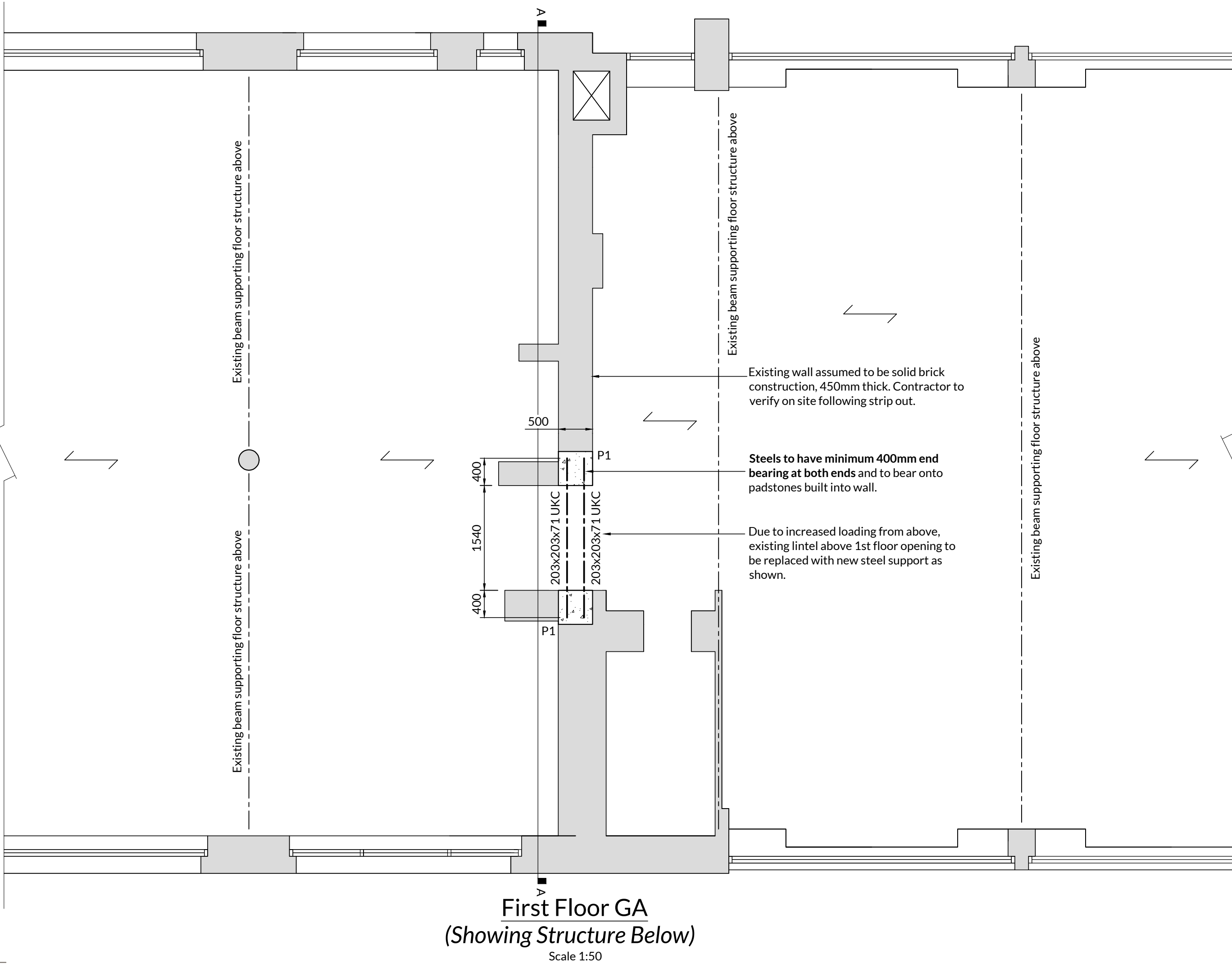
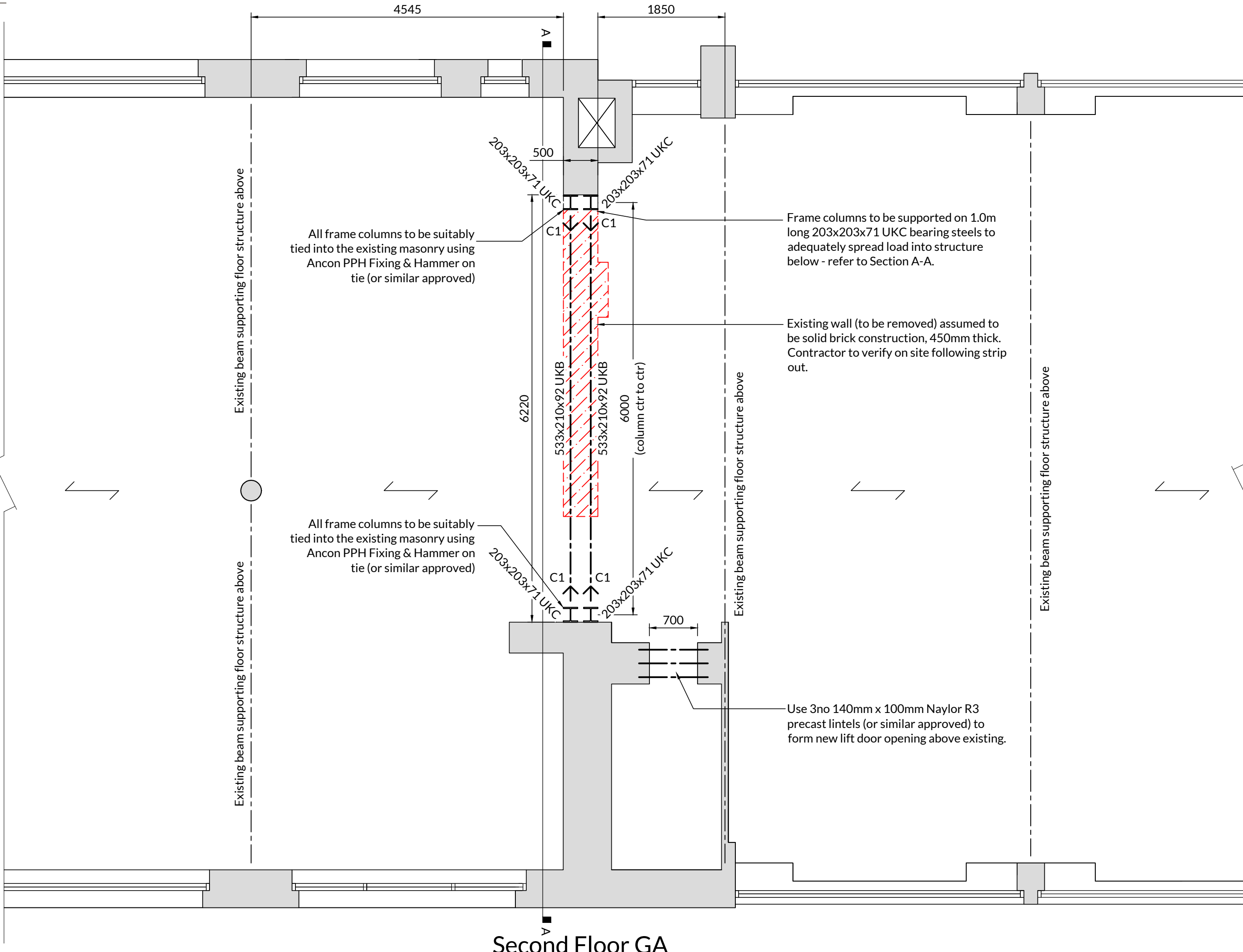
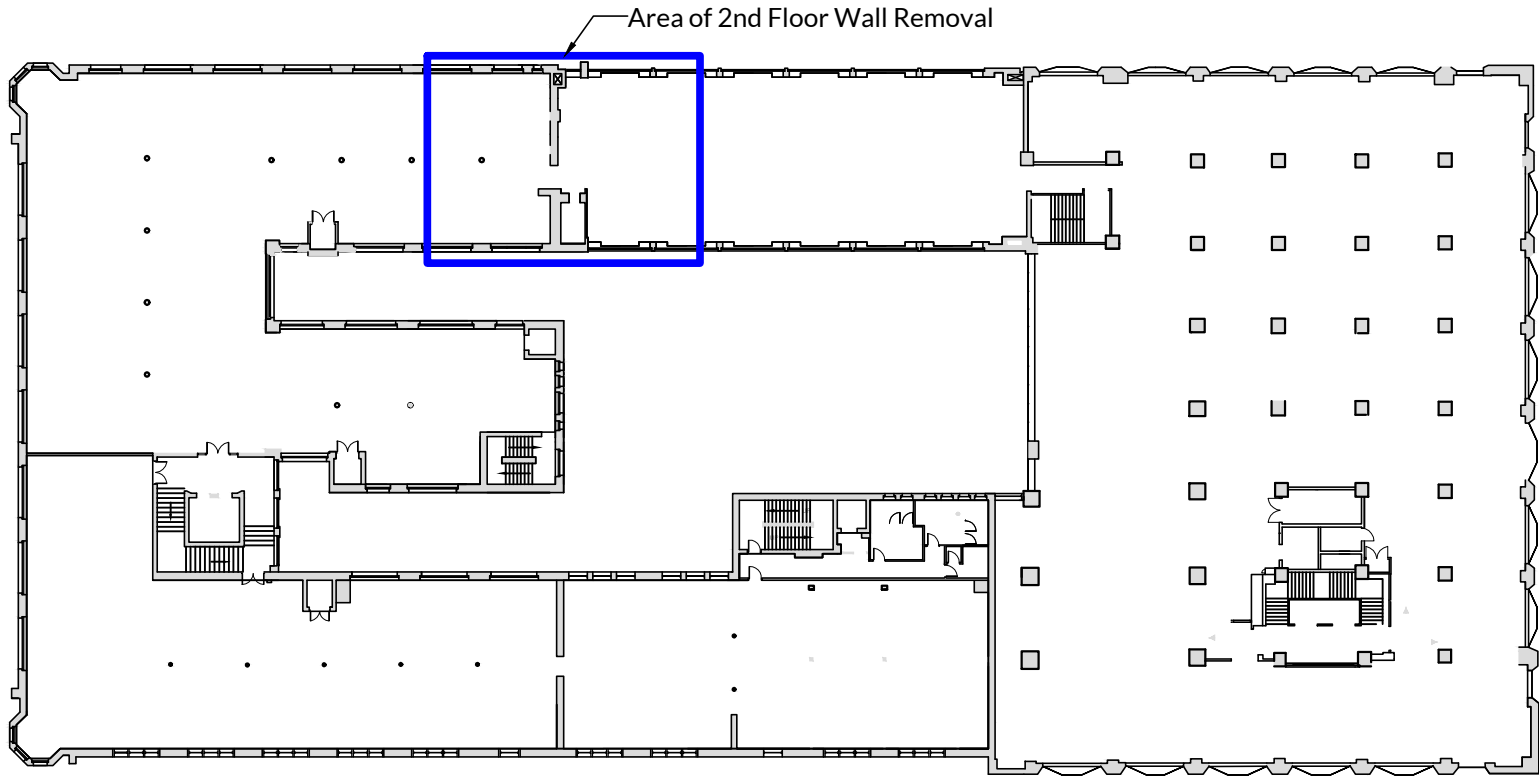


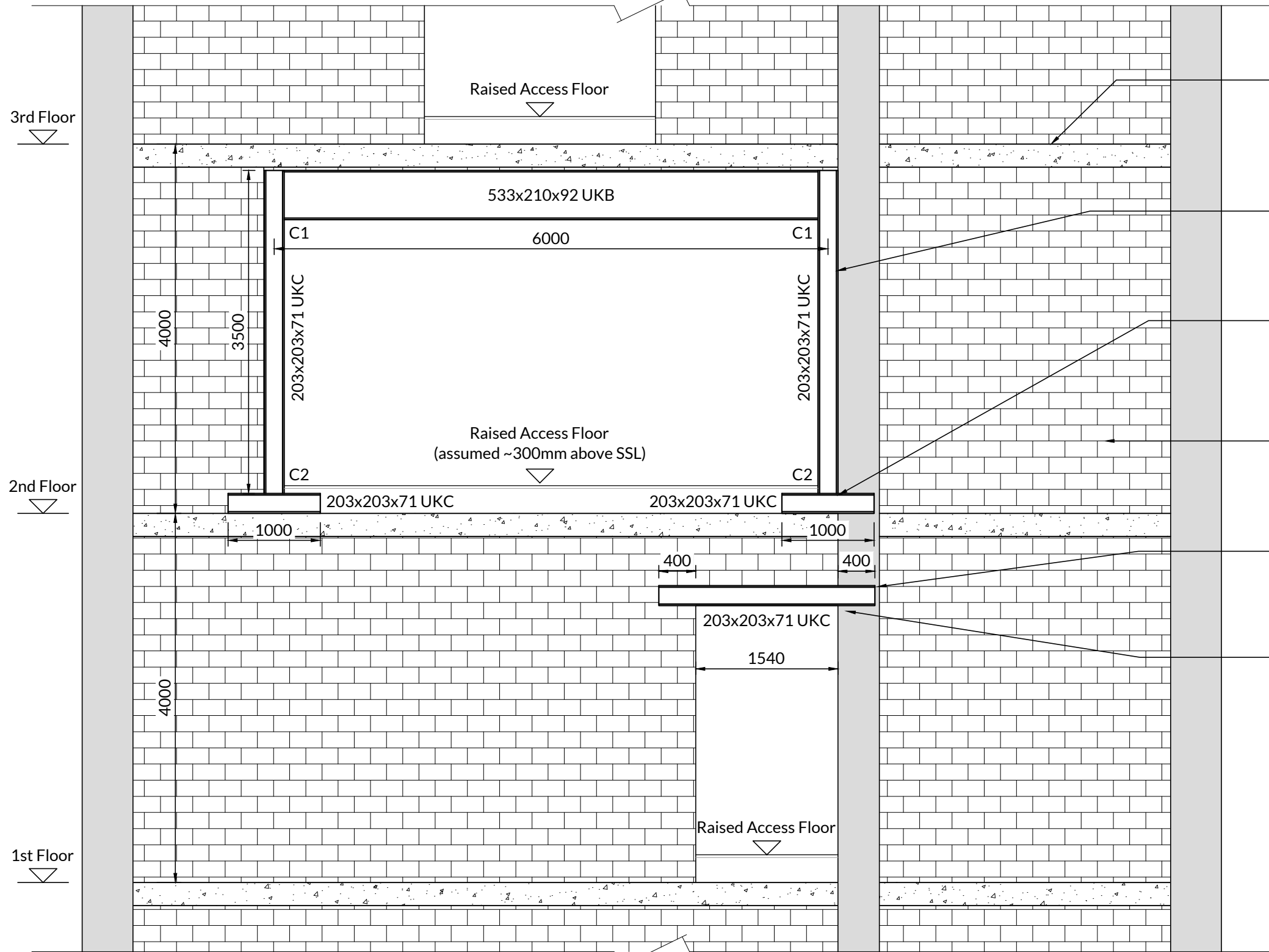


KEY:

- Span direction of floor structure. Assumed to be filler joist concrete construction (or similar) of maximum thickness 250mm. Contractor to verify on site.
- Beam to Column Moment Connection
- P1 500 x 450 x 150mm deep concrete padstone
- C1 Steelwork connections - refer to table for design forces
- Existing masonry. Assumed solid brick construction with minimum compressive strength 20 N/mm²
- Areas to be demolished



Key Plan
Scale 1:500



- Existing floors assumed to be filler joist concrete construction (or similar) of maximum thickness 250mm. Contractor to verify on site following strip out.
- All frame columns to be suitably tied into the existing masonry using Ancon PPH Fixing & Hammer on tie (or similar approved)
- Frame columns to be supported on 1.0m long 203x203x71 UKC bearing steels to adequately spread load into structure below. It is envisaged bearing steels can be hidden within the raised access floor void.
- Existing walls assumed to be solid brick construction, 450mm thick. Contractor to verify on site following strip out.
- Steels to have minimum 400mm end bearing at both ends and to bear onto padstones built into wall.
- Due to increased loading from above, existing lintel above 1st floor opening to be replaced with new steel support as shown.

Section A-A
Scale 1:50

CONNECTION FORCES (ULS)			
	Moment (kNm)	Shear (kN)	Axial (kN)
C1: 533x210x92 UKB to 203x203x71 UKC moment connection	80	480	240
C2: 203x203x71 UKC base plate connection	-	30	480

Notes:

- To be read in conjunction with Architects drawings and specification.
- Refer to Architects drawings for information relating to DPM details, insulation, waterproofing, and finishes.
- All proprietary items are to be installed in accordance with manufacturers recommendations and specification.
- All structural works to be undertaken in accordance with Building Regulations (2010) Approved Document A.
- Do not scale from the printed drawings or the computer digital data. Use figured dimensions only.
- All primary steelwork to be grade S355 J0 and all secondary steelwork to be grade S275 J0, all in accordance with BS EN 10025 and BS EN 10210.
- All steelwork is in a C2 (Low) environment - to be blast cleaned to surface preparation grade Sa2½ then coated with a zinc phosphate epoxy primer.
- All dimensions to be site measured prior to fabrication or commencement with works.
- Unless noted otherwise all steel beams to have minimum end bearing 150mm when parallel with wall, and minimum 100mm end bearing when perpendicular to wall.
- Steelwork and lintels to be installed tightly to the underside of existing structure (where applicable) and packed with grout as required.
- The Contractor shall be responsible for the design of all connections (both new-new and new-existing) to the loadings stated on the steelwork drawings.
- All connections to be designed to the requirements of BS EN 1992 and BS EN 1993 where relevant.
 - All bolts to be grade 8.8 to BS 3692
 - Minimum bolt diameter to be 16mm
 - Beam end plate connections - 4 bolt minimum (U.N.O.)
 - Bracing gussets - 2 bolt minimum (U.N.O.)
 - All bolts, nuts and washers to be galvanised in accordance with the specification.
- All welding to take account of heat build-up and ensure that the steel does not distort.
- No cutting or site welding shall take place unless indicated clearly on the drawings or already approved in writing by the Structural Engineer.
- Coating of steelwork and fixings shall be in strict accordance with manufacturers recommendations. Reinstatement of coating to erected on site steelwork shall be in strict accordance with the specification and in accordance with manufacturer's recommendations.
- After erection on site all areas of damaged primer and all bolts shall be adequately cleaned and full specified paint system applied.
- A minimum number of 3 full threads is to pass through the nut on all bolted connections.
- Where shim plates are used at connections these are to be tack welded in place.
- All steelwork to be fabricated in accordance with the National Structural Steelwork Specification (NSSS), and the be CE marked in accordance with the relevant standards.
- Padstones (where utilised) are to be formed with grade C25/30 concrete. Refer to key and references on drawing for specific padstone sizes.
- Contractor to be responsible for all temporary works required to safely facilitate the structural proposals and maintain structural integrity of the existing building for the duration of the works.
- It is envisaged that a thorough strategy of temporary works and possibly back propping may be required to facilitate the proposals. All temporary works should be designed and specified by a suitably qualified temporary works designer, and should be checked on site prior to any demolition works being carried out.
- All demolition works are to be undertaken with non-percussive methods unless otherwise agreed with the Structural Engineer. Demolition to follow safe best practices and to be carried out only by a suitably qualified Contractor who is experienced in this type of work.
- Should any discrepancies to what has been detailed with regards to the existing structure be discovered once works commence, the Structural Engineer is to be notified immediately.

Rev Description By Date

Status: PRELIMINARY

JLF

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Client: XLB Property

Project: Tootal Buildings
Broadhurst House
Oxford Street, Manchester

Drawing: Project Sankey
Second Floor Refurbishment
Structure for Wall Removal

Scale @ A1: As Shown Scale @ A3: n/a Date: 1.5.24

Job No.	Drawing No.	Revision:
XL01	(2)102	P1