

Design Proposals

An outline description of the proposals to Galleries 38, 39 and 40 is identified below and illustrated with some three dimensional visualisations on the following pages. This is followed by a more detailed description of the proposed scope of work to the building fabric. Details of the proposed structure and building services are identified in a following section together with separate reports issued by Alan Baxter & Associates and TGA.

- Refurbishment of the original 'Smirke' interiors within Galleries 38 and 39 including ceilings, walls and floor finishes and new mechanical ventilation through the existing floor grills.
- Restoration of the original 'Smirke' interiors within Gallery 40, almost completely lost following bomb damage in the Second World War. This will include removal of the existing mezzanine floor and the incorporation of a new multilevel plant room and primary services infrastructure to the adjacent galleries.
- New electrical plant room above adjacent Botanical staircase corridor including new floor structure

A more detailed description of scope of work with regard to the building fabric in these spaces can be summarised as follows:

Ceilings:

- Removal of existing ceiling, including fabric finish and recessed lighting tracks, in parallel to the proposed roof removal works above the Gallery 40. Replacement with a new ceiling and three roof lanterns in the original coffer and cross beam arrangement as interpreted from archive drawings, photographs and to match the existing ceiling details in Galleries 38 and 39. This will include the following:
 - Ceiling coffers and beams to be formed in modern plasterboard with applied detailed mouldings.
 - New vertical apron to roof lantern opening to be formed in timber/plaster to replicate mouldings on existing aprons to Galleries 38 and 39.
- New 1 hour fire rated plasterboard ceilings (including basic decoration) to underside of new floor/roof structures in new Gallery 40 plant room, including intermediate and upper mezzanines.
- Removal of all existing fixtures and fittings to ceilings in Galleries 38 and 39 including metal security grills and metal solar control louvres with associated support structure and MDF perimeter surrounds.
- Refurbishment of existing ceilings above Galleries 38 and 39 to include the following:

- New roof lantern on top of existing apron raised slightly relative to new roof level (as described in earlier section on roof areas).
- Repair of existing original ceiling, cornices, mouldings and roof lantern apron, where necessary, following specialist condition survey. Repairs to include reinstatement of details to underside of cross beams in Gallery 39.
- Decoration of refurbished and new ceilings and aprons in Galleries 38, 39 and 40. Final colour scheme to be developed and confirmed following results of historic paint analysis and as part of Exhibition Design.
- Removal of existing ceiling, supporting structure and disused/damaged slate water tank above the Botanical stair corridor. Replacement with a new plant room floor structure to support a new 1 hour fire rated plasterboard ceiling below, including new fire rated access hatch and drop down ladder.

Walls:

- Removal of all modern fixtures and fittings within Galleries 38, 39 and 40 including shelving, storage units and structural brackets embedded within the existing walls.
- Removal of all modern internal plasterboard linings within Galleries 38 and 39 including enclosures to circulation corridor and linings to doorway into Gallery 40.
- Removal of all modern internal plasterboard linings, wall finishes and attached fixtures and fittings within Gallery 40 including enclosures to circulation corridor, electrical cupboards, suspended mezzanine floor and finishes/linings to existing perimeter walls.
- New 1 hour fire rated plasterboard screen wall forming full height enclosure to new plant room and supporting structure at west end of Gallery 40. This will need to include new 1 hour fire rated access doors on either side of the doorway to the Central Saloon incorporated as part of an architectural lining, the detailed design of which will be developed as part of the Exhibition Design.
- New modern plaster/dry lining to all three remaining walls within Gallery 40.
- New hardwood skirtings to all new wall surfaces within Gallery 40 (subject to Exhibition Design proposals). New skirtings to match existing skirting details in Galleries 38 and 39.

- Existing doors, architraves and linings to doorway into Central Saloon to be refurbished and repaired where necessary. Door linings on Gallery 40 side to be adapted and extended into room to incorporate new glazed doors and new matching architrave. Walls either side of new extended architrave to be built out in dry lining to suit.
- Existing doors, architraves and linings to doorway into Gallery 41 to be refurbished and repaired where necessary. Door linings on Gallery 40 side to be adapted and extended into room to incorporate new 1 hour fire resistant glazed doors and new matching architrave. New wall surface either side of new extended architrave to be built out in dry lining to full width and height of room to suit. New cornice with 'dentil' detail matching the existing in Gallery 41 to be incorporated above new architrave.
- Removal and bricking up of existing doorway between Gallery 39 and 40 and making good plaster finishes to match existing adjacent (Gallery 39) or new finishes (Gallery 40). New structural opening to be formed in revised location between the same two gallery spaces. Both sides of new doorway to incorporate new architraves, linings to reveals and cornice with 'dentil' detail to match Galleries 41 and 68.
- New structural builder's work openings from Gallery 40 to adjacent spaces in order to accommodate the distribution of building services below floor level, at high level and above ceiling level.
- Repair of existing wall finishes, cornices and skirtings, where necessary, following specialist condition survey in Galleries 38 and 39. This is to include 'making good' to match the existing adjacent finishes following localised installation of any services related to the new proposals.
- Existing doors, architraves, linings of doorway to Gallery 38 to be refurbished and repaired where necessary. Architrave and linings on Gallery 38 side to be adapted and extended into room with new wall surround to incorporate new glazed doors. New cornice with 'dentil' detail to be incorporated above extended architrave to match the existing in Gallery 41 and 68.
- Existing architraves and linings to doorway between Gallery 38 and 39 to be refurbished and repaired where necessary.
- Existing modern door, architraves and linings to doorway into Botanical stair corridor from Gallery 39 to be removed and replaced with new 1 hour fire rated panelled door and architrave to match historic drawings.
- Decoration of all walls in Galleries 38, 39 and 40. Final colour scheme to be developed and confirmed following results of historic paint analysis and as part of Exhibition Design.

Floors:

- Removal of all existing modern vinyl floor finishes and central supporting plywood/timber decking within the Galleries 38 and 39. Further investigation required to ascertain whether timber boarding is original and its current condition. Replacement with new solid oak strip flooring to match Central Saloon and Gallery 37 if required.
- Careful removal of all existing modern vinyl floor finishes from existing perimeter stone borders in Galleries 38 and 39. Removal and appropriate cleaning of stone floor to be undertaken by stonework specialist.
- Repair or refurbishment of existing metal grating, where necessary, to allow incorporation of new fabric ventilation duct within floor trench below. New section of matching metal grating required along south side of Gallery 39.
- Removal of all existing modern vinyl floor finishes and modern supporting plywood/timber decking within the Gallery 40. Replacement with new solid oak strip flooring with decorative insert to match Central Saloon and Gallery 37. Final layout and pattern to be developed in the next stage of design development together with potential locations for recessed floor boxes for electrical services.

Threshold of door into Central Saloon and area below between plant room doors at west end of Gallery 40 to incorporate new stone floor finish with appropriate substrata to match Central Saloon.

- New stone threshold to new doorway between Galleries 39 and 40.
- Existing stone threshold to doorway between Gallery 40 and 41 to be cleaned where necessary.
- New anti-static vinyl finishes on 18mm modern plywood decking within all new plant areas.

Appraisal of Design Proposals

The following is a summary appraisal of the proposals for Galleries 38, 39 and 40 in the context of the existing historic building, with particular reference to the Museum's Conservation Plan and the agreed conservation and design strategies for this project.

- In line with the Museum's Conservation Plan, the current proposal to reinstate the original ceiling and roof lantern configuration in Gallery 40 and refurbish Galleries 38 and 39 extends the strategy of restoring the 'coherence of the upper exhibition galleries' by reintroducing the scale, orientation and rhythm of the original 'Smirke' interiors and completing the spatial sequence into Gallery 41.
- The reinstatement of the original coffer and beam ceiling configuration in Gallery 40 is based on the available archive photographs (pg.34) in this area in which the general detailing and mouldings appear to be the same as Galleries 37, 38 and 39. This ceiling arrangement is also based on the relative location of the three original roof lanterns (see aerial photograph on page 3) and the footprint of the original full height vestibule at the west end of this gallery.

In line with the agreed conservation strategy to utilise spaces which have been previously modified for incorporating primary services, a new plant space is proposed within the reinstated foot print of the original vestibule. This will be enclosed with a full height wall which terminates the ceiling at the west end of the gallery and will be expressed as a large rectangular opening framing both the door into the Central Saloon and a recessed wall lining to the lower plant spaces on either side. The final design and treatment to this lining will relate to both plant access requirements and the future Exhibition Design.

In order to avoid compromising the setting out and rhythm of the reinstated coffered ceiling, the design team have endeavoured to keep within the constraints of the original vestibule footprint by fully utilising the vertical space available (with an intermediate and upper mezzanine) and developing a services strategy (see later section) for the surrounding galleries which can be which minimises the impact on the original historic configuration.

- In line with the above strategy, the proposals to incorporate mechanical services distribution include the need to distribute high and low level ductwork (pg.47) on both the north and south walls within Gallery 40. The low level ductwork on the south side would also need to drop below floor level in a number of locations and then pass through the wall into Galleries 38 and 39 from where they will feed into a fabric diffusers discretely located within the existing floor ducts (with metal grating).

The number of these ducts and therefore new builders work holes required will depend on the current space available to avoid the existing steel, timber and brick arch floor structure below. Investigations so far have indicated that there will need to be approximately five openings below floor level for these ducts. Similar holes related to electrical services are indicated on the main design drawings for these spaces.

The current strategy within Gallery 40 itself is that the high and low level ductwork will be incorporated as part a continuous 'architectural' element or display case, the detail of which will be developed as part of the Exhibition Design.

- In order to meet the required level of environmental control within the exhibition spaces it will be necessary to incorporate framed glass doors into the existing doorways at either end of Gallery 40 and between Galleries 38 and 37.

In addition, the new doors at the east end of Gallery 40 will need to be 1 hour fire resistant in order to also avoid the need to incorporate a smoke curtain into the same doorway, as defined in the Museum's Fire Safety Plan. As this document also proposes a horizontal evacuation strategy in these areas, it will be necessary for all of these doors to swing in both directions, requiring pivot hinges and floor springs.

In order to minimise the visual and physical impact on the existing doors, linings and architraves, the current proposal is to incorporate these doors on the inside face of these galleries where much of the original door features have been lost. This will include adapting and extending the existing linings, incorporating the new door frames and transom and applying a new architrave and cornice above. These doors can then be held open against the existing oak panelled doors which also fold in flush with the reveals. Although the finish of the door frame has yet to be agreed, it will be selected with appropriate consideration for the adjacent historic doors.

Depending on which doorway is being altered, it will be necessary to build out the surrounding wall to allow for this adaptation as illustrated on the typical detail on page 43. Although, it is likely that this will only be required on the doorway between Galleries 38 and 37, further detailed design development of the doors may also require this on the doorway at the east end of Gallery 40.

- As part of restoring the 'coherence' and a consistent hierarchy of spaces at this level, it is also proposed to introduce cornices (with 'dentil' detail) above the doorways leading to Gallery 41 from Gallery 40 and leading to Gallery 37 from Gallery 38. Although there is currently no record of what these doorways originally looked like, it is reasonable to assume that they would have been the same as the existing cornices within adjacent Galleries 41 and 68.

Once in place, the original sequence and hierarchy of architectural detail from the South Stair, through Central Saloon (cornices with console bracket detail) and then into the adjacent upper galleries (cornices with dentil detail) would be complete.

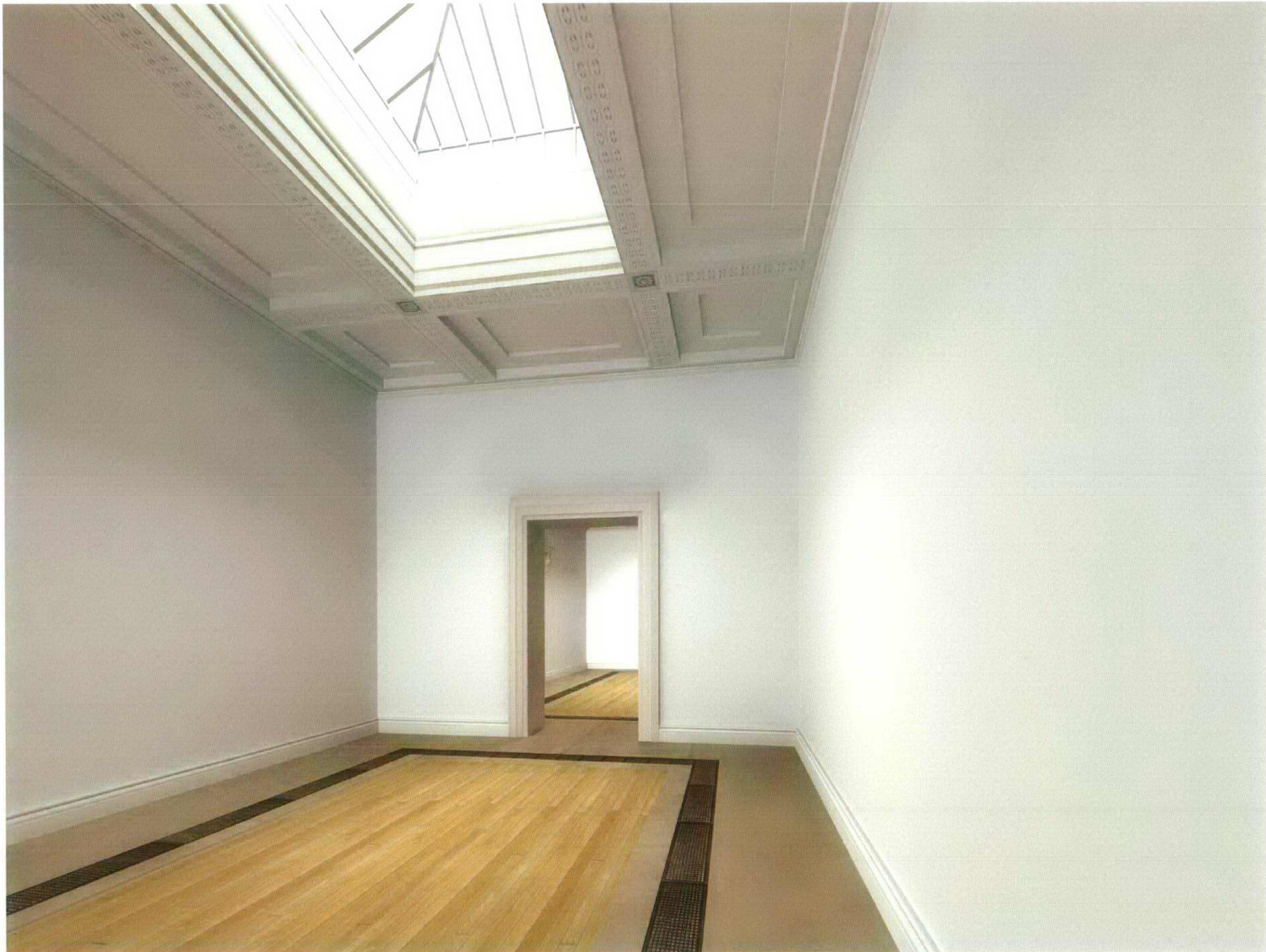
It should be noted that, although the design drawings show the correct proposed door and cornice arrangement for these spaces, the three dimensional visualisations were carried out earlier in the design process and, as such, currently show the wrong type of cornice. In addition, cornices are no longer proposed on either side of the existing doorway between Galleries 38 and 39, in line with archive drawing on page 32.

- With reference to Section 3.5I in the Conservation Plan, it is proposed to relocate the existing modern connection between Gallery 40 and Gallery 39 to a more central axis in order to improve the primary circulation between these spaces.

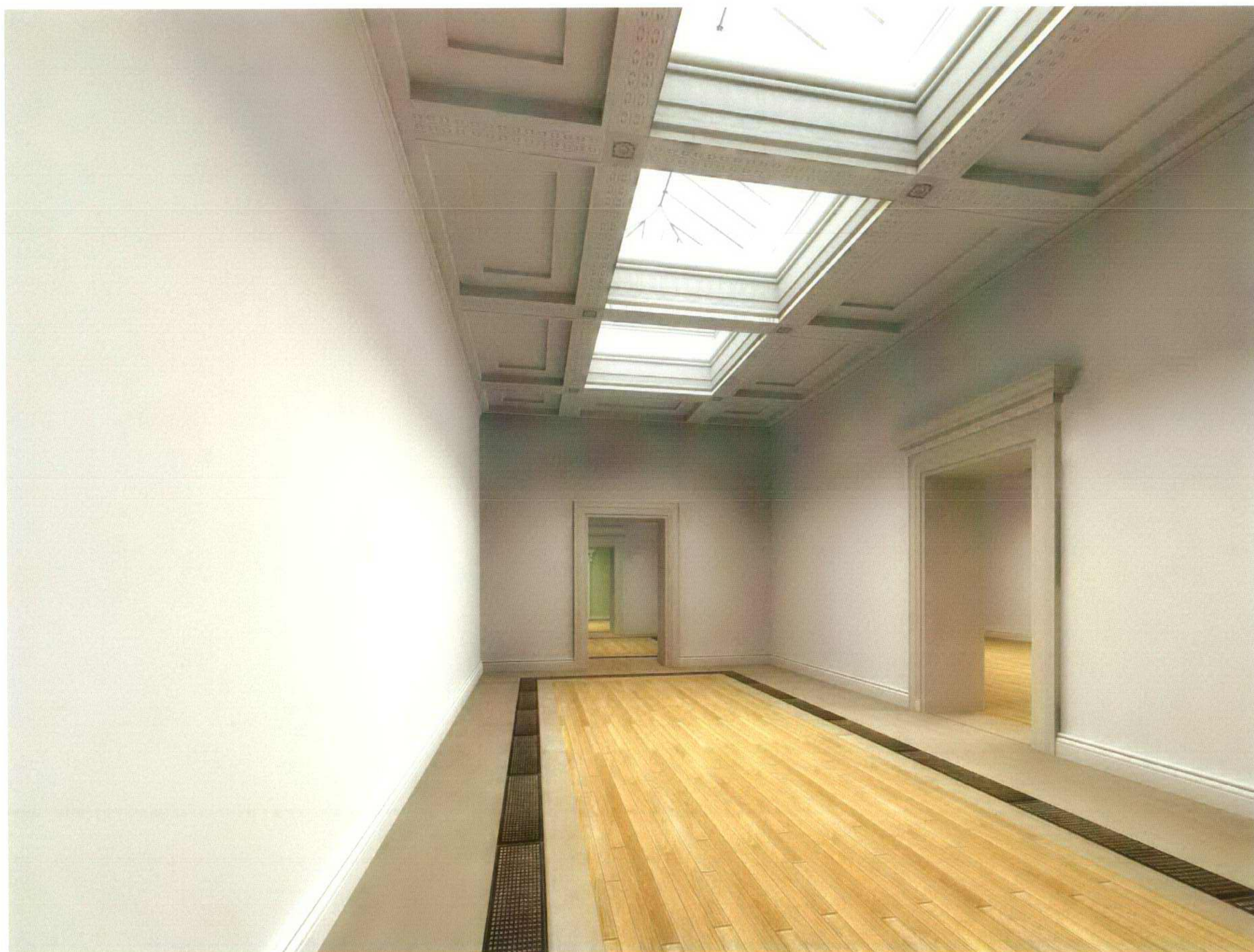
Although this opening will have no doors, it will reflect the scale and detail of the gallery doorway between Gallery 40 and 41, including a new cornice (with dentil detail) on either side. This would help to emphasise the importance of this new connection in maintaining the primary circulation between these spaces.

It is worth noting that early 'Smirke' design drawings (pg.4) originally indicated an opening in the same location although there is no evidence of this ever being constructed.

- As highlighted in Section 3.5m in the Conservation Plan, the existing door and architraves from Gallery 39 into the Botanical stair corridor were carried relatively recently. As part of the general strategy to restore coherence to these galleries, it is proposed to replace this door to match the original design as illustrated on the historic record drawing on page 32.



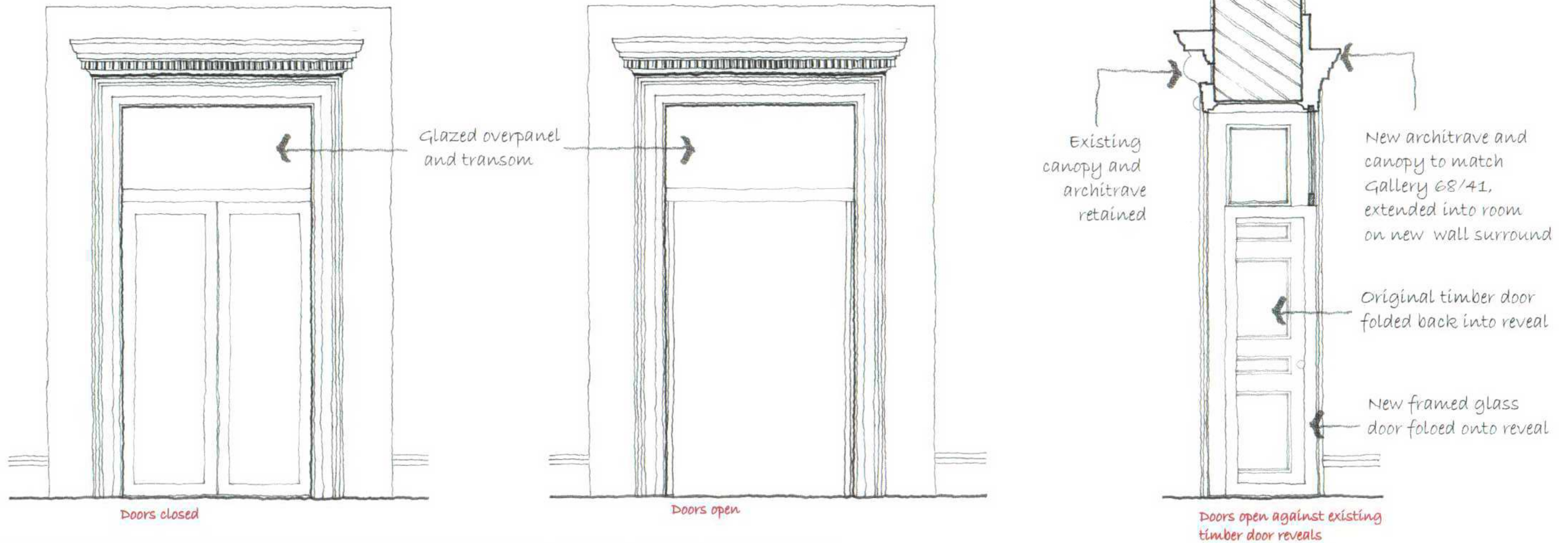
Proposed view from Gallery 38 towards Gallery 39



Proposed view from Gallery 39 towards Gallery 38 and new opening into Gallery 40



Proposed view within Gallery 40 towards existing doorway into Gallery 41 and new doorway into Gallery 39



Typical proposed details for incorporation of new glazed doors within existing door cases



Existing fire shutter adjacent to Main Entrance at Level 2

Existing door to Gallery 68

Existing door to Gallery 37

