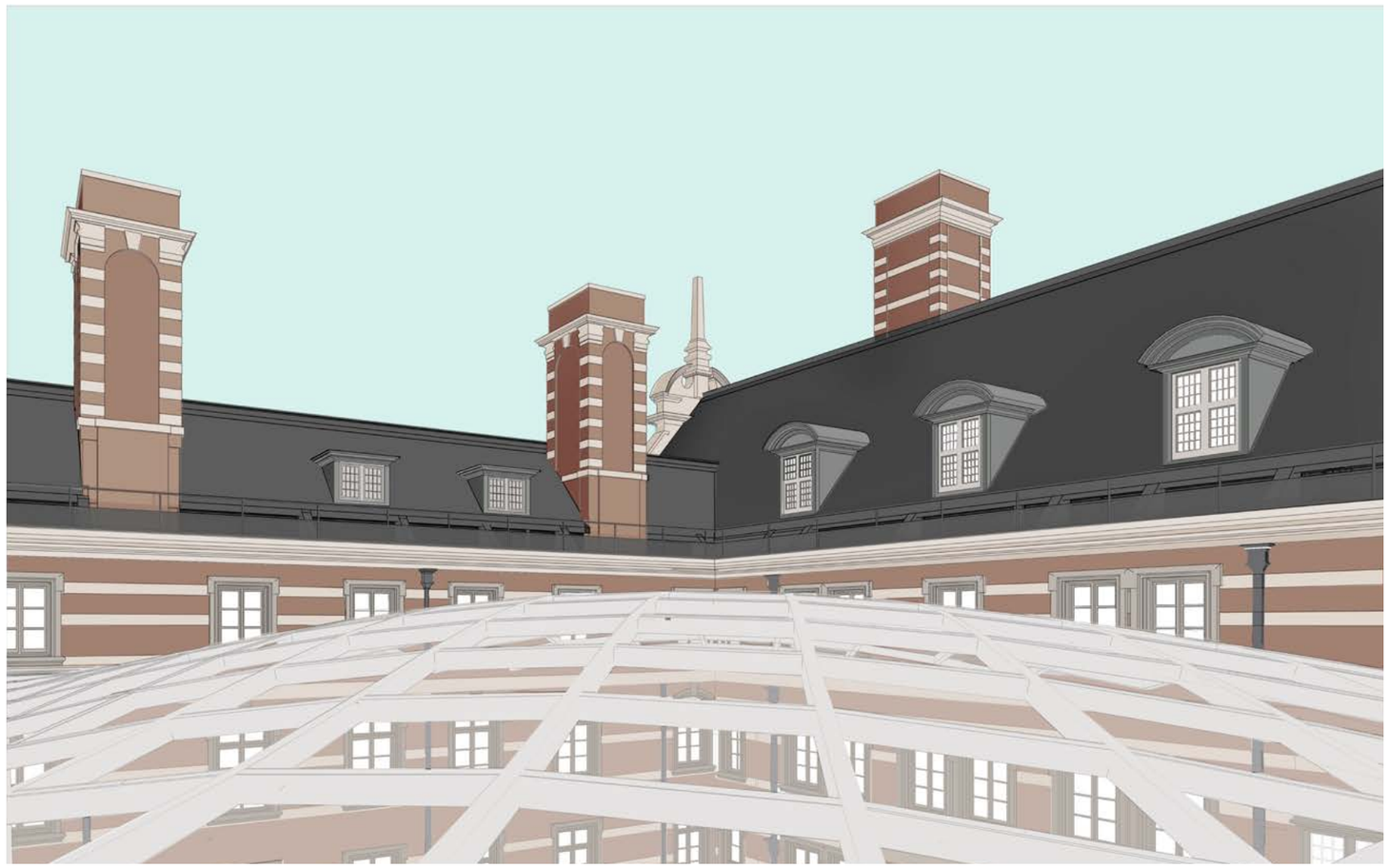
5.5.1.1 The Fifth Floor level was preferred to be the location of the new roof structure as this is the first opportunity for a consistent perimeter detail without impacting upon existing window openings and stone details. It enables continued views of the majority of the courtyard elevations internally and if transparent retains views of the existing eaves and roof lines.

5.5.1.2 The new roof will be visible through courtyard facing windows at this level. The design has been developed to reduce the depth of the roof's arc minimising view obstruction of opposing elevation. The roof has also been designed to meet fire, acoustic, thermal and security requirements.

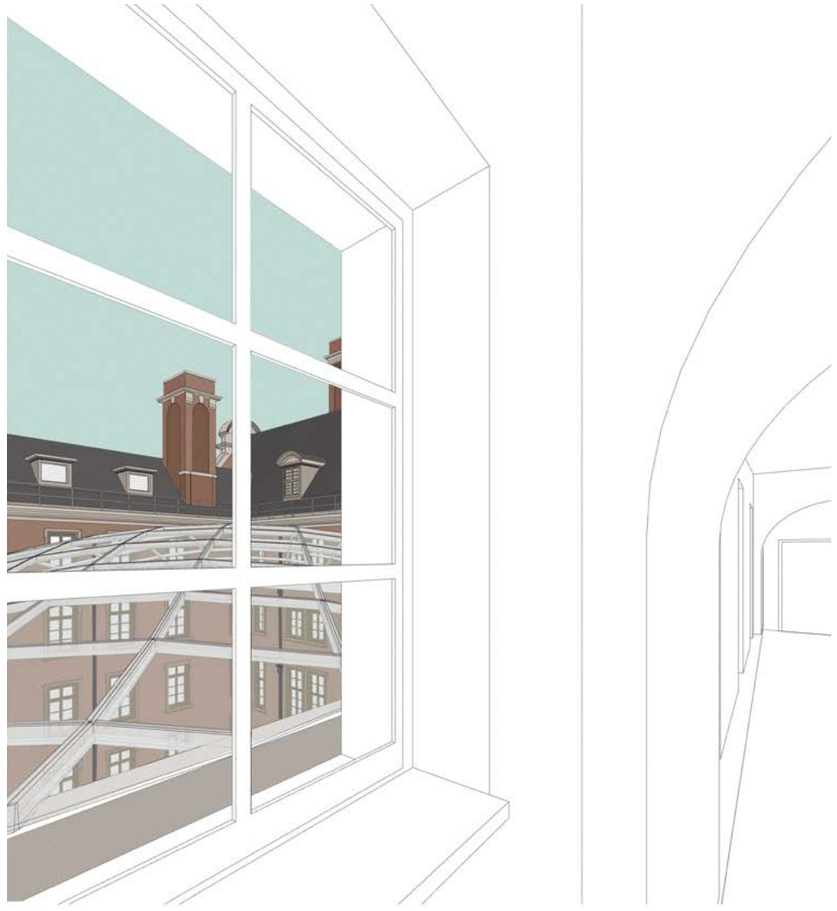
5.5.1.3 The width and number of structural members has been developed to retain facade visibility, utilizing a structurally efficient diagrid system with double-glazed panels, which avoid the need for panel triangulation. The detailed design of the roof will be developed with specialist engineers and contractors.

5.5.1.4 Access to the courtyard roof will be incorporated at this level through an existing window adapted to form a door, as part of the building's proposed access and maintenance strategy.





1 - View of courtyard roof from Fifth Floor level



2 - View from Fifth Floor internal corridor

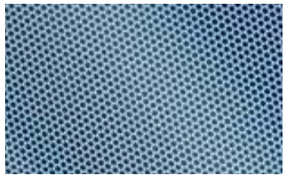
5.5.2 Courtyard roof perimeter design

5.5.2.1 The proposed roof features an inset perimeter beam that conceals the gutter and access grating and integrates the diagrid's structural members. Opening panels are located within the 'halo' between the beam and the facade, where eight support arms connect the roof to the existing building (two per elevation).

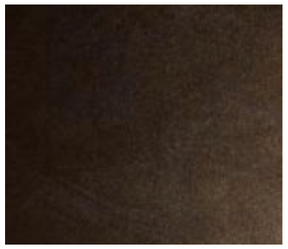
5.5.2.2 The new openings in the existing masonry construction have been designed to be limited as far as possible, in order to insert and fix the new structure with minimal impact. The openings would relate to the coursing; brick and stone facing work would be reinstated. The support arm is sized and located to line up with the stone band and this junction would be visible from below, in the 'shadow gap' between the ring beam and the facade.

5.5.2.3 The materiality, finish and tone of the supporting ring beam is to be consistent with the new interventions within the courtyard below, whilst the diagrid structure itself is intended to be as lightweight and transparent as possible.

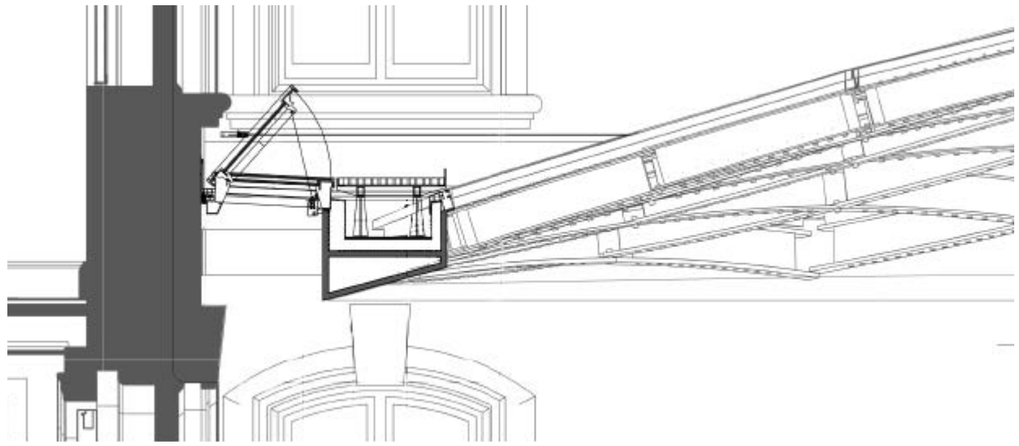
5.5.2.4 The intention is for the details to be refined further with specialist contractor input and measured / fabric surveys, and discharged via condition, along with all material samples, method statements, etc.



Double glazed panels with micro-dot ceramic frit for anti-slip to perimeter zone



Powder-coated and/or painted finishes to framing elements



Indicative roof perimeter detail

Proposed diagrid roof structure at Fifth Floor level

5.5.3 Rainwater strategy

5.5.3.1 The new glazed roof increases the roof area and requires modifications to the existing rainwater drainage strategy.

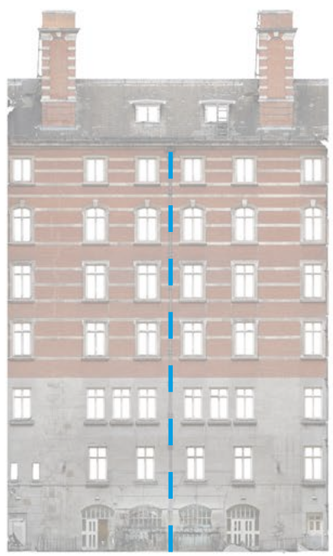
5.5.3.2 Based on a preference to retain historic fabric, retain the existing surface fixed rainwater pipe and hopper aesthetic and to keep the overall number of RWPs in the courtyard to a minimum, the proposal is to refurbish / replace the existing rainwater pipes in all existing locations and supplement with new to match in limited new locations.

5.5.3.3 This strategy requires an additional three rainwater pipes in the courtyard. These will pass through into the basement, via the courtyard floor, where they connect into the basement drainage pipework, replaced and extended as required.

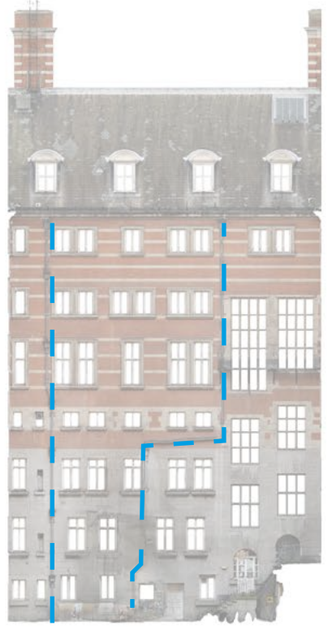
5.5.3.4 The opportunity has been taken to rationalise a small number of the existing RWP runs, most notably on the east courtyard elevation where the pipe currently travels horizontally above the granite base but can be re-set as vertical as originally intended. New RWPs have been located in locations where there are consistent vertical areas of stone and brickwork. On the north courtyard elevation, the new pipes are located towards the corners of the available elevation to retain the legibility of the brickwork and its relationship with the chimneys above.

Existing rain water goods

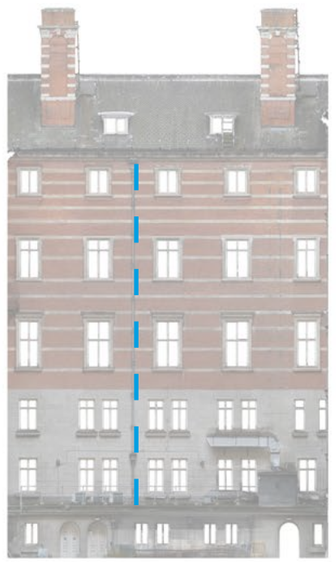
Proposed rain water goods to match existing



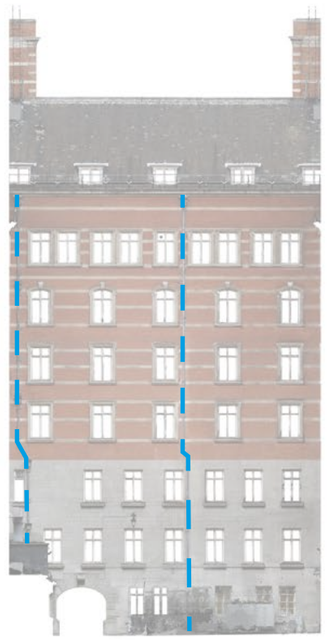
Existing north courtyard elevation



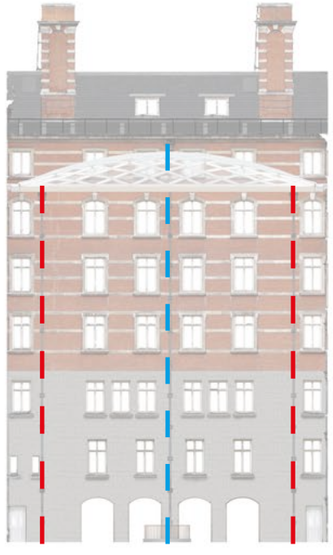
Existing east courtyard elevation



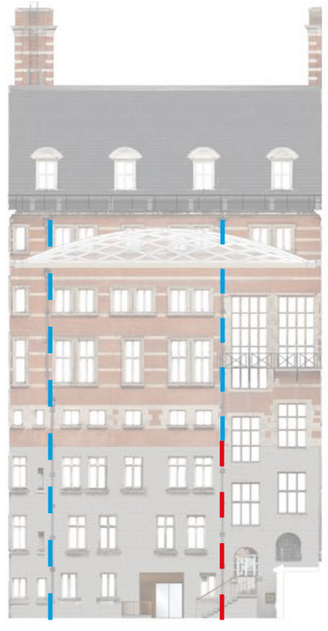
Existing south courtyard elevation



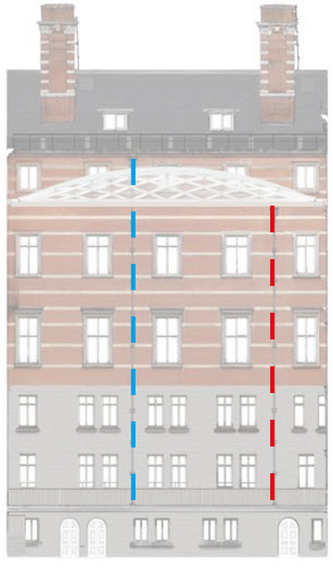
Existing west courtyard elevation



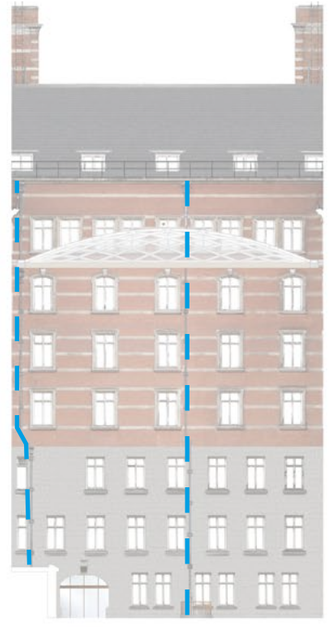
Proposed north courtyard elevation



Proposed east courtyard elevation



Proposed south courtyard elevation



Proposed west courtyard elevation

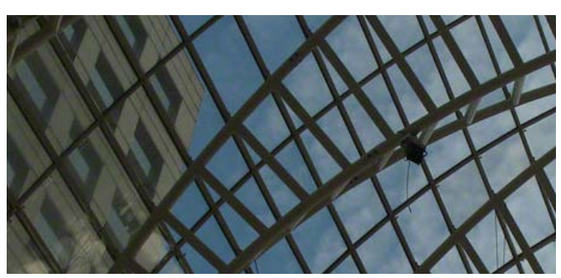
5.5.4 Acoustic strategy

5.5.4.4 The courtyard space comprises generally hard surfaces that will contribute to an inherently 'live' acoustic. Within this space there is a need to provide an acoustically stable environment to ensure end-user comfort and safety announcements are compliant.

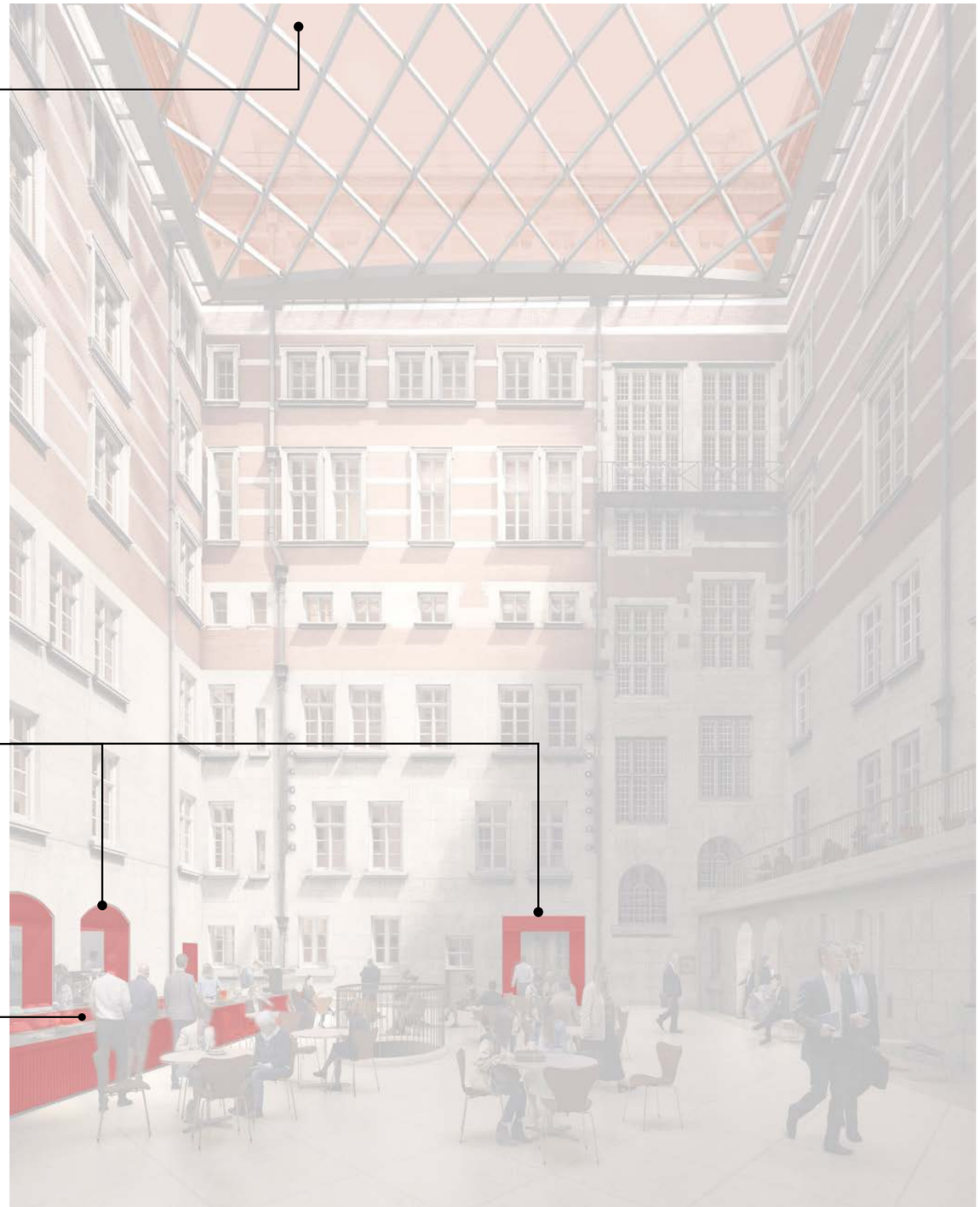
5.5.4.4 The diagram on this page illustrates the proposed target locations for the integration of acoustic absorption. These locations are limited to areas where new fabric and fixtures are introduced (roof, new openings, serveries) with a view to minimising impact on the historic fabric and preserving the clarity and reading of the courtyard and roof line beyond.

5.5.4.4 PAVA speakers within the space will be optimised in number and location to provide a compliant system that works with the acoustic environment.

5.5.4.4 It is envisaged that potential treatments to the proposed courtyard roof glass surfaces are explored through physical samples to support the detailed design proposals of the courtyard roof.



Microsorber Transparent acoustic film examples



Courtyard illustration with acoustic absorption areas indicated in red

5.6 Building entry sequence

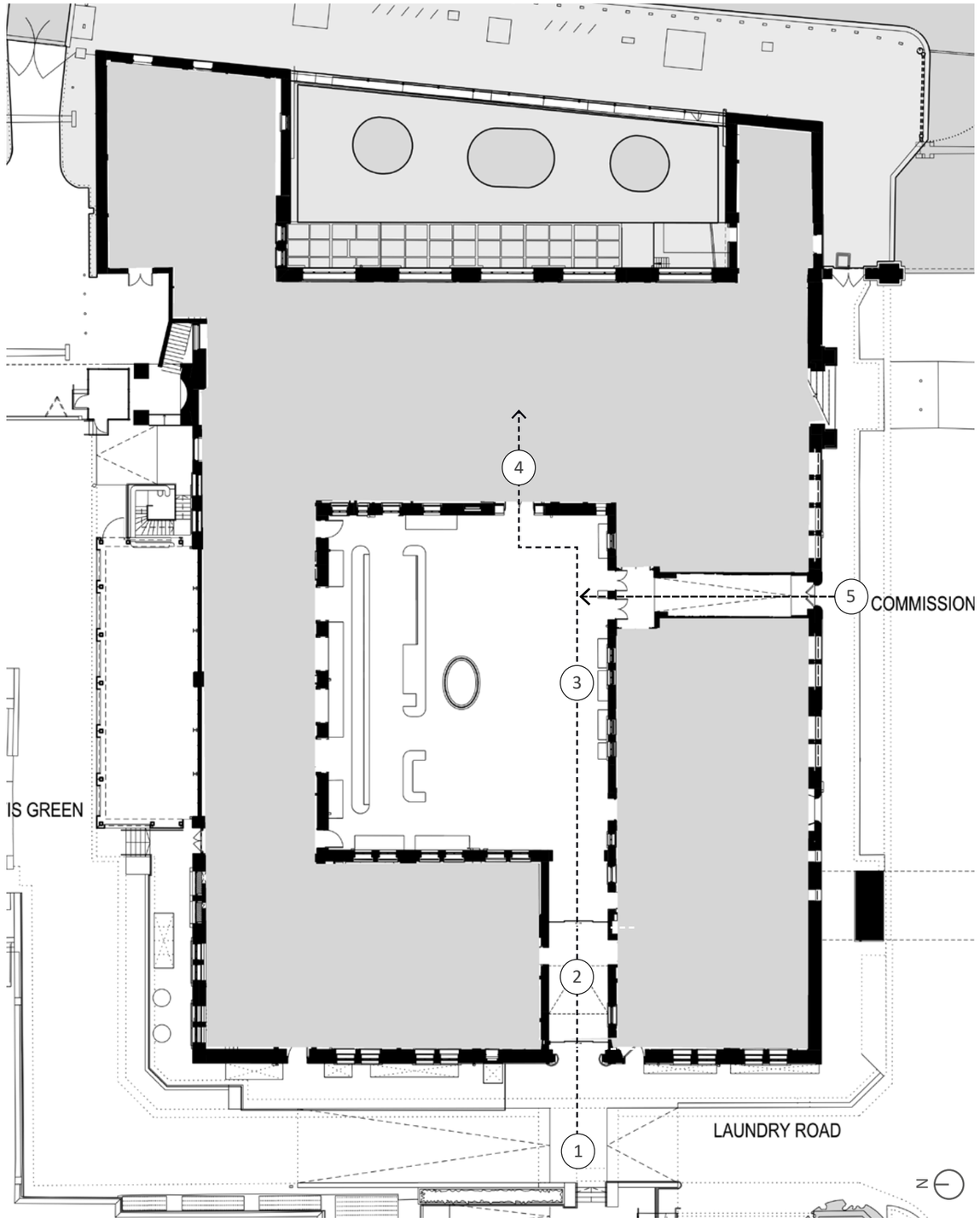
5.6.1 The existing opening on the west facade will be utilised to provide level access from Laundry Road, via the existing passage, into Norman Shaw North. Two sets of fully glazed, bi-parting sliding access controlled doors, sit beyond the existing arched opening. This set-back preserves the hierarchy of the original entrance, and enables the creation of a functional draught and fire protection lobby to the new courtyard space beyond.

5.6.1 The doors will be clearly understood as new interventions, being simple and modern with minimal metal framing and high quality ironmongery. The inner set is located to maintain a clear distance from existing window and door features. Both sets sit within a metal lining to provide an off set from the granite facades (consistent with the approach to linings within the courtyard). The junction with the ceiling is mediated by new suspended rafts that conceal crossing services.

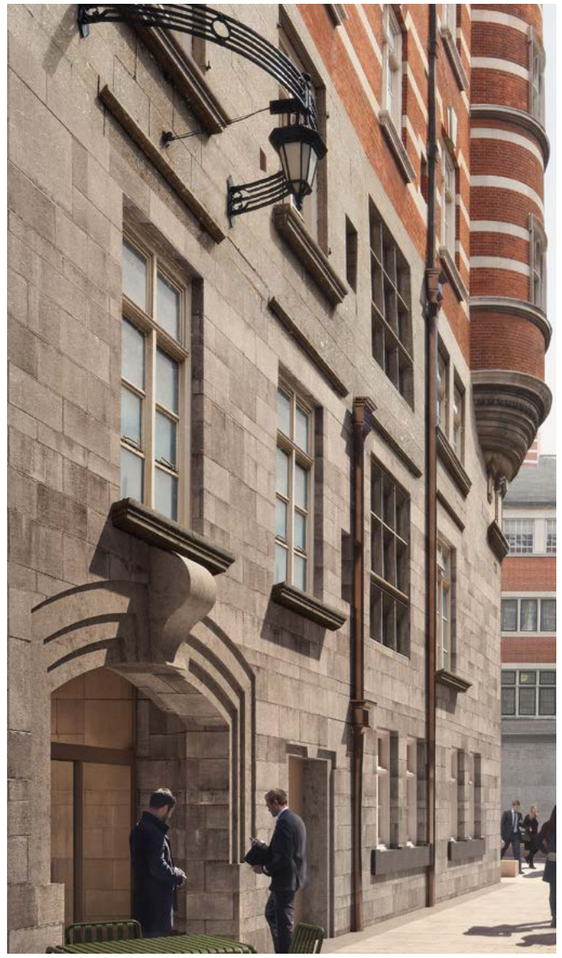
5.6.2 To achieve level thresholds, external and courtyard finished levels are adjusted to match the existing internal floor levels. The floor of the passage is gently sloped to mediate between the internal and external levels. Once within the covered courtyard the user is presented with the new principal entrance beyond. Alternatively, access from the reinstated south route brings the visitor immediately adjacent to it.

5.6.3 The installation of three new passenger lifts to this area in the 1970s altered the original fabric and historic plan form, and provides an opportunity for intervention and improvement. A double height entrance space is proposed in this area directly adjacent to the improved passenger lifts. The proportion and quality of the space signifies a key arrival point within Norman Shaw North, offering a new accessible pedestrian entrance off the courtyard and clear way-finding and visual connections to the current Ground Floor entrance level and principal circulation routes.

1. *Principal entrance from Laundry Road*
2. *West passage draught lobby enclosed by sliding doors*
3. *Central courtyard*
4. *Main entrance to NSN*
5. *South route*



Lower Ground Floor plan



Existing arched opening on Laundry Road (above), leading to new lobby with with fully glazed bi-parting doors (below)

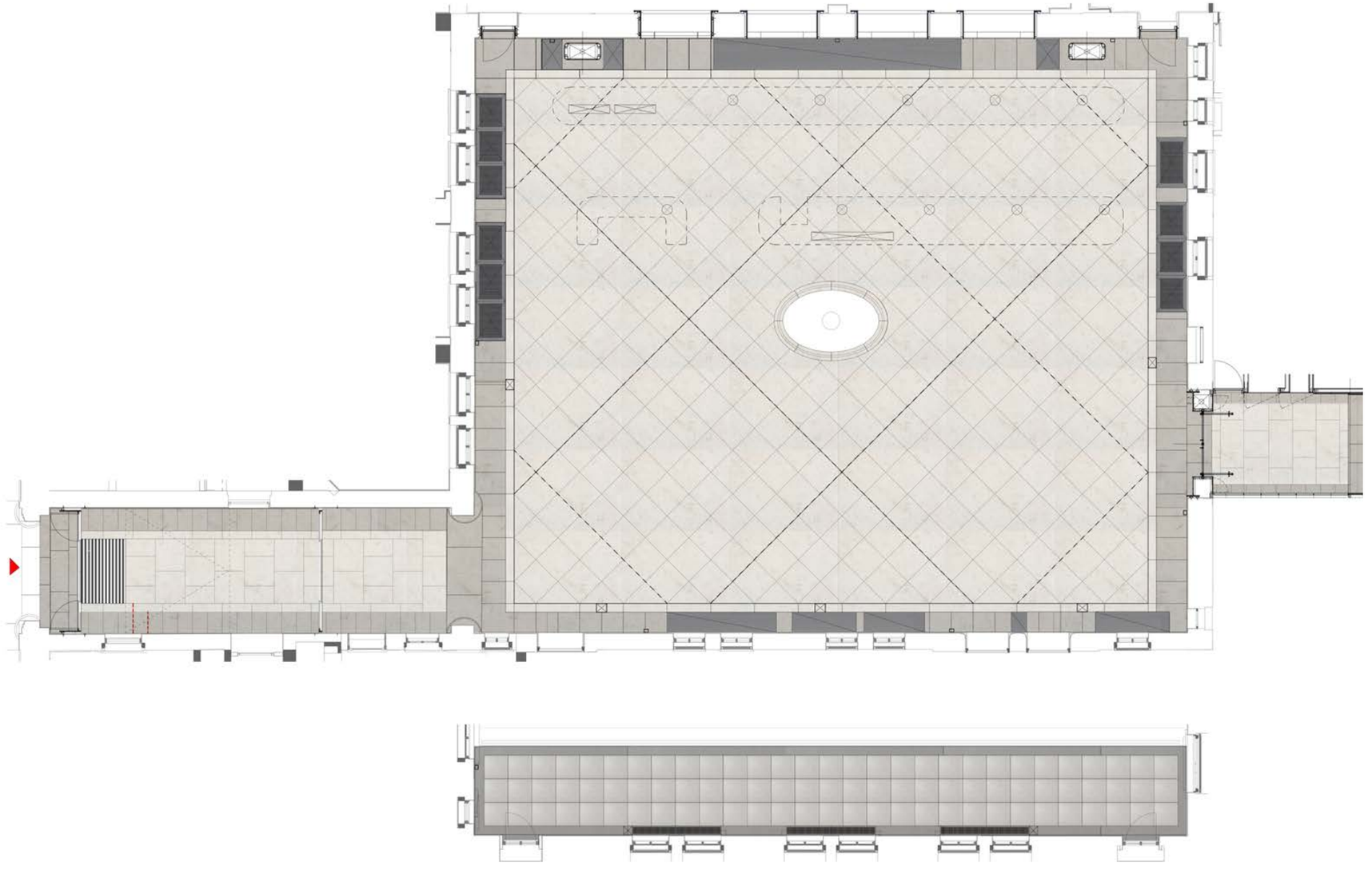
5.7 Courtyard base

5.7.1 This section illustrates the degree of intervention proposed to the existing courtyard. This includes alterations to the floor finish, Ground Floor roof terrace area and various openings. The limited number of new elements are necessary to improve the accessibility, functionality and legibility of the historic space.

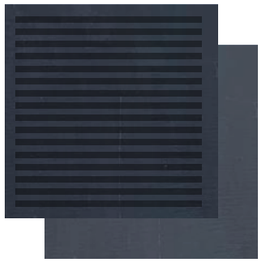
5.7.2 The proposed floor finish is natural stone, to preserve the external character of the space and provide a robust and resilient surface. A honed and sealed stone, neutral in tone is proposed to provide a practical, maintainable surface in the context of a proposed high traffic and catering environment.

5.7.3 The design features a generous perimeter border to align with the extent of existing light wells which are re-set with new metal grilles as part of the ventilation strategy for the space. The border is darker in tone which provides a subtle transition from the original granite to the surrounding elevations. An inner border co-ordinates with stone access panels for services.

5.7.4 The primary field of stone is a simple square pattern, set at 45 degrees and reflecting the diagrid roof above. A consistent material approach and finish will provide a uniform courtyard base that responds to both the simplicity of the existing concrete finish and the approach seen in Portcullis House.



York Stone paving (grey stone borders)



Blackened steel perimeter grilles

Porcelain tiles - terrace

01 *405sqm of area transformed to usable, high quality space. Enclosure to courtyard reduces the thermal envelope and increases energy efficiency*

02 *Cleaning and repair works to internal courtyard elevations*

03 *Repair and refurbishment works to roof to address defects and thermal performance*

04 *Repairs to the external envelope to address defects*

05 *Acoustic and security enhancements to existing glazing via secondary glazing*

06 *Reinstatement of the central courtyard oculus*

07 *New main entrance from the courtyard*

08 *Refurbishment of the internal corridors Original features revealed and recovered where possible*

09 *Refurbishment to accommodation Original features revealed and recovered where possible and insertion of new services and ceiling rafts*

10 *Refurbishment and new use of the existing roof area as an upper terrace*

11 *Re-organisation of basement areas and improved water proofing*

Key section (proposed)

5.7.5 In order to create level access into the building, the varied levels of the courtyard will be consolidated and made level. This level will generally match the existing perimeter stone and concrete kerbs within the space, to create level thresholds. The existing stone and concrete finishes will be carefully removed in preparation for the new build-up, which incorporates underfloor heating, and new stone finishes.

5.7.6 New construction is also required to provide the terraced area with level access to the adjacent corridor space on Ground Floor level. This replaces the existing non original construction.

5.7.7 Alternative structural options for the terrace floor have been explored and the proposal comprises a timber construction. This offers benefits in speed of installation and reduces the overall weight and depth, maximising ceiling height for the accommodation below.

5.7.8 The current asphalt infill flooring to this area is unsightly and non original it is therefore considered a heritage benefit to remove the floor, install an appropriately finished level surface, and allow access to this terrace as a new amenity through two remodelled window openings to form doors, from the Ground Floor corridor.

View from the upper terrace to the courtyard showing reinstated oculus, linings and restaurant serveries

5.7.9 The existing north courtyard elevation features four large existing arched openings with inset glazed timber-framed screens [installed in the 1970s], which are to be removed. In the proposal, this façade divides the back of house catering area from front of house catering, and incorporates manned hot and cold food and drink serveries set within new metal reveals that line the openings.

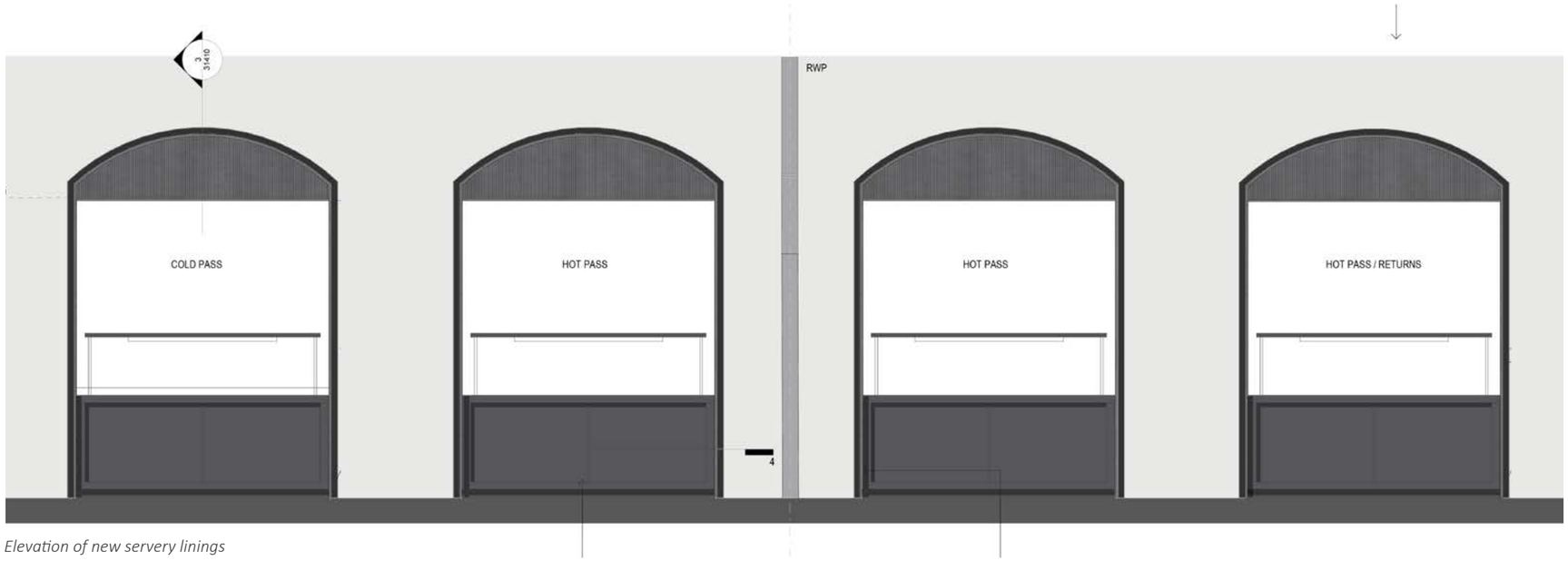
5.7.10 To allow greater ease of movement between the kitchen and the food serveries, and provide passageways for goods and equipment, some non structural walls are proposed to be carefully removed.

5.7.11 As well as improving the look and feel of the courtyard, the new reveals and over panels are integral to the fire upgrades and acoustic strategy. The heads of the arches are infilled with a perforate metal panel backed with absorbent material to improve the acoustic environment in the space by reducing the amount of reverberant sound bouncing off adjacent hard surfaces. The infill also provides an opportunity to conceal a fire curtain between courtyard and kitchen areas.

View of courtyard with lined reveals

5.7.12 All new linings within courtyard openings are expressed with shadow gaps to preserve an understanding of the original granite detailing and be legible as a modern over lay.

1970's doors to be removed



Elevation of new servery linings

ing modern timber and glazed screens

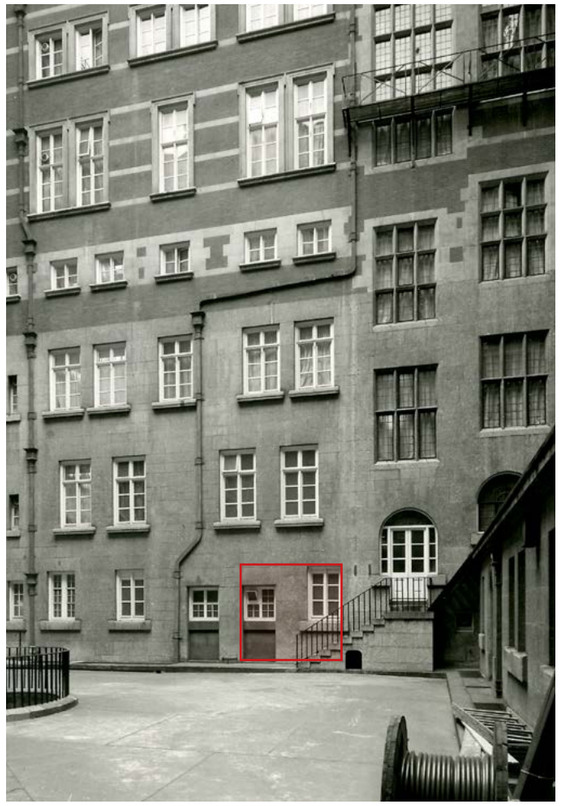
5.8 New courtyard entrance

5.8.1 The design development of the main entrance door follows a study of existing door and window openings in the courtyard facades and the approach to articulating new linings. Existing window and door frames are recessed within the openings made in the granite face. Reveals are rounded or square, depending on size and large granite lintels are present on larger openings.

5.8.2 The opening to the main entrance is made by the consolidation of two existing smaller openings shown adjacent, one of which was already adapted. The new metal lining frames this new opening where the remnants of the granite detailing is preserved, (including reveals and lintels), to describe this as a new intervention. This lining is augmented by an articulated 'lintel' concealing new structure. Within this are the recessed glazed door and ribbed jamb panels that conceal ventilation diffusers and acoustic absorption.

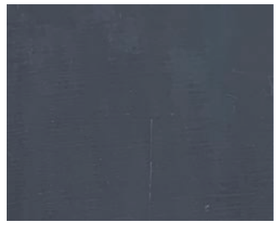
5.8.3 Consistent detailing and finishes of the metalwork panels, linings and floor grilles will allow these items to be read as a family of contemporary elements within the historic setting.

5.8.4 In combination with the forming of the new entrance, the non-original granite steps adjacent will be removed and the window, adpated as the fire escape, will be restored to its original configuration with the facing granite work, including cill, reinstated.



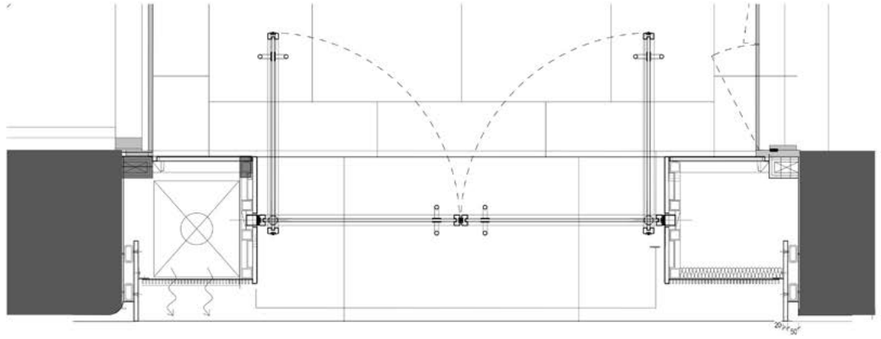
Two existing smaller openings and extent of enlargement for new main entrance. Note: Granite steps adjacent to be removed and window reinstated

View of new entrance door



Blackened steel reveals

Fabricated diffuser screen



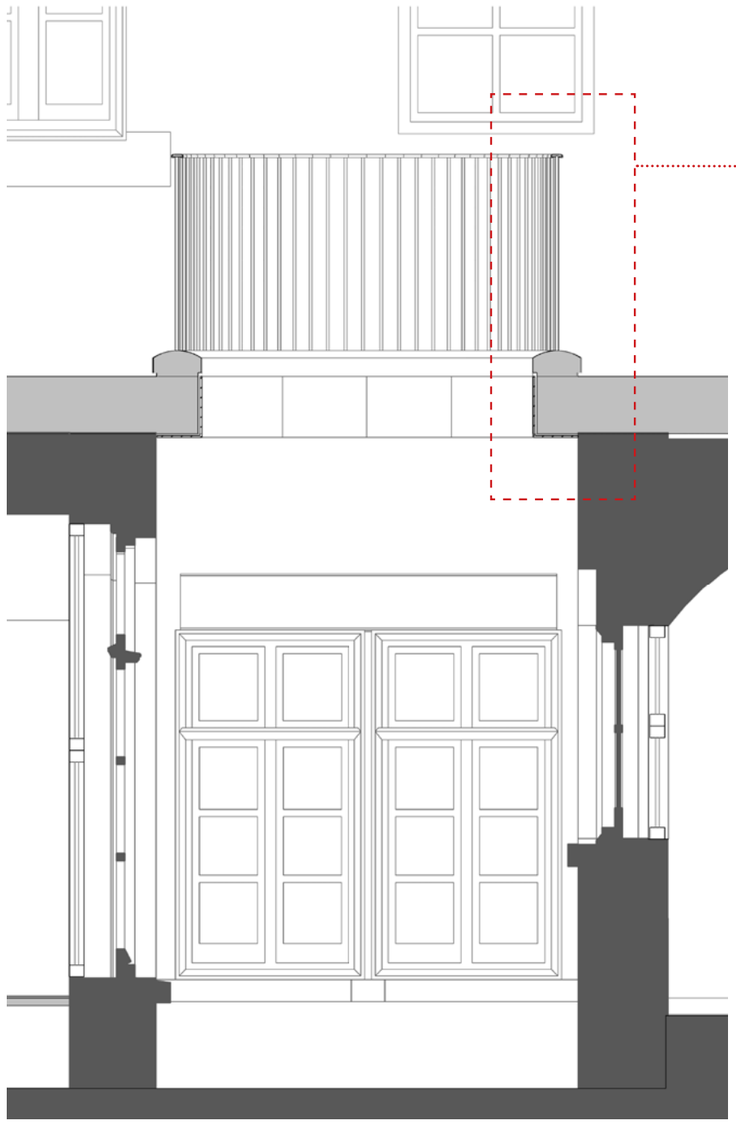
Illustrative plan and elevation of entrance door

5.9 Oculus and railings

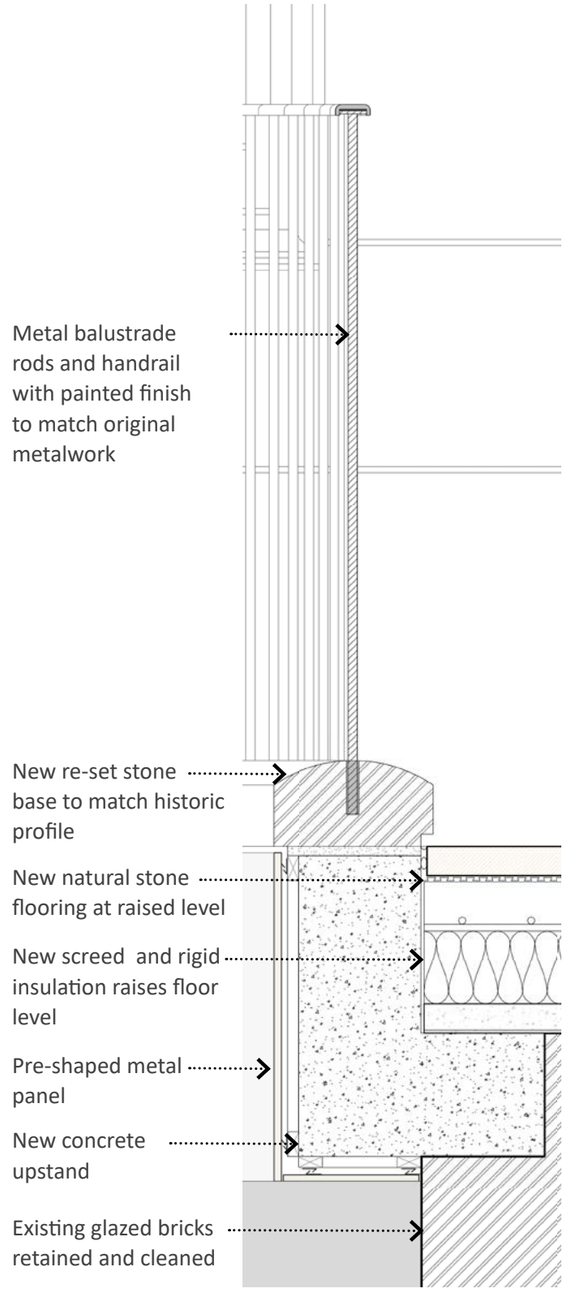
5.9.1 The reinstated central oculus detail is intended to match the configuration and materiality of the original oculus as depicted in historic photographs, removed when the portacabins were installed.

5.9.2 This comprises a low stone upstand with painted metal baluster rods capped with a simply profiled top rail.

Photograph of oculus prior to removal and installation of portacabins



Illustrative part section showing oculus over basement lightwell



Proposed oculus detail

5.10 Courtyard illumination

5.10.1 The proposed lighting strategy for the courtyard is to provide artificial light for the benefit of the building users whilst minimising the impact of new lighting on the historic facades and views out. The strategy therefore directs light to the courtyard floor, as opposed to the elevations or the proposed new roof.

5.10.2 This strategy is designed to maintain the exterior quality of the space and to avoid placing focus on the roof - the intention being that at night, the eye is drawn through the roof diagrid to the historic roofscape and sky beyond. This also avoids dazzle through uplighting or directing light down from higher, more acute locations.

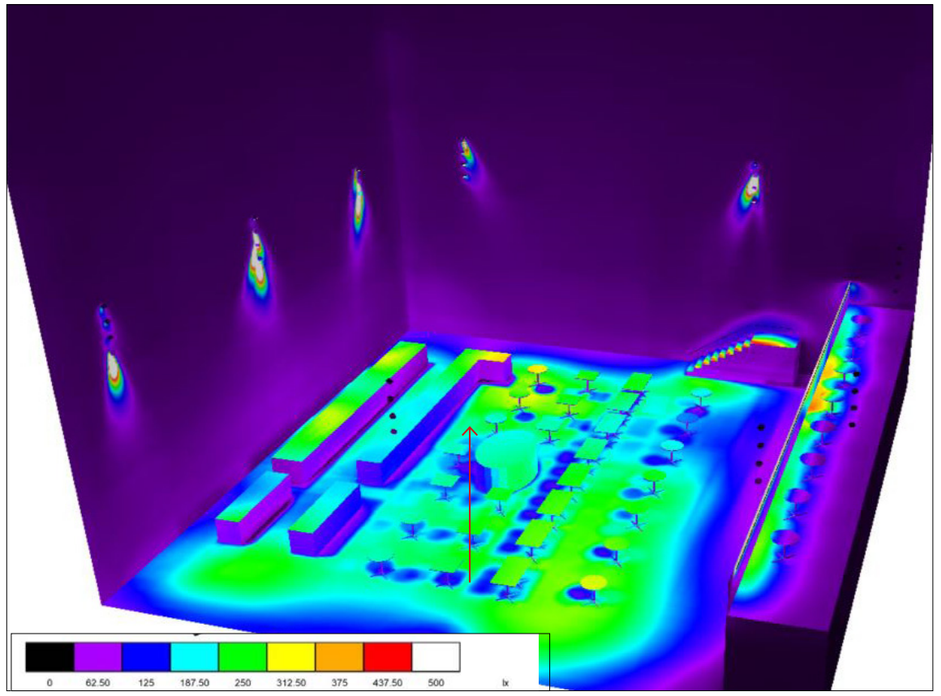
5.10.3 Intent and strategy

5.10.4 A strategy for introducing wall-mounted vertical lighting bars, co-located adjacent to rainwater pipes is proposed at first floor level, within the granite base - pairing the two functional items within the space.

5.10.5 Calculations have been carried out to confirm that a uniform lighting coverage can be achieved across the courtyard space by limiting the lighting bars to the proposed locations adjacent to each courtyard rainwater pipe. These locations are indicated on the application drawings submitted.

5.10.6 The intent for installing and fitting this lighting is to limit the impact on the fabric. First fix metal sleeving would enable conduit to pass through the masonry and be co-ordinated with joints in the facing granite. This cabling is distributed from the new cabling installed inside the building. Second fix bars, simple and utilitarian in aesthetic are then sleeved over and connected to a concealed track within the vertical element; enabling flexibility in positioning of the actual light fixtures.

Montage showing same, shorter lighting bar co-located with rain water pipe



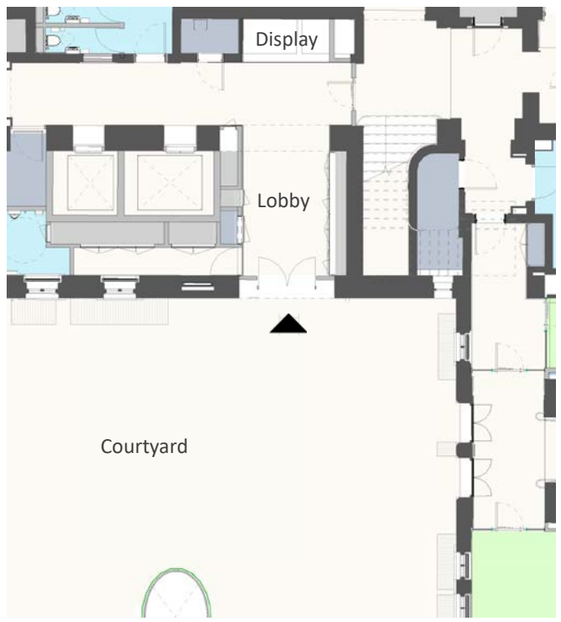
Study illustrating lighting distribution within courtyard premised on wall-fixed lighting positions

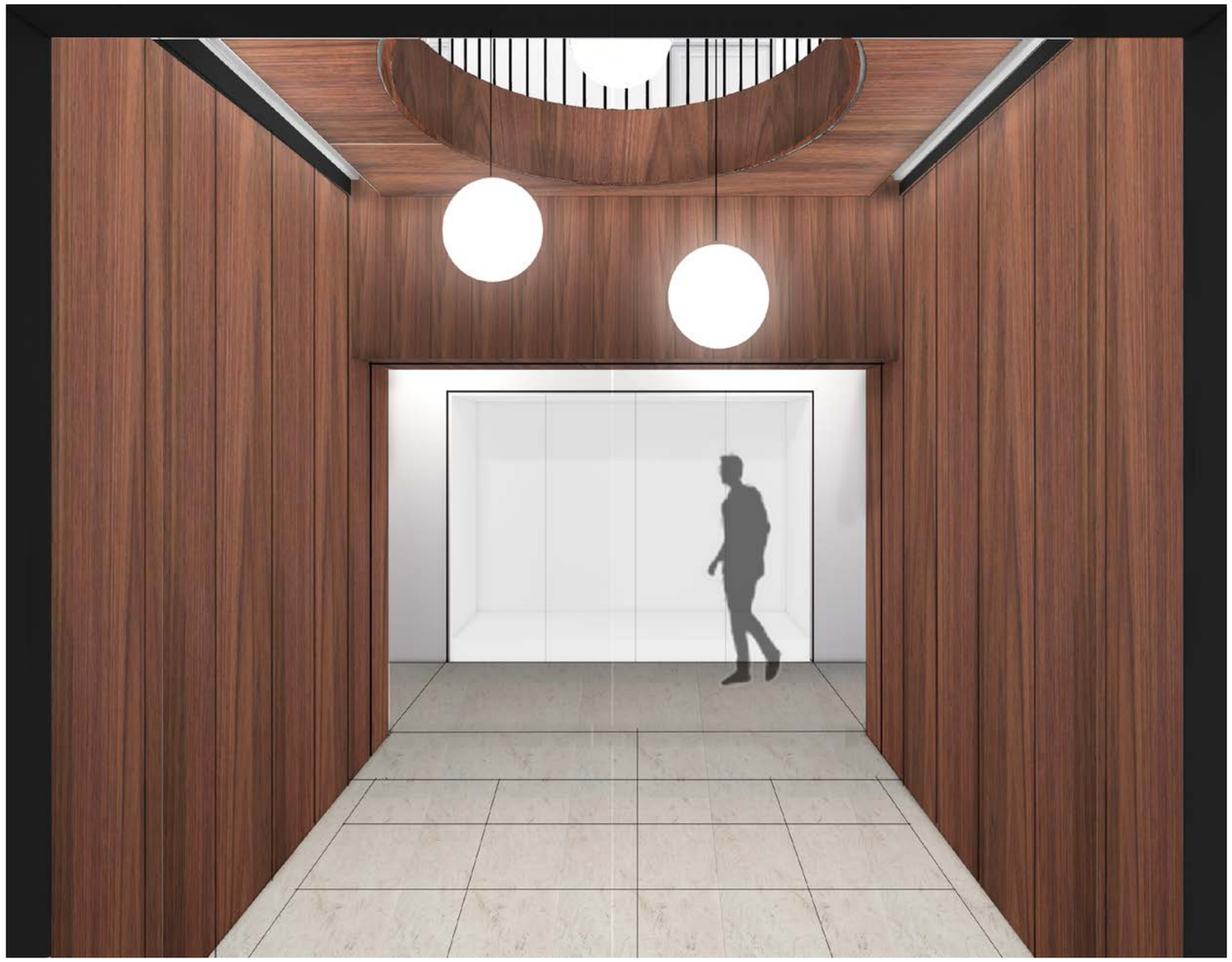
5.11 New Main Entrance Lobby

5.11.1 The new entrance lobby to the east of the courtyard is strategically located adjacent to the proposed passenger lifts to the left and the principal accommodation stair to the right.

5.11.2 Entered via the new courtyard entrance doors, the visitor arrives within a timber-lined space (concealing services), conceived as a double-height volume, visually connected to the floor above. On axis is a display cabinet to showcase significant artwork or artefacts from the Parliamentary archives and help draw visitors through into the space and circulation routes either side.

5.11.3 An eliptical opening at the ground level above provides the double height visual connection between the two levels and is detailed with a slender metal post and timber rail balustrade, echoing the designs in the courtyard oculus. This connectivity also serves to orientate those approaching from Ground Floor level providing a visual link back to the entrance lobby and courtyard space beyond.





Entrance view towards display case and circulation beyond, with oculus void above

York Stone paving (grey stone borders)

Blackened steel reveal

Walnut veneer panels

Heritage paint scheme

Pendant light fittings

5.12 Other building entrances

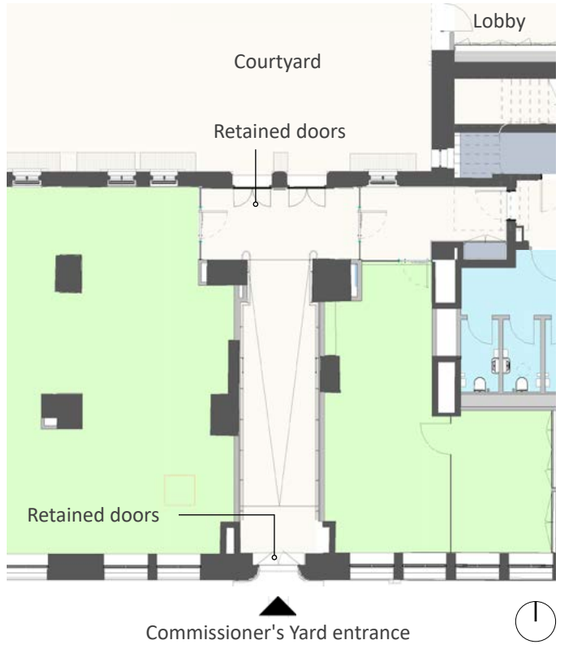
5.12.1 South Passage

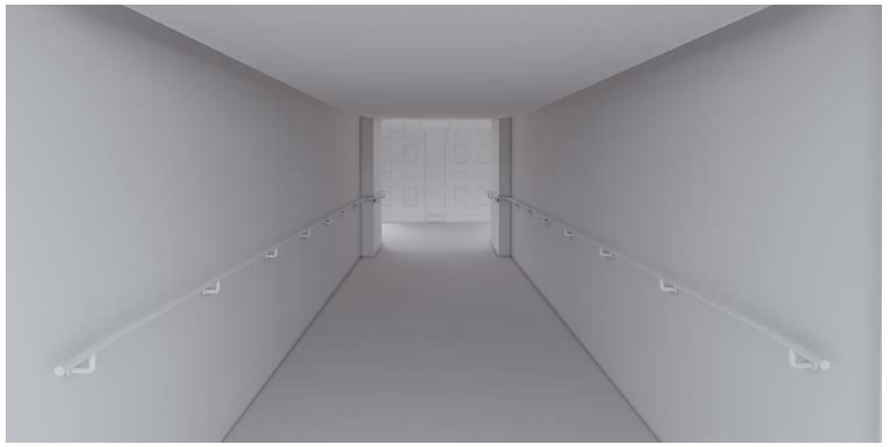
5.12.2 As part of the proposals, the original south passage is to be re-introduced to reinstate the lower ground floor parti and provide additional resilience and flexibility for entering the building.

5.12.3 This can provide a 'pressure relief' for the west entrance and provide a direct, step-free route adjacent to the new courtyard entrance lobby as well as the existing historic stepped main entrance, which is commonly used.

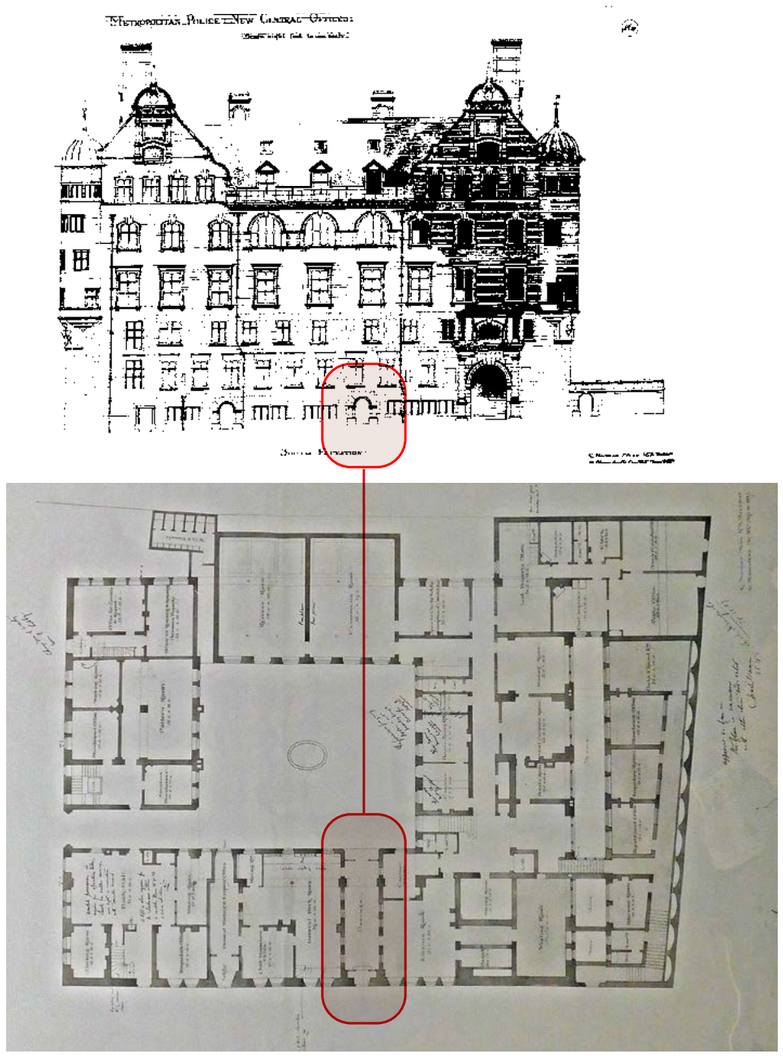
5.12.4 There is little remnant of the south passage today; remaining structure sits within an open-plan space. Reactivating this entrance and reinstating the passage to connect Commissioners' Yard with the courtyard of Norman Shaw North would be a heritage gain.

5.12.5 The space would be simply detailed with the new ramp finished in stone, in keeping with the west passage. A suspended ceiling is introduced to conceal new services. The original external doors are retained and adapted with new ironmongery for access control.

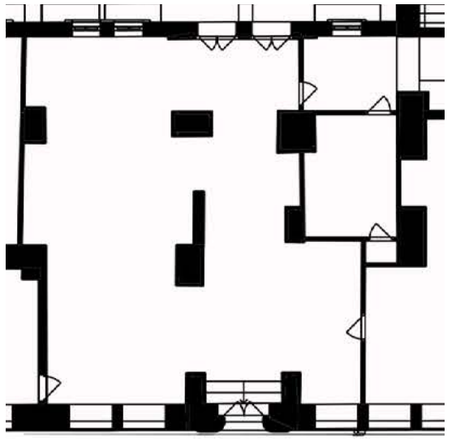




Views from entrance (bottom) and to entrance (top)



Archive drawings showing original south entrance



As existing plan - no defined passage

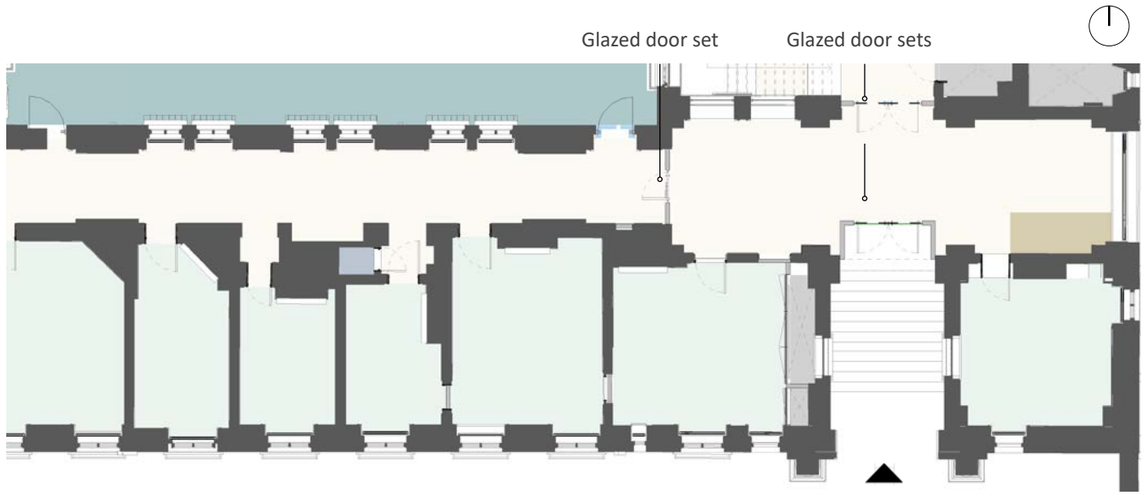
As existing view looking west - no defined passage

South entrance door as existing - to be retained

5.12.6 Entrance to Ground Floor (South)

5.12.6 The proposed new entrance door from the stepped South entrance replaces the existing modern internal lobby. The intent is for a 'lighter', modern volume, incorporating fully glazed doors and an over panel 'fanlight', to be read alongside the restored historic fabric. The design prefaces the family of new glazed cross corridor doors and screens deployed within the internal corridors.

5.12.6.1 The existing historic solid timber external doors that are located on the half landing of the stone steps are maintained with the proposals and held open.



Ground Floor plan showing entrance lobby to the South

Existing entrance lobby

Proposed entrance lobby

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