CHAPTER 7 The Proposals: Enabling Works

# **ENABLING WORKS SUMMARY**

Delivering the proposals including demolition works, new buildings, and replaced primary services distribution across the estate is a significant undertaking in the context of a live operational public institution such as The British Museum. To enable the proposals to be delivered, a number of smaller enabling works must take place.

For avoidance of doubt, these enabling works are works required as part of the proposals to facilitate continuity of existing BAU operations, logistics, and infrastructure during the construction period, or required to facilitate the construction of the proposed new buildings where these sit directly adjacent to existing BAU operational functions & access points or existing plant infrastructure & distribution which needs to remain live. They do not comprise any form of Enabling Development in planning terms.

In some cases these enabling works will be only temporary, to provide continuity of operations to the Museum during a phase of construction activity. In other cases, the enabling works will be permanent to allow for new development to occur and remain in place.

This chapter provides an illustrated summary of these enabling works. For the avoidance of doubt, this Chapter refers only to enabling works for which permissions are being sought as part of the scope of this application. There are other enabling works that exist outside of that scope, that have, are, or will have their own approvals process outside of this application. These are omitted from the narrative within this Chapter. Though not an enabling project, it should also be noted that the East Road Building (ERB), though part of the Energy Centre Programme works, was brought forwards as an advanced element in the programme, with a Planning and Listed Building Consent application made in April of 2023.

Lastly, reference should also be made to relevant submission documents pertaining to the Construction Management Plan. Changes on site required as part of the Construction Management Plan are generally not covered within this chapter, though the construction of the crane base, required to facilitate the erection of the SWEC building, is covered due to associated diversion of existing drainage.

# 7.2 WIDER SITE ENABLING WORKS

### 7.2.1 South-West Gate

A Construction Management Plan for the proposed works is currently in development and relevant documents have been produced as part of the planning application. However a few key items are summarised within the following section.

#### South-West Gate

To facilitate construction vehicle traffic and logistics some temporary alteration to the existing South-West Gate will be required in order that logistic operations can occur safely.

This will involve temporary removal of the existing gate doors and a portion of the existing plinth and associated below ground foundations and railings above as indicated in the plan and marked up photograph adjacent.

The method of proposed works would be:

- Record and non intrusively mark existing components
- Remove the main gates, and portions of plinth and railings.
- Restore these gates and railings off site and store on site following restoration.
- Store the stones removed on site.
- Design, manufacture and install required railings and gates to provide a temporary, set back, secure entranceway.
  - Re-instate railings upon completion of the works as per the existing condition.
  - Re-instatement of restored gates upon completion of the works as per the existing condition.



#### Top left clockwise:

Plan of the South-West Gate showing the portion of railing, plinth and doors to be temporarily removed in red wash. The dotted red line indicates the existing door to be removed but the plinth and railings behind will not be removed temporarily.

Existing photograph of the South-West Gate showing the portion of railing, plinth and doors to be temporarily removed in red wash. The dotted red line indicates the existing door to be removed but the plinth and railings behind will not be removed temporarily.

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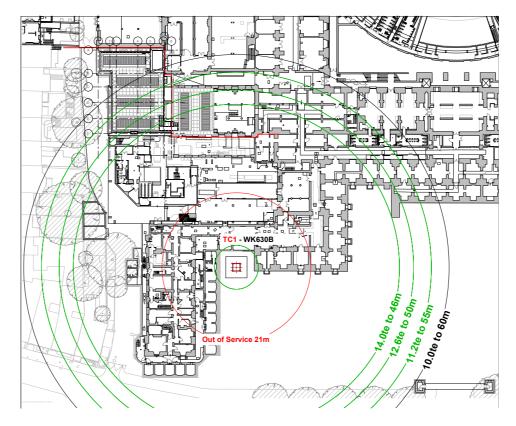
Southern elevation of the South-West Gate showing the portion of railing, plinth and doors to be temporarily removed in red wash. The dotted red line indicates the existing door to be removed but the plinth and railings behind will not be removed temporarily. Prepared with RealPM and Alan Baxter Associates

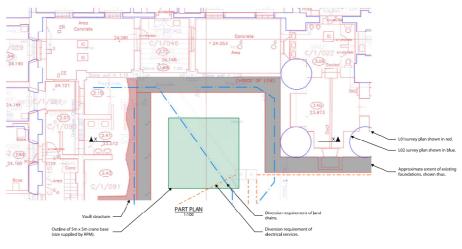
The SWEC site is difficult to access and manage on account of it being enclosed on all sides by existing buildings and also the internal West Road.

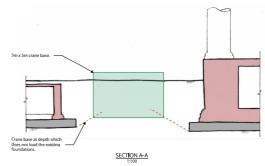
In order to construct the new SWEC whilst also keeping the road open to maintain business-as-usual operations for the Estate, a tower crane will need to be erected within the north-western corner of the South Forecourt, between the South Colonnade and West Residence. The crane will be of a significant size due to the reach required to the SWEC site, and will require a reinforced concrete crane base as its foundation.

To construct the crane base, the existing paving slabs within the South Forecourt will be recorded, carefully removed, and stored on site. The ground will then be excavated, with existing below ground drainage runs diverted permanently around the crane base 5m x 5m footprint, and the RC crane base poured up to and slightly above ground level.

Due to its size, it is intended for the majority of the tower crane base foundation to remain in place, with only the top demolished and made good to facilitate reinstatement of the South Forecourt paving as existing once the Energy Centre Programme construction is complete.







#### Top to bottom:

Plan showing the location of the proposed tower crane within the South Forecourt to facilitate the construction of the SWEC relative to the Level o1 museum foundations adjacent. Plan courtesy of RealPM

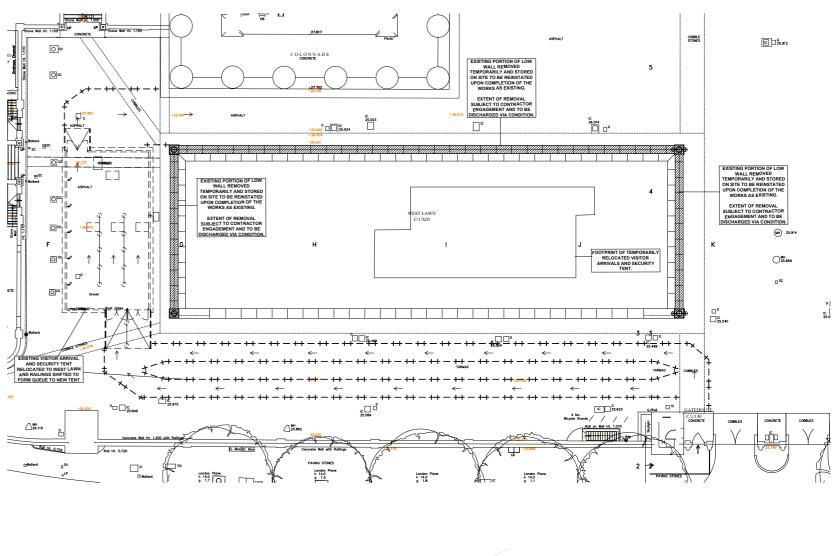
Plan and section showing the proposed reinforced concrete tower crane base foundation and associated below ground drainage diversions. The section shows the proposed depth of the crane base as being higher than the lowest level of existing neighbouring foundations. Courtesy of Alan Baxter Associates.

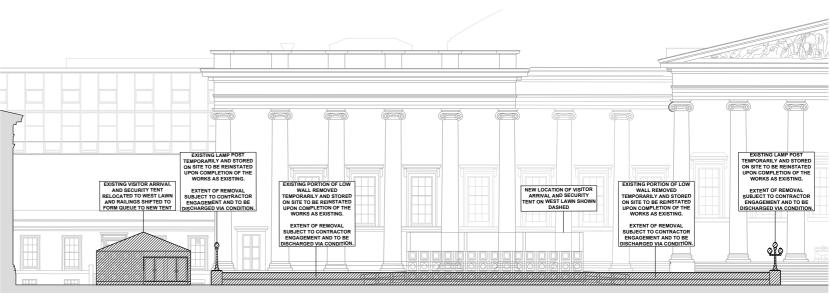
To facilitate temporary relocation of the Visitor Arrivals & Security Pavilion and the erection of equipment to facilitate the construction of the proposed SWEC building, temporary removal of the South Forecourt West Lawn low wall will be required. The wall will be reinstated as per the existing condition upon completion of the works.

The extent of removal is subject to contractor engagement and is to be discharged via condition, as indicated on the adjacent drawing.

The method of proposed works would be:

- Record and non intrusively mark existing components
- Remove portions of plinth low wall including lamps at corner posts.
- Restore lamps off site and store on site following restoration.
- Store the stones removed on site.
- Design, manufacture and install required railings and gates to provide a temporary safe and secure temporary condition.
- Re-instate plinth low walls upon completion of the works as per the existing condition.





#### Top to bottom:

Plan showing the indicative extent of temporary removal of the South Forecourt West Lawn low wall required to facilitate the construction of the proposed works.

South Forecourt West Lawn southern elevation showing the indicative extent of temporary removal of the South Forecourt West Lawn low wall required to facilitate the construction of the proposed works.

## **SWEC SITE ENABLING WORKS**

### SWEC Enabling Works Summary

As the SWEC building acts as an infill block surrounded by existing buildings, a number of enabling works are required to divert services and functions out of the demise of the SWEC site. This will enable easier construction and a simpler logistics strategy as all works can be contained within the site without complications associated with managing existing services. This includes:

#### Existing Distribution Pipework Between New Wing Plant Room & SWBH

The existing distribution between the SWBH and New Wing level on plant room needs to remain operational throughout delivery until the new systems installed in the SWEC can replace them. These existing connections therefore require temporary relocation away from the SWEC construction site. The relocated pipework will be removed following completion of Phase I of the SWEC.

#### **Existing Lycian Façade Pipework Distribution**

There is an existing pipework connection between chillers on the roof of the Lycian Building to the New Wing level or plant room. This system serves the Great Court & needs to remain operational throughout delivery. The distribution therefore requires relocation away from the SWEC site. The relocated pipework will be removed following completion of Phase I of SWEC, which will permanently replace this system.

#### New Wing Restaurant Pizza Oven Flue & Air Vents

These vents, windows, and a flue for the pizza oven within the New Wing restaurant currently sit on the North facade of the New Wing. They will need permanent relocation in order to accommodate the new SWEC building footprint.

#### New Wing Level 01 Catering Hub

This catering hub serves restaurants, the staff canteen, and Museum Cafés within the New Wing. Access will need to be formed to the south to be away from the construction site and internal areas refurbished to allow for new access and rearranged changing rooms.

#### New Wing Plant Room AHU Air Intake

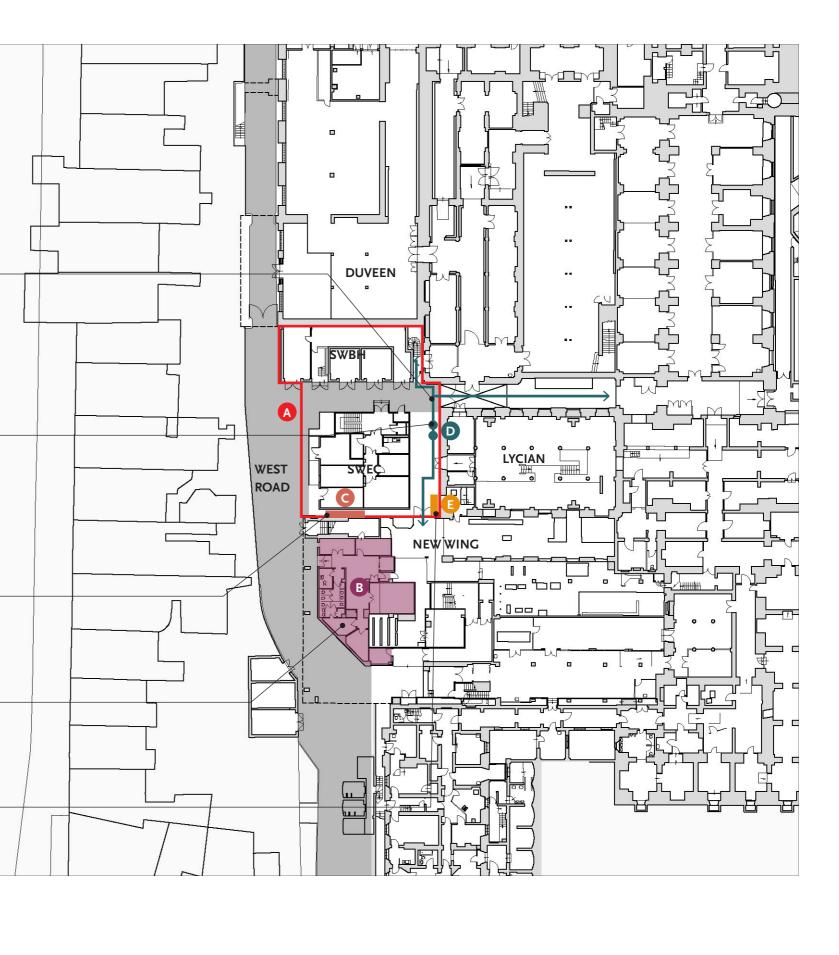
This air intake, which currently takes air to plant in the New Wing Level o1 plant room via the raised existing floor in the Lycian Building, will need to be temporarily relocated during construction so the intake does not face directly into the construction site. It will be reinstated in its current location following the completion of the SWEC.



- B New Wing Catering Hub
- C New Wing Restaurant Services
- D Existing Pipework Distribution

#### Right:

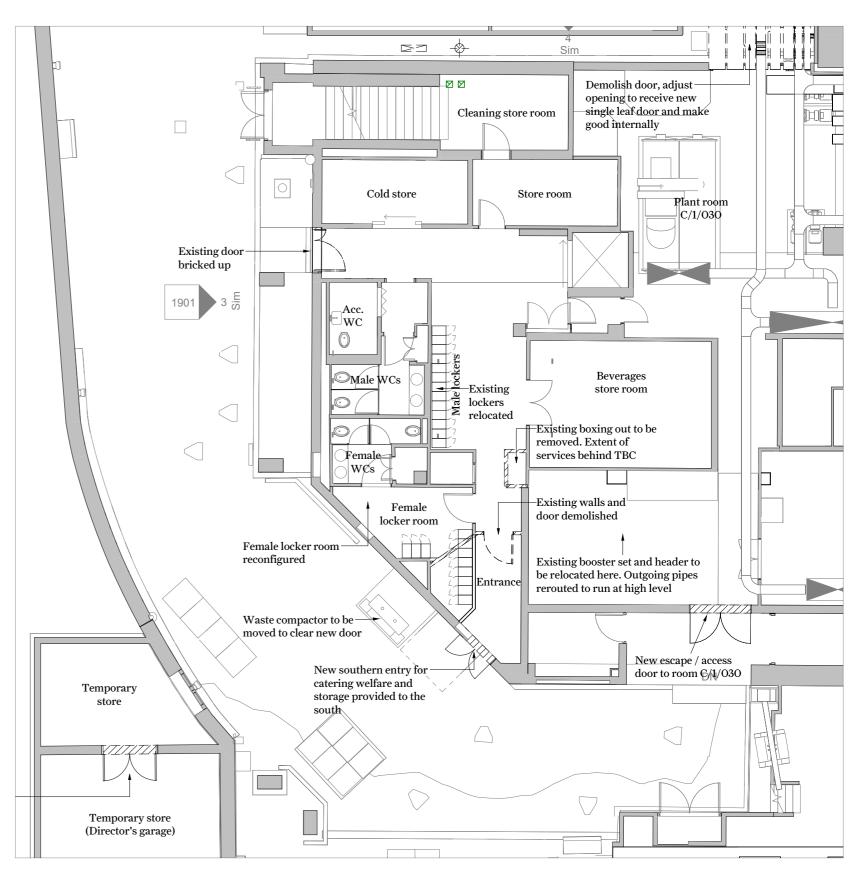
Level 01 floor plan with key Enabling Works required



The Level of New Wing catering hub serves the Pizzeria and Staff Canteen which occupy the upper levels of the New Wing. It is intended that these functions will remain open and operational throughout the construction period. Minor modifications will therefore be required to ensure entrance can be gained to this area for loading of goods and personnel access away from the SWEC construction site.

The enabling works will re-direct and re-route access to the catering hub and neighbouring plant room C/1/030 to avoid close cross over with the SWEC site and maintain egress and escape routes. The following works are included:

- Existing western entry door/opening into catering hub to be bricked up and new southern entry for catering welfare via existing changing room space.
- Male and Female locker rooms to be relocated/ re-furbished to allow for new southern access door and lobby
- Providing a new escape and access door directly south of the plant room C/1/030
- Cold store currently in the South-West Portacabins to be relocated within the Director's Garage
- New internal double door access between stores within Directors Garage
- Removal of existing double door into C/1/030
  and new door, with new door formed to the East
  as part of the main works. New double door to
  South form new access to plant room away from
  SWEC site
- Relocation of external Waste Compactor and associated concrete base



Proposed reconfiguration of New Wing

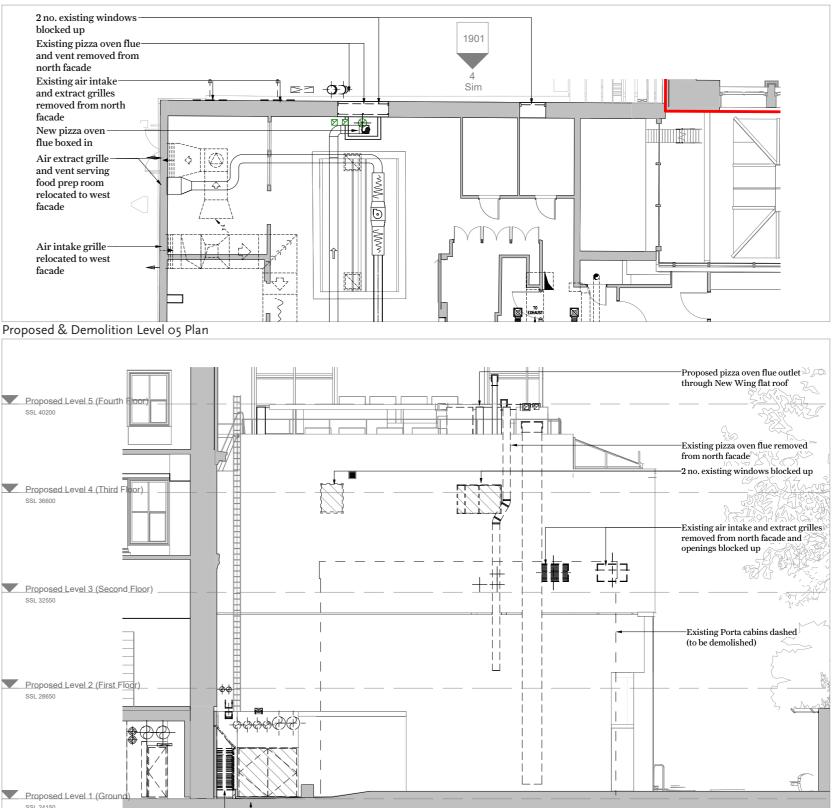
**Right:** 

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WRIGHT & WRIGHT ARCHITECTS 229

Along the northern elevation of the New Wing there are a number of existing windows and services which need to be demolished or relocated in order to enable the new 'party wall' condition with the SWEC to be formed. These include:

- Removal and blocking up of 2 No. windows at level 05, serving the kitchen and cold stores
- Removal of the existing north elevation external pizza flue. This will include the creation of a new internal riser adjacent one of the blocked up windows within the kitchen. This will allow the pizza oven flue to be diverted to run internally through the building and terminate at the lower New Wing flat roof
- Relocate existing intake and extract grills to the West Elevation of the New Wing.



Proposed Level 5. (Fourth Eloci St. 4000 Proposed Level 5. (Fourth Eloci Proposed Level 5. (Fourth Eloci Proposed Level 4. (Third Eloci Existing pizza oven flue removed From orth facade Proposed Level 3. (Steered Eloci St. 3990 Proposed Lev



#### Top right clockwise:

Proposed and demolition level 05 plan of enabling works to New Wing kitchen flues & air vents

Proposed and demolition northern elevation of the New Wing

Proposed and demolition West Elevation of the New Wing

Proposed & Demolition New Wing West Elevation

Lycian Building & New Wing Services Infrastructure

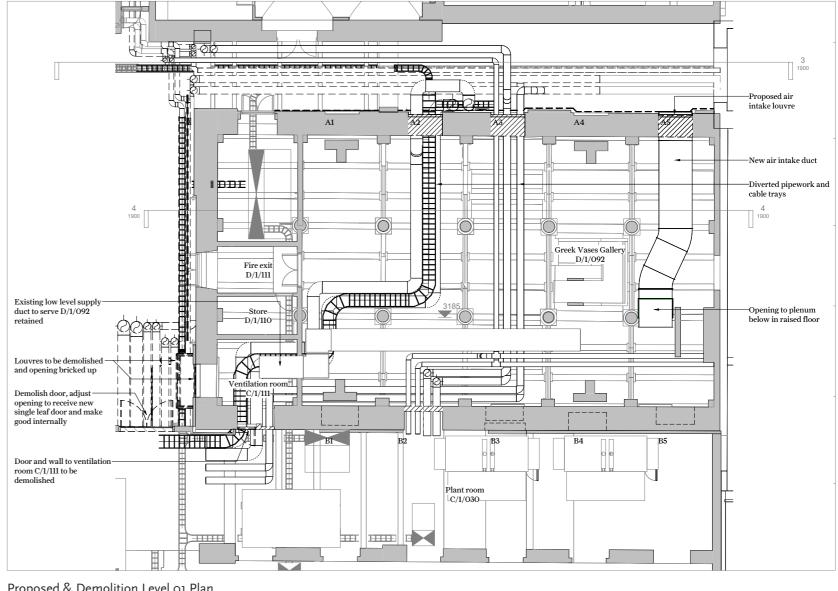
Prepared with Steensen Varming

By removing the historic bricking up of openings, deemed as detrimental to the building's significance, within the Lycian building at level 01, pipework, cable trays and ductwork can be temporarily rerouted through these openings and then internally through the level 01 basement of the Lycian building into plant room C/1/030. This strategy provides for the temporary relocation of:

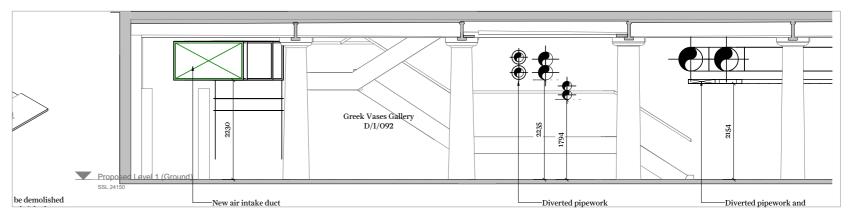
- Distribution pipework between New Wing plant room & South-West Boiler House
- Distribution pipework currently mounted on • the West Elevation of Lycian Building which runs between the New Wing Plant Room and chiller plant of the Lycian Building roof which serves the Great Court
- The New Wing plant room AHU Air intake

Prior to works being undertaken in this area, the Greek Vase Gallery D/1/092, will be decanted by the Museum's conservation team. This gallery has been closed to the public for some time, and had been utilised as a store for the Greek vases subsequently.

It should be noted that once Phase 01 of the SWEC is complete and operational, the temporary rerouted services will be able to be removed as the services will be redundant and replaced by those operating within the SWEC building. That is with the exception of the New Wing plant room AHU air intake, which will return to be located in its existing position. Likewise, the bricking up of openings removed will be reinstated as glazing is not appropriate for security and environmental reasons given the rooms current use as a collections store. This will maintain the status quo of the existing condition.



Proposed & Demolition Level 01 Plan

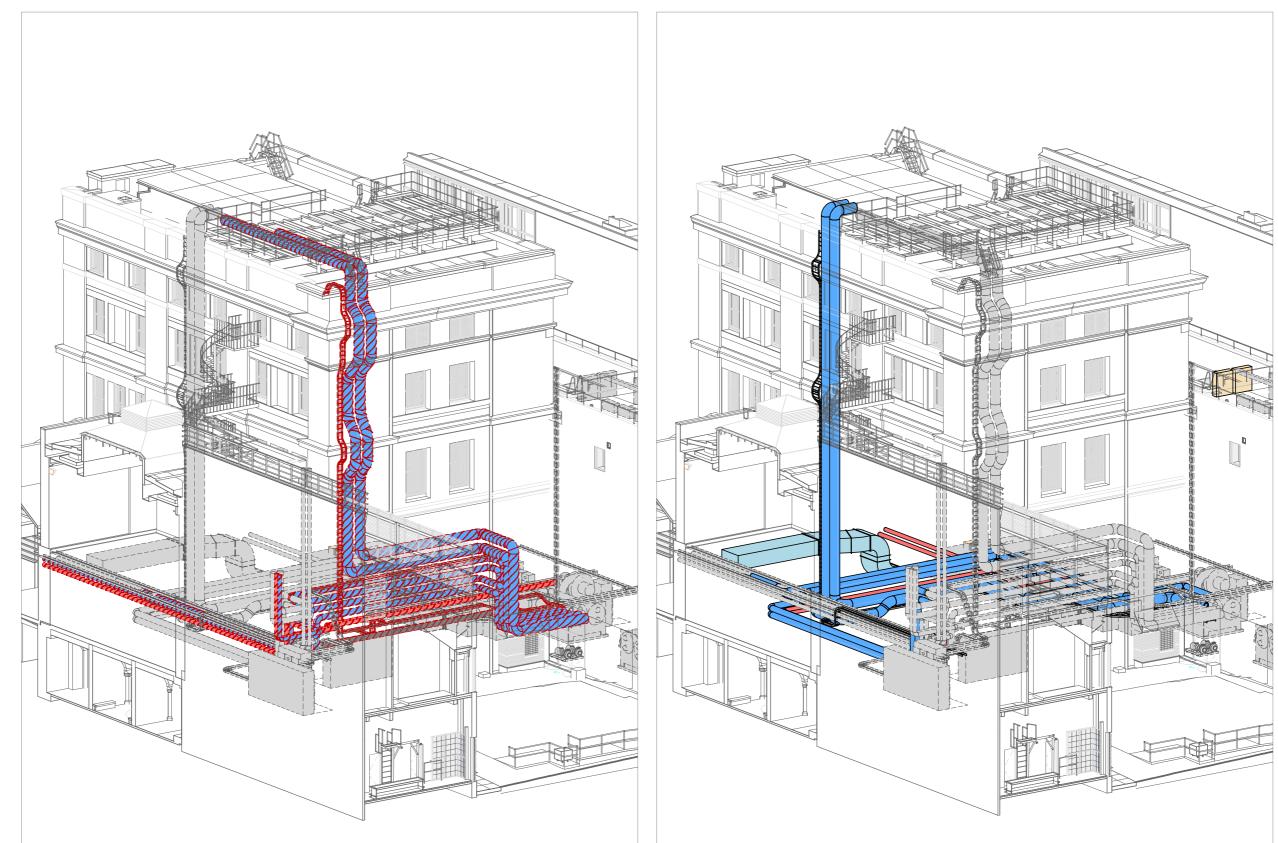


Proposed Lycian Room D/1/092 Section

### **Top right:**

Proposed and demolition level 01 plan showing the re-routed services through room D/1/092

Proposed Lycian Room D/1/092 Section



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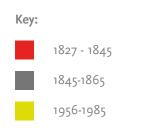
From left:

Demolition 3D illustrating the existing services routes externally with the proposed routes ghosted in grey by Steensen Varming

Proposed 3D illustrating the proposed temporary relocation of servicing by Steensen Varming

As stated on the previous spread, there is a significant amount of external services which need to be re-routed temporarily to enable the SWEC site to be cleared for construction. This will require the removal of existing bricking up of previous openings, which occurred in the late 20th Century.

It should be noted the fabric removed is not of any historic significance. The bricking up of openings removed will be reinstated following completion of the works as their removal is only required to faciliate temporary enabling works as outlined in the previous section. Glazing is not appropriate to replace the bricking up for security and environmental reasons given the rooms current use as a collections store. The proposals will therefore maintain the status quo of the existing condition.

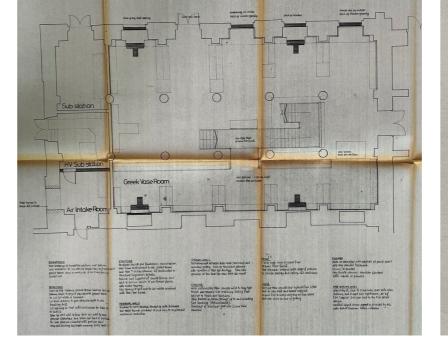


#### From top left clockwise:

Basement plan of the Lycian building, 1981 renovations

Basement plan of the Lycian building, 1844 Smirke design

CMP, Historical Development Plans showing the date of fabric



1981

#### From the CMP Gazetteer re: C/1/030

The supporting columns for the 1980s Level 5 mezzanine over D/2/047 punctured the jack-arched floor structure in four positions and penetrate through to the basement. A staircase was introduced down from Level 2 in the eastern half of the room, and, within the basement, a raised mezzanine was constructed along the south side of the room. The windows along both north and south sides were bricked in, and along the west end the last bay was closed off to create service rooms (D/1/112. *D/1/111, D/1/110, C/1/111). The door to the east was* renewed with a pair of flush doors and a flush panel over:



1844



