

UCL- 20 Bedford Way-Phase 1

Structural Report-Outlining significant alterations

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This report summarises the significant structural alterations happening within the Phase 1 works at 20 Bedford Way. These are limited to the removal of a section of wall and the addition of a new lift both within the Wing A block. These are shown on drawings 20BW-ACM-WA-01-DR-SE-01301, 20BW-ACM-WA-02-DR-SE-01302, 20BW-ACM-WA-03-DR-SE-01303 & 20BW-ACM-WA-04-DR-SE-01304.

Local demolition of wall

The section of wall that is proposed to be demolished is on grid line 118 at Level 3, the wall itself spans from level 3 up to level 9. The justification for the removal of this section of wall is that the load path will not be significantly altered by the introduction of this opening. This has been proved by finite element modelling this section of the building. From review of the reinforced concrete record drawings it can be seen that the floor plate of both the Level 3 slab and the Level 4 slabs are detailed as if the support provided by this wall was not there, presumably to keep the detailing consistent. Therefore the removal of this section of the wall should not have a detrimental effect to the slabs. However before this work can take place the reinforcement to both Level 3 and Level 4 slabs will have to be determined to verify it as per the record drawings.

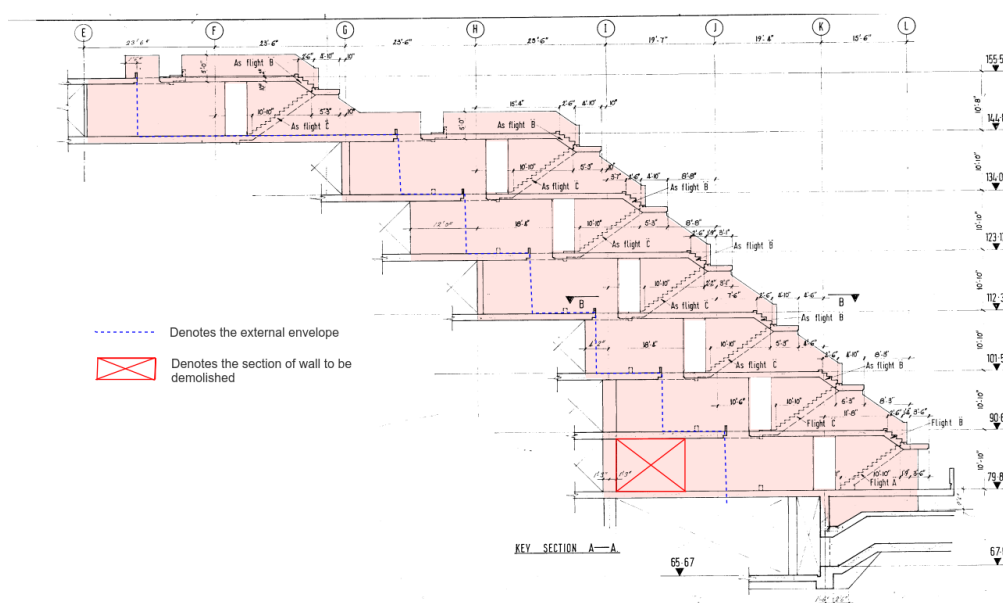


Image taken from 1972 record drawing 2550 01/WD17.1 C

Formation of new lift shaft

A lift is required to serve Level 2 to Level 4; this will require the formation of a new shaft and the local demolition of the Level 2, 3 & 4 slabs. The positioning of this lift in relation to the column/wall layout is such that the new openings do not require significant strengthening. However this will be provided by the blockwork that will form the shaft wall. Once again from reviewing the reinforced record drawings, it is not deemed providing this shaft is an issue but it has been advised that this reinforcement is verified on site.

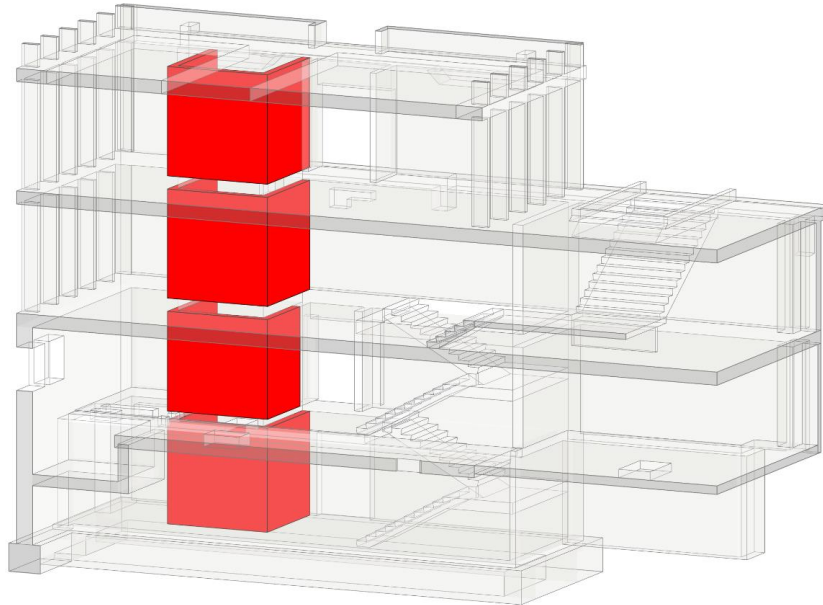


Image taken from AECOM Revit model