

DESIGN STATEMENT

Project: Emergency Structural Reinstatement Works
Liverpool Road Hotel, Manchester

Project No: 2205-02

Date: 16.12.2022

Author: PW

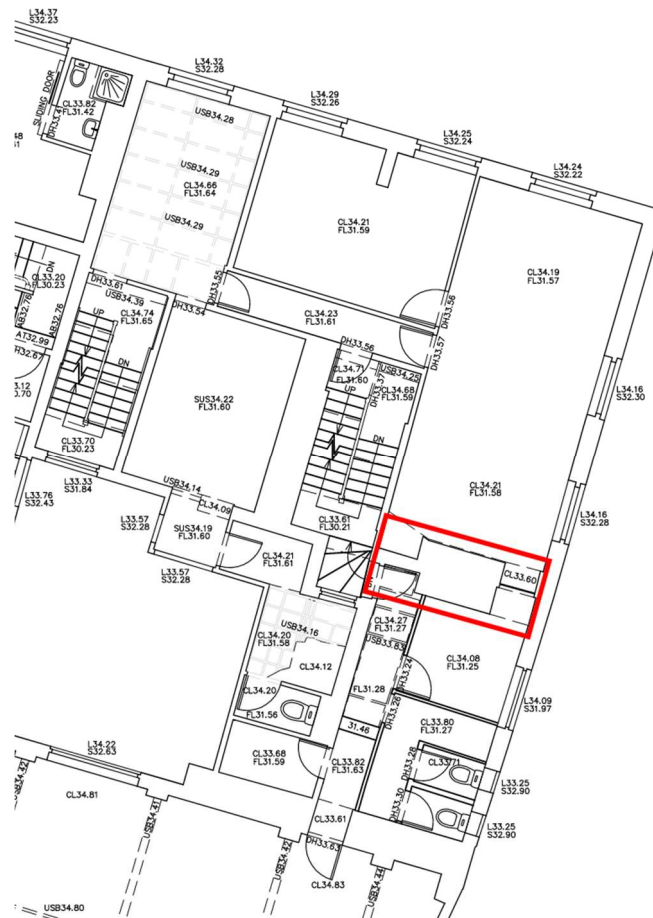


1 INTRODUCTION

This design statement sets out the proposed emergency structural reinstatement works that have been developed by Renaissance Associates as part of the initial phase of refurbishment at 123-125 Liverpool Road in Manchester. The purpose of this statement is to highlight the current condition of the area of 123 Liverpool Road where a partial internal structural collapse has occurred, the making safe works that have been carried out to date and the proposals for reinstating the structure in the permanent condition to ensure that the building is safe for use.

2 PREVIOUS STRUCTURAL ARRANGEMENT

Survey drawings for 123-125 Liverpool Road produced by ADS Structural in 2017 as well as photographs taken by Tim Groom Architects at the same time give an impression of the structural arrangement of the building prior to the partial collapse that has since occurred. As shown boxed in red in the image below, a load-bearing wall and chimney breast were present at 1st and 2nd floor which appears to be part of the original rear external wall to 123 Liverpool Road.



This arrangement is also evident at basement level. However, as can be seen in the following photo, the load-bearing wall and chimney breast had been partially removed at ground floor by 2017.



There are no details available for the transfer structure that was introduced as part of these alterations, and it is not clear from the photographs how the remaining section of masonry above was supported.

3 CURRENT CONDITION FOLLOWING INITIAL MAKING SAFE WORKS

Since 2017, the load-bearing masonry wall, chimney breast and transfer structure identified in Section 2 have collapsed from roof to ground floor. This has also caused the timber floor supported by the load-bearing wall and transfer structure from ground to 2nd floor in the front part of 123 Liverpool Road to collapse as well. The following photos show the condition of the remaining structure during the first inspection carried out by Renaissance in June 2022.





A section of roof had been left unsupported and the end of a primary roof truss was only supported by a section of corbelled masonry left from the collapsed load-bearing wall as well as rudimentary temporary propping installed prior to Renaissance's involvement.

To protect the building from further progressive collapse as a matter of urgency and to allow the debris from the initial partial collapse to be cleared below, Renaissance designed a temporary support system for the roof structure and corbelled masonry shown on drawing LRH-REN-XX-ZZ-DR-S-90001 and installed in August 2022.

Following the installation of the temporary support system and the subsequent clearing of debris from the basement of 123 Liverpool Road, a further inspection by Renaissance has revealed that the internal load-bearing wall adjacent to the collapse is visibly bowing and at risk of collapse due to it being unrestrained from basement to roof level. The section of external wall adjacent to the collapse has also been left unrestrained. The unstable internal load-bearing wall is shown in the photo below.



Furthermore, a section of timber joists and internal partitions at 1st floor are also partially unsupported to the rear of the collapse zone preventing access at ground floor below.

An initial assessment was made by Renaissance to determine the feasibility of introducing temporary restraint to the walls either side of the collapse zone. However, the lack of access to the rear due to the unstable 1st floor joists above means that there is no area to support a temporary restraint system without putting workers directly underneath the unstable internal wall. As a result, the only feasible approach to the next stage of making safe works is to take down the unstable internal wall to create a safe access point to the rear of 123 Liverpool Road and allow the unstable elements at 1st floor to be cleared or propped preventing further progressive collapse of the building. The design for the additional temporary works and an indicative construction methodology for this next stage of making safe works is shown on drawings LRH-REN-XX-ZZ-DR-S-90002 to LRH-REN-XX-ZZ-DR-S-90005.

4 PROPOSED EMERGENCY REINSTATEMENT WORKS

Once the next stage of temporary making safe works described in Section 3 have been implemented, the intention is to permanently reinstate the internal structure within 123 Liverpool Road that has previously collapsed to tie the currently unrestrained external wall back into the floor plates from ground to 2nd floor and ensure that this is no longer at risk of collapse in the short-term. This has been determined the most suitable solution for the next phase of emergency works to ensure the structural integrity of the external wall rather than introduce a temporary restraint system which would only increase the complexity of carrying out the permanent works to reinstate the structure at a later date and potentially losing a greater extent of the existing fabric.

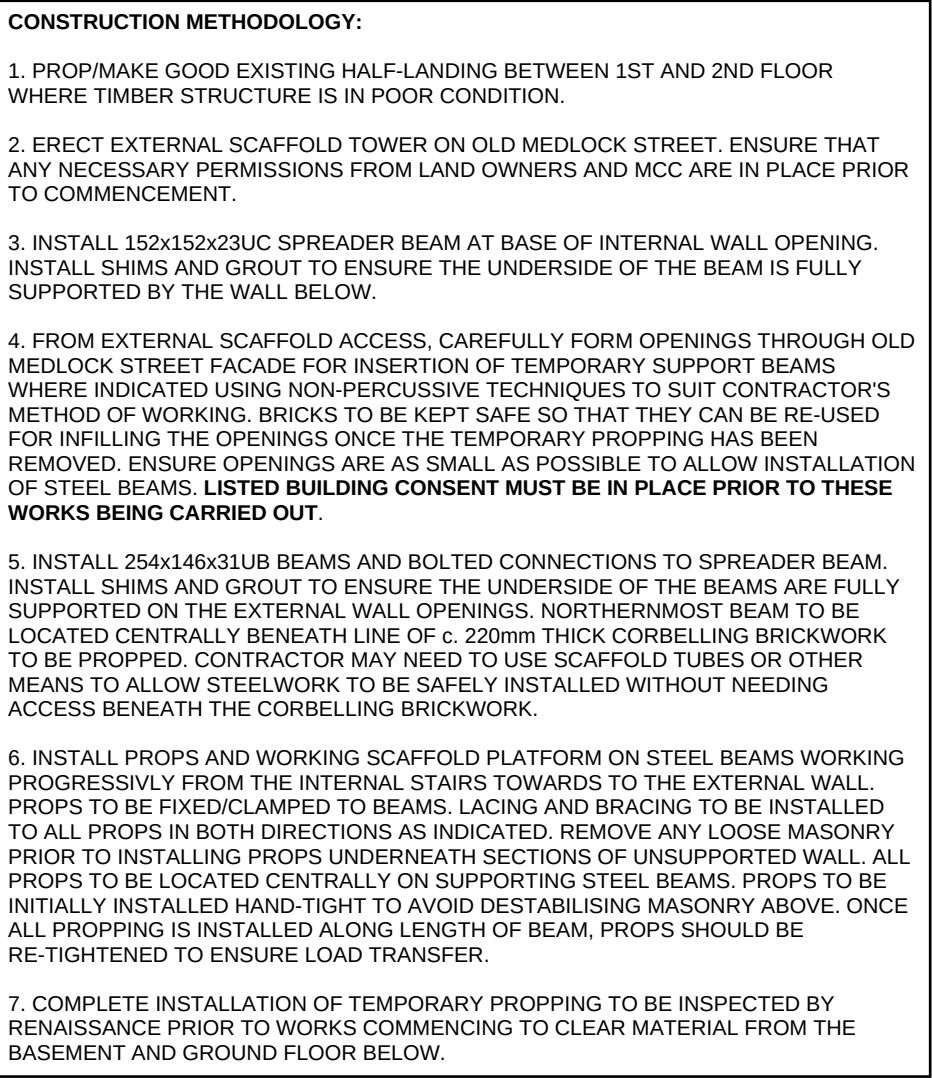
A design review has been carried out by Renaissance focused on whether the permanent structure could be reinstated as per the arrangement that was apparent in 2017 which would involve installing a new transfer frame at ground floor and re-constructing the load-bearing wall and chimney breast from 1st floor to roof level. However, this has been deemed not

possible due to the presence of the temporary propping currently installed at 2nd floor to support the roof. Furthermore, the works involved with making amendments to the propping to allow for the wall to be re-constructed at 2nd floor would have a high risk of causing further progressive collapse and loss of building fabric. The photo below gives an idea of what is currently installed at 2nd floor and indicates the reasons for reinstating the structure in its original form being unfeasible.



As a result of this, the solution proposed for reinstating the timber floor from ground to 2nd floor and re-supporting the roof is to install a new steel frame from basement to roof level with columns offset to pass by the temporary propping at 2nd floor. The new timber floors can be supported by the steel frame at each level and tie into the external wall to ensure that it is suitably restrained in the permanent condition. The preliminary design for the emergency reinstatement works is shown on drawings LRH-REN-XX-ZZ-DR-S-90006 and LRH-REN-XX-ZZ-DR-S-90007.

Due to the current condition of the building and the high risk of further progressive collapse. The emergency works proposed in this document have been deemed as the only feasible option for ensuring the structural integrity of the building as soon as possible whilst minimising any further loss of the existing fabric and ensuring the safety of workers on site.



Architectural drawing showing a section of a building facade and roof structure. The drawing includes various structural elements and construction notes.

Structural Elements and Labels:

- Roof Structure:**
 - EXISTING ROOF
 - ASSUMED EXISTING ROOF TRUSS
 - USB36.26
 - FL34.26 CL36.92 B01
 - FL34.29 CL36.9
 - FL34.32 CL36.98
 - FL33.61 CL37.37
 - FL34.84 CL37.48
 - FL35.02 CL37.54
 - FL36.31 CL35.48
 - FL37.17 CL35.68
- Timber Landing:**
 - DN
 - FL35.17 CL36.48
 - FL36.31 CL35.48
- External Scaffold Tower:**
 - EXTERNAL SCAFFOLD TOWER TO BE ERECTED TO ALLOW FOR OPENINGS TO BE FORMED THROUGH MASONRY ON OLD MEDLOCK STREET FACADE AND PROPPING GABLE WALL WHERE INTERNAL FLOORS HAVE COLLAPSED. DESIGN AND DETAILS IN LINE WITH SCAFFOLD CONTRACTOR'S REQUIREMENTS
- Construction Notes:**
 - HATCHED AREA INDICATES SECTION OF TIMBER LANDING IN POOR CONDITION. THIS SHOULD BE PROPPED OR MADE GOOD PRIOR TO WORKS COMMENCING
 - HATCHED AREA INDICATES EXTENT OF EXISTING LOAD-BEARING WALL COLLAPSE FROM BASEMENT TO 2ND FLOOR
 - PROPS TO BE INSTALLED TO UNDERSIDE OF UNSUPPORTED TIMBER ROOF BEAMS



2ND FLOOR PLAN SHOWING
TEMPORARY PROPPING ARRANGEMENT

- | | |
|---|---|
|  | INDICATES EXISTING TIMBER ROOF BEAM |
|  | INDICATES EXISTING LOAD-BEARING MASONRY WALL |
|  | INDICATES SPAN OF EXISTING TIMBER ROOF JOISTS |
|  | INDICATES SECTION OF EXISTING MASONRY TO BE PROPPED |
|  | INDICATES LOCATIONS WHERE HOLES TO BE FORMED THROUGH EXISTING MASONRY FACADE TO ALLOW FOR INSTALLATION OF PROPPING SUPPORT BEAMS - HERITAGE CONSULTANT TO BE LIAISED WITH PRIOR TO THESE WORKS TO ENSURE THAT THE RELEVANT LISTED BUILDING CONSENT IS IN PLACE |
|  | INDICATES BS NO. 2 PROP WITH SAFE WORKING LOAD CAPACITY OF 15kN. PROPS TO BE LACED AND BRACED ON SCAFFOLD TUBE AND POSITIONED ON CENTRELINE OF SUPPORT BEAMS. ENSURE THAT BASE IS FIXED/CLAMPED TO STEELWORK |
|  | INDICATES WORKING SCAFFOLD PLATFORM TO BE CONSTRUCTED BETWEEN TEMPORARY STEEL BEAMS TO SCAFFOLD CONTRACTOR'S DESIGN AND DETAILS |
|  | INDICATES TEMPORARY STEEL BEAM TO SUPPORT PROPS: |
- B01 = 254x146x31UB (S355)

- B02 = 152x152x23UC (S355)

P03	FOR REVIEW AND COMMENT			23.06.22	PW	TM
Rev.	Description:		Date:	By:	Chkd:	



Renaissance Associates
Carvers Warehouse
77 Dale Street
Manchester
M1 2HG

Project:

LIVERPOOL ROAD HOTEL, MANCHESTER

Drawing Title:

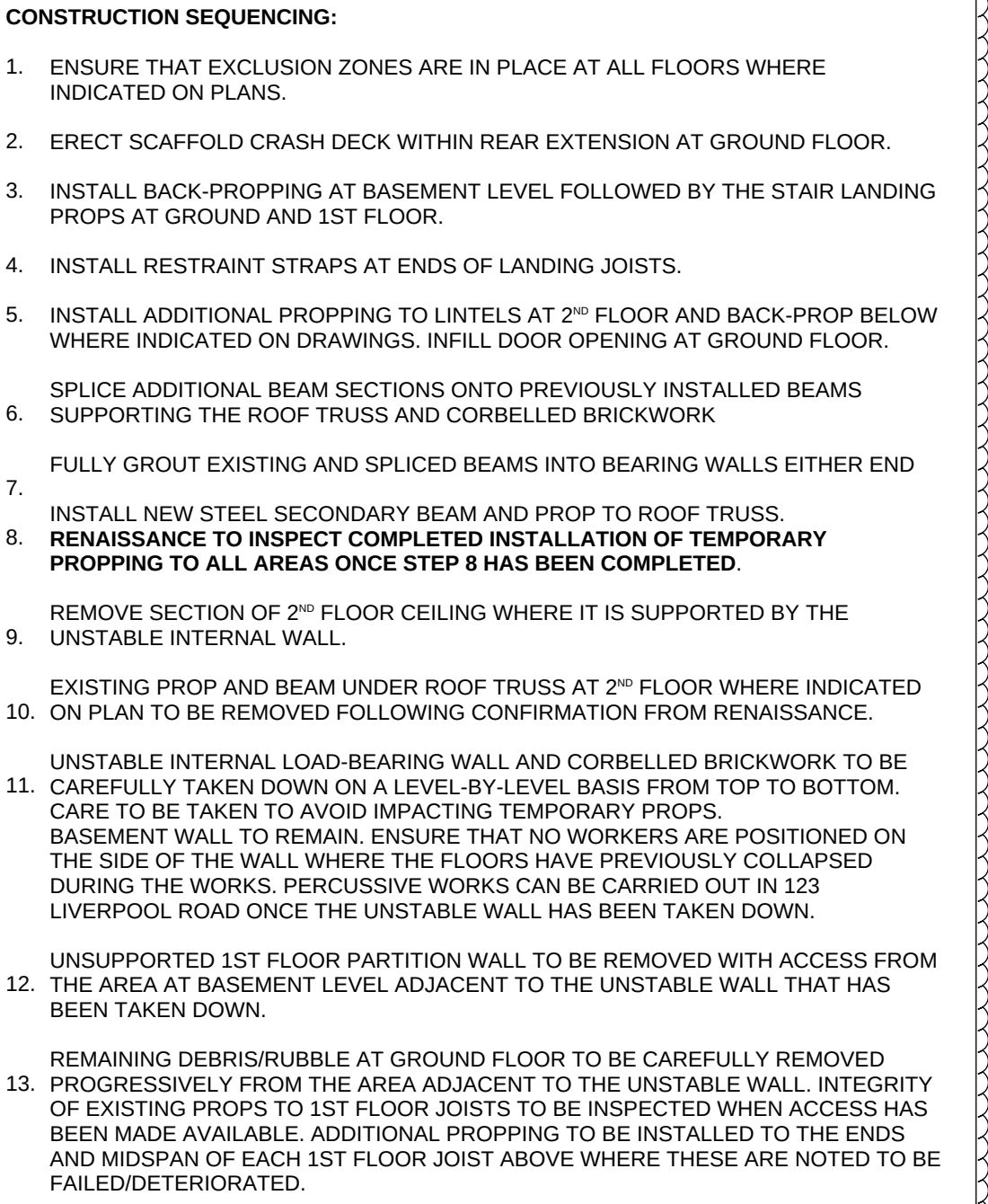
TEMPORARY PROPPING AT 2ND FLOOR TO ALLOW FOR SITE CLEARANCE

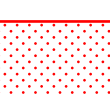
Status:

PRELIMINARY

Size:	Date:	Drawn by:	Designed by:	Checked by:
A2	23.06.22	PW	PW	TM
Scale: NTS		Project No: 2205-02		
Project:	Originator:	Volume:	Level:	Type:
			Role:	Category/Number:
				Rev:

LRH-REN-XX-ZZ-DR-S-90001-P01



- | | |
|---|--|
|  | INDICATES SECTION OF 2ND FLOOR CEILING TO BE REMOVED PRIOR TO UNSTABLE WALL BEING TAKEN DOWN |
|  | INDICATES SECTION OF LOAD-BEARING MASONRY WALL TO BE CAREFULLY TAKEN DOWN FROM TOP TO BOTTOM |
|  | INDICATES EXISTING PROP AND BEAM TO BE REMOVED FOLLOWING INSPECTION OF ROOF TRUSS ABOVE |
|  | INDICATES EXCLUSION ZONE TO BE MAINTAINED UNTIL TUNNEL/MAKING SAFE WORKS HAVE BEEN COMPLETED |
|  | INDICATES PROPOSED TEMPORARY BS PROP WITH SWL OF 10KN. PROPS TO BE LACED AND BRACED WITH SCAFFOLD TUBE |
|  | INDICATES PROPOSED TEMPORARY TITAN S PROP WITH SWL OF 40KN |
|  | INDICATES 4No. LEVELS OF SCAFFOLD TUBES TO BE POCKETED THROUGH AND DRILL-FIXED INTO WALLS AND COUPLED WITH PREVIOUSLY INSTALLED BS PROPS TO RESTRAIN CORBELLING BRICKWORK TO UNDERSIDE OF ROOF |

- 1
- NO PERCUSSIVE WORKS TO BE CARRIED OUT WITHIN 123 LIVERPOOL ROAD UNTIL UNSTABLE WALL HAS BEEN TAKEN DOWN
- 2
- INTERNAL LOAD-BEARING WALL AND COLLAPSED AREAS OF TIMBER FLOOR WITHIN 123 LIVERPOOL ROAD TO BE REINSTATED AS SOON AS POSSIBLE FOLLOWING WORKS SHOWN ON THIS DRAWING
- 3
- RENAISSANCE TO CARRY OUT INSPECTION OF INSTALLATION OF TEMPORARY WORKS FOLLOWING STEP 6 ON THE CONSTRUCTION SEQUENCING. WORKS ARE NOT TO PROGRESS UNTIL THIS INSPECTION HAS BEEN COMPLETED

P05	DOOR INFILL ADDED AND SPLICE AMENDED	20.01.23	EM	PW
P04	PROP HEAD AND BASE DETAILS ADDED	26.10.22	EM	PW
P03	UPDATED ACCORDING TO SITE FINDINGS	24.10.22	EM	PW
P02	REVISION TO TW AT 2nd FLOOR	29.09.22	PW	TM
P01	FOR INFORMATION	22.09.22	PW	TM
Rev.	Description:	Date:	By:	Chkd:



Drawing Title:

ADDITIONAL EARLY TW
REQUIREMENTS AT BASEMENT

Status:

FOR INFORMATION

Size: A1	Date: SEP'22	Drawn by: PW	Designed by: PW	Checked by: TM
Scale: 1:50	Project No: 2205-02			
Project - Originator - Volume - Level - Type - Role - Number:				Revision:

LRH-REN-XX-ZZ-DR-S-90002 | P05

1. ENSURE THAT EXCLUSION ZONES ARE IN PLACE AT ALL FLOORS WHERE INDICATED ON PLANS.
2. ERECT SCAFFOLD CRASH DECK WITHIN REAR EXTENSION AT GROUND FLOOR.
3. INSTALL BACK-PROPPING AT BASEMENT LEVEL FOLLOWED BY THE STAIR LANDING PROPS AT GROUND AND 1ST FLOOR.
4. INSTALL RESTRAINT STRAPS AT ENDS OF LANDING JOISTS.
5. INSTALL ADDITIONAL PROPPING TO LINTELS AT 2ND FLOOR AND BACK-PROP BELOW WHERE INDICATED ON DRAWINGS. INFILL DOOR OPENING AT GROUND FLOOR.
6. SPlice ADDITIONAL BEAM SECTIONS ONTO PREVIOUSLY INSTALLED BEAMS
7. SUPPORTING THE ROOF TRUSS AND CORBELLED BRICKWORK
8. FULLY GROUT EXISTING AND SPLICED BEAMS INTO BEARING WALLS EITHER END
9. INSTALL NEW STEEL SECONDARY BEAM AND PROP TO ROOF TRUSS.
10. RENAISSANCE TO INSPECT COMPLETED INSTALLATION OF TEMPORARY PROPPING TO ALL AREAS ONCE STEP 8 HAS BEEN COMPLETED.
11. REMOVE SECTION OF 2ND FLOOR CEILING WHERE IT IS SUPPORTED BY THE UNSTABLE INTERNAL WALL.
12. EXISTING PROP AND BEAM UNDER ROOF TRUSS AT 2ND FLOOR WHERE INDICATED ON PLAN TO BE REMOVED FOLLOWING CONFIRMATION FROM RENAISSANCE.
13. TEMPORARY INTERNAL LOAD-BEARING WALL AND CORBELLED BRICKWORK TO BE CAREFULLY TAKEN DOWN ON A LEVEL-BY-LEVEL BASIS FROM TOP TO BOTTOM. CAUTION BE TAKEN TO AVOID IMPACTING TEMPORARY PROPS. BASEMENT WALL TO REMAIN. ENSURE THAT NO WORKERS ARE POSITIONED ON THE SIDE OF THE WALL WHERE THE FLOORS HAVE PREVIOUSLY COLLAPSED DURING THE WORKS. PERCUSSIVE WORKS CAN BE CARRIED OUT IN 123 LIVERPOOL ROAD ONCE THE UNSTABLE WALL HAS BEEN TAKEN DOWN.
14. UNSUPPORTED 1ST FLOOR PARTITION WALL TO BE REMOVED WITH ACCESS FROM THE AREA AT BASEMENT LEVEL ADJACENT TO THE UNSTABLE WALL THAT HAS BEEN TAKEN DOWN.
15. REMAINING DEBRIS/RUBBLE AT GROUND FLOOR TO BE CAREFULLY REMOVED
16. PROGRESSIVELY FROM THE AREA ADJACENT TO THE UNSTABLE WALL. INTEGRITY OF EXISTING PROPS TO 1ST FLOOR JOISTS TO BE INSPECTED WHEN ACCESS HAS BEEN MADE AVAILABLE. ADDITIONAL PROPPING TO BE INSTALLED TO THE ENDS OF EACH SPAN OF EACH 1ST FLOOR JOIST ABOVE WHERE THESE ARE NOTED TO BE FAILED/DETERIORATED.

EXCLUSION ZONE TO BE
MAINTAINED WITHIN REAR
EXTENSION WHERE HATCHED
AREA DUE TO FAILED TIMBER
FLOOR/ROOF STRUCTURE

PREVIOUSLY INSTALLED BEAMS
CALLED BRICKWORK

S INTO BEARING WALLS EITHER END
D PROP TO ROOF TRUSS.
INSTALLATION OF TEMPORARY
BS BEEN COMPLETED.

HERE IT IS SUPPORTED BY THE

US AT 2ND FLOOR WHERE INDICATED
FIRMATION FROM RENAISSANCE.

AND CORBELLED BRICKWORK TO BE
LEVEL BASIS FROM TOP TO BOTTOM.
TEMPORARY PROPS.

NO WORKERS ARE POSITIONED ON
HAVE PREVIOUSLY COLLAPSED
CAN BE CARRIED OUT IN 123
LL HAS BEEN TAKEN DOWN.

TO BE REMOVED WITH ACCESS FROM
TO THE UNSTABLE WALL THAT HAS

DOOR TO BE CAREFULLY REMOVED
TIT TO THE UNSTABLE WALL. INTEGRITY
TO BE INSPECTED WHEN ACCESS HAS
ING TO BE INSTALLED TO THE ENDS
OVE WHERE THESE ARE NOTED TO BE

DIPSON STRONG-TIE HES06B10
STRAINT STRAPS (OR SIMILAR)
TO BE FIXED BETWEEN ENDS
JOISTS AND MASONRY WALL

EXCLUSION ZONE TO BE
MAINTAINED WITHIN REAR
ENSION WHERE HATCHED
ED DUE TO FAILED TIMBER
FLOOR/ROOF STRUCTURE

REFER TO DRAWING
LRH-REN-XX-ZZ-DR-S-90002
FOR SECTION A-A

TEMPORARY BS PROPS TO BE INSTALLED
TIGHT TO UNDERSIDE OF STAIR
LANDINGS AT MAXIMUM 900mm CENTRES
WITH SCAFFOLD BOARD HEAD AND SOLE
PLATES. PROPS TO BE LACED AND
BRACED WITH SCAFFOLD TUBE IN BOTH
DIRECTIONS

DEBRIS/RUBBLE TO BE
AREA HATCHED IN GR
UNSTABLE WALL HAS
DOWN. ENSURE THAT
ABOVE ARE PROPPED
CLEARANCE IS BEING

SCAFFOLD CRASH DECK
OVER CORRIDORS AT GR
WHERE INDICATED IN BLU
WORKERS FROM FALLING
TO FAILED FLOOR JOIST

1. DO NOT SCALE FROM THIS DRAWING. CONTRACTOR TO CONFIRM ALL DIMENSIONS ON SITE PRIOR TO WORKS BEING UNDERTAKEN.
2. REFER TO DRAWINGS LRH-REN-XX-ZR-DS-9-00002 TO 90005 FOR FULL DETAILS OF TEMPORARY WORKS AND SEQUENCING REQUIRED AT ALL FLOORS.
3. THE CONSTRUCTION METHODOLOGY NOTED ON THIS DRAWING IS TO BE CONFIRMED BY THE TEMPORARY WORKS CO-ORDINATOR AS BEING ACCEPTABLE. ANY AMENDMENTS TO THE METHODOLOGY ARE TO BE ADVISED PRIOR TO WORKS BEING UNDERTAKEN.
4. THE TEMPORARY PROPPING ON THIS DRAWING SHOULD REMAIN IN PLACE UNTIL ALL STRUCTURAL ELEMENTS ARE FULLY SUPPORTED IN THE PERMANENT CONDITION.
5. CONTRACTOR TO REVIEW EXISTING STRUCTURAL ARRANGEMENTS TO ENSURE THAT METHODOLOGY SHOWN ON THIS DRAWING IS SUITABLE AND REPORT ANY AMBIGUITIES TO RENAISSANCE PRIOR TO PROCEEDING.

	INDICATES SECTION OF 2ND FLOOR CEILING TO BE REMOVED PRIOR TO UNSTABLE WALL BEING TAKEN DOWN
	INDICATES SECTION OF LOAD-BEARING MASONRY WALL TO BE CAREFULLY TAKEN DOWN FROM TOP TO BOTTOM
	INDICATES EXISTING PROP AND BEAM TO BE REMOVED FOLLOWING INSPECTION OF ROOF TRUSS ABOVE
	INDICATES EXCLUSION ZONE TO BE MAINTAINED UNTIL TEMPORARY/MAKING SAFE WORKS HAVE BEEN COMPLETED
	INDICATES PROPOSED TEMPORARY BS PROP WITH SWL OF 10KN. PROPS TO BE LACED AND BRACED WITH SCAFFOLD TUBE
	INDICATES PROPOSED TEMPORARY TITAN S PROP WITH SWL OF 40KN
	INDICATES 4 th LEVELS OF SCAFFOLD TUBES TO BE POKETED THROUGH AND DRILL-FIXED INTO WALLS AND COUPLED WITH PREVIOUSLY INSTALLED BS PROPS TO RESTRAIN CORRELLING BRICKWORK TO UNDERSIDE OF ROOF
	INDICATES 215mm THICK 7.3N BLOCKWORK INFILL

 3 RENAISSANCE TO CARRY OUT INSPECTION OF
INSTALLATION OF TEMPORARY WORKS
FOLLOWING STEP 6 ON THE CONSTRUCTION
SEQUENCING. WORKS ARE NOT TO PROGRESS
UNTIL THIS INSPECTION HAS BEEN COMPLETED

P05	DOOR INFILL ADDED AND SPLICE AMENDED	20.01.23	EM	PW
P04	PROP HEAD AND BASE DETAILS ADDED	26.10.22	EM	PW
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P01	FOR INFORMATION	22.09.22	PW	TM
Rev:	Description:	Date:	By:	Chkd



Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HN

Project

Drawing Title

Status:

Size: A1	Date: SEP'22	Drawn by: PW	Designed by: PW	Checked by: TM
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Scale:	1:50	Project No:	2205-02
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Project	-	Originator	-	Volume	-	Level	-	Type	-	Role	-	Number:	Revision
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LRH-REN-XX-ZZ-DR-S-90003	P05
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GROUND FLOOR PLAN SHOWING ADDITIONAL EARLY TEMPORARY WORKS REQUIREMENTS

1. ENSURE THAT EXCLUSION ZONES ARE IN PLACE AT ALL FLOORS WHERE INDICATED ON PLANS.
2. ERECT SCAFFOLD CRASH DECK WITHIN REAR EXTENSION AT GROUND FLOOR.
3. INSTALL BACK-PROPPING AT BASEMENT LEVEL FOLLOWED BY THE STAIR LANDING PROPS AT GROUND AND 1ST FLOOR.
4. INSTALL RESTRAINT STRAPS AT ENDS OF LANDING JOISTS.
5. INSTALL ADDITIONAL PROPPING TO LINTELS AT 2ND FLOOR AND BACK-PROP BELOW WHERE INDICATED ON DRAWINGS. INFILL DOOR OPENING AT GROUND FLOOR.
6. SPlice ADDITIONAL BEAM SECTIONS ONTO PREVIOUSLY INSTALLED BEAMS
7. SUPPORTING THE ROOF TRUSS AND CORBELLED BRICKWORK
8. FULLY GROUT EXISTING AND SPLICED BEAMS INTO BEARING WALLS EITHER END
9. INSTALL NEW STEEL SECONDARY BEAM AND PROP TO ROOF TRUSS.
10. RENAISSANCE TO INSPECT COMPLETED INSTALLATION OF TEMPORARY PROPPING TO ALL AREAS ONCE STEP 8 HAS BEEN COMPLETED.
11. REMOVE SECTION OF 2ND FLOOR CEILING WHERE IT IS SUPPORTED BY THE UNSTABLE INTERNAL WALL.
12. EXISTING PROP AND BEAM UNDER ROOF TRUSS AT 2ND FLOOR WHERE INDICATED ON PLAN TO BE REMOVED FOLLOWING CONFIRMATION FROM RENAISSANCE.
13. TEMPORARY INTERNAL LOAD-BEARING WALL AND CORBELLED BRICKWORK TO BE CAREFULLY TAKEN DOWN ON A LEVEL-BY-LEVEL BASIS FROM TOP TO BOTTOM. CADE BE TAKEN TO AVOID IMPACTING TEMPORARY PROPS.
14. BASEMENT WALL TO REMAIN. ENSURE THAT NO WORKERS ARE POSITIONED ON THE SIDE OF THE WALL WHERE THE FLOORS HAVE PREVIOUSLY COLLAPSED DURING THE WORKS. PERCUSSIVE WORKS CAN BE CARRIED OUT IN 123 LIVERPOOL ROAD ONCE THE UNSTABLE WALL HAS BEEN TAKEN DOWN.
15. UNSUPPORTED 1ST FLOOR PARTITION WALL TO BE REMOVED WITH ACCESS FROM THE AREA AT BASEMENT LEVEL ADJACENT TO THE UNSTABLE WALL THAT HAS BEEN TAKEN DOWN.
16. REMAINING DEBRIS/RUBBLE AT GROUND FLOOR TO BE CAREFULLY REMOVED
17. PROGRESSIVELY FROM THE AREA ADJACENT TO THE UNSTABLE WALL. INTEGRITY OF EXISTING PROPS TO 1ST FLOOR JOISTS TO BE INSPECTED WHEN ACCESS HAS BEEN MADE AVAILABLE. ADDITIONAL PROPPING TO BE INSTALLED TO THE ENDS OF EACH SPAN OF EACH 1ST FLOOR JOIST ABOVE WHERE THESE ARE NOTED TO BE FAILED/DETERIORATED.

Architectural floor plan of the 2nd floor of a building. The plan shows various rooms, corridors, and structural elements. Key features include:

- Rooms and Corridors:** Labeled with codes such as L34.32, L34.33, L34.34, L34.35, L34.36, L34.37, L34.38, L34.39, L34.40, L34.41, L34.42, L34.43, L34.44, L34.45, L34.46, L34.47, L34.48, L34.49, L34.50, L34.51, L34.52, L34.53, L34.54, L34.55, L34.56, L34.57, L34.58, L34.59, L34.60, L34.61, L34.62, L34.63, L34.64, L34.65, L34.66, L34.67, L34.68, L34.69, L34.70, L34.71, L34.72, L34.73, L34.74, L34.75, L34.76, L34.77, L34.78, L34.79, L34.80, L34.81, L34.82, L34.83, L34.84, L34.85, L34.86, L34.87, L34.88, L34.89, L34.90, L34.91, L34.92, L34.93, L34.94, L34.95, L34.96, L34.97, L34.98, L34.99, L34.100.
- Structural Elements:** Labeled with codes such as USB34.1, USB34.2, USB34.3, USB34.4, USB34.5, USB34.6, USB34.7, USB34.8, USB34.9, USB34.10, USB34.11, USB34.12, USB34.13, USB34.14, USB34.15, USB34.16, USB34.17, USB34.18, USB34.19, USB34.20, USB34.21, USB34.22, USB34.23, USB34.24, USB34.25, USB34.26, USB34.27, USB34.28, USB34.29, USB34.30, USB34.31, USB34.32, USB34.33, USB34.34, USB34.35, USB34.36, USB34.37, USB34.38, USB34.39, USB34.40, USB34.41, USB34.42, USB34.43, USB34.44, USB34.45, USB34.46, USB34.47, USB34.48, USB34.49, USB34.50, USB34.51, USB34.52, USB34.53, USB34.54, USB34.55, USB34.56, USB34.57, USB34.58, USB34.59, USB34.60, USB34.61, USB34.62, USB34.63, USB34.64, USB34.65, USB34.66, USB34.67, USB34.68, USB34.69, USB34.70, USB34.71, USB34.72, USB34.73, USB34.74, USB34.75, USB34.76, USB34.77, USB34.78, USB34.79, USB34.80, USB34.81, USB34.82, USB34.83, USB34.84, USB34.85, USB34.86, USB34.87, USB34.88, USB34.89, USB34.90, USB34.91, USB34.92, USB34.93, USB34.94, USB34.95, USB34.96, USB34.97, USB34.98, USB34.99, USB34.100.
- Notes:**
 - 1. VOID AT 2ND FLOOR ABOVE DUE TO COLLAPSE
 - 2. TEMPORARY BS PROPS TO BE INSTALLED TIGHT TO UNDERSIDE OF STAIR LANDINGS AT MAXIMUM 900mm CENTRES WITH SCAFFOLD BOARD HEAD AND BRACE PLATES. PROPS TO BE LACED AND SOLED WITH SCAFFOLD TUBE IN BOTH DIRECTIONS
 - 3. SECTION OF PARTITION WALL TO BE REMOVED PRIOR TO DEBRIS/RUBBLE BEING CLEARED AT GROUND FLOOR BELOW
- Key:**
 - 1. VOID AT 2ND FLOOR ABOVE DUE TO COLLAPSE
 - 2. TEMPORARY BS PROPS TO BE INSTALLED TIGHT TO UNDERSIDE OF STAIR LANDINGS AT MAXIMUM 900mm CENTRES WITH SCAFFOLD BOARD HEAD AND BRACE PLATES. PROPS TO BE LACED AND SOLED WITH SCAFFOLD TUBE IN BOTH DIRECTIONS
 - 3. SECTION OF PARTITION WALL TO BE REMOVED PRIOR TO DEBRIS/RUBBLE BEING CLEARED AT GROUND FLOOR BELOW

LOAD-BEARING MASONRY WALL TO BE CAREFULLY TAKEN DOWN FROM TOP TO BOTTOM FOLLOWING REMOVAL OF 2ND FLOOR CEILING AND INSTALLATION OF STAIR LANDING PROPS

— VOID AT 2ND FLOOR
ABOVE DUE TO
COLLAPSE

TEMPORARY BS PROPS TO BE INSTALLED
TIGHT TO UNDERSIDE OF STAIR LANDINGS
AT MAXIMUM 900mm CENTRES WITH
SCAFFOLD BOARD HEAD AND SOLE PLATES.
PROPS TO BE LACED AND BRACED WITH
SCAFFOLD TUBE IN BOTH DIRECTIONS

SECTION OF PARTITION WALL TO
BE REMOVED PRIOR TO
DEBRIS/RUBBLE BEING CLEARED
AT GROUND FLOOR BELOW

1. DO NOT SCALE FROM THIS DRAWING. CONTRACTOR TO CONFIRM ALL DIMENSIONS ON SITE PRIOR TO WORKS BEING UNDERTAKEN.
2. REFER TO DRAWINGS LRH-REN-XZ-XX-DR-S-90002 TO 90005 FOR FULL DETAILS OF TEMPORARY WORKS AND SEQUENCING REQUIRED AT ALL FLOORS.
3. THE CONSTRUCTION METHODOLOGY NOTED ON THIS DRAWING IS TO BE CONFIRMED BY THE TEMPORARY WORKS CO-ORDINATOR AS BEING ACCEPTABLE. ANY AMENDMENTS TO THE METHODOLOGY ARE TO BE ADVISED PRIOR TO WORKS BEING UNDERTAKEN.
4. THE TEMPORARY PROPPING ON THIS DRAWING SHOULD REMAIN IN PLACE UNTIL ALL STRUCTURAL ELEMENTS ARE FULLY SUPPORTED IN THE PERMANENT CONDITION.
5. CONTRACTOR TO REVIEW EXISTING STRUCTURAL ARRANGEMENT TO ENSURE THAT METHODOLOGY SHOWN ON THIS DRAWING IS SUITABLE AND REPORT ANY AMBIGUITIES TO RENAISSANCE PRIOR TO PROCEEDING.

	INDICATES SECTION OF 2ND FLOOR CEILING TO BE REMOVED PRIOR TO UNSTABLE WALL BEING TAKEN DOWN
	INDICATES SECTION OF LOAD-BEARING MASONRY WALL TO BE CAREFULLY TAKEN DOWN FROM TOP TO BOTTOM
	INDICATES EXISTING PROP AND BEAM TO BE REMOVED FOLLOWING INSPECTION OF ROOF TRUSS ABOVE
	INDICATES EXCLUSION ZONE TO BE MAINTAINED UNTIL TEMPORARY/MAKING SAFE WORKS HAVE BEEN COMPLETED
	INDICATES PROPOSED TEMPORARY BS PROP WITH SWL OF 10KN. TUBE TO BE LACED AND BRACED WITH SCAFFOLD TUBE
	INDICATES PROPOSED TEMPORARY TITAN S PROP WITH SWL OF 40KN
	INDICATES 4no. LEVELS OF SCAFFOLD TUBES TO BE POKETED THROUGH AND DRILL-FIXED INTO WALLS AND COUPLED WITH PREVIOUSLY INSTALLED BS PROPS TO RESTRAIN CORRELLING BRICKWORK TO UNDERSIDE OF ROOF

NO PERCUSSIVE WORKS TO BE CARRIED OUT
WITHIN 123 LIVERPOOL ROAD UNTIL UNSTABLE
WALL HAS BEEN TAKEN DOWN

INTERNAL LOAD-BEARING WALL AND COLLAPSED
AREAS OF TIMBER FLOOR WITHIN 123 LIVERPOOL
ROAD TO BE REINSTATED AS SOON AS POSSIBLE
FOLLOWING WORKS SHOWN ON THIS DRAWING

RENAISSANCE TO CARRY OUT INSPECTION OF
INSTALLATION OF TEMPORARY WORKS
FOLLOWING STEP 6 ON THE CONSTRUCTION
SEQUENCING. WORKS ARE NOT TO PROGRESS
UNTIL THIS INSPECTION HAS BEEN COMPLETED

P05	DOOR INFILL ADDED AND SPLICE AMENDED	20.01.23	EM	PW
P04	PROP HEAD AND BASE DETAILS ADDED	26.10.22	EM	PW
P03	UPDATED ACCORDING TO SITE FINDINGS	24.10.22	EM	PW
P02	REVISION TO TW AT 2nd FLOOR	29.09.22	PW	TM
P01	FOR INFORMATION	22.09.22	PW	TM
Rev:	Description:	Date:	By:	Chkd



Renaissance Associates Ltd
Carvers Warehouse
77 Dale Street
Manchester
M1 2HN

Project

LIVERPOOL ROAD HOTEL,
MANCHESTER

Drawing Title

ADDITIONAL EARLY TW REQUIREMENTS AT 1ST FLR

Status:

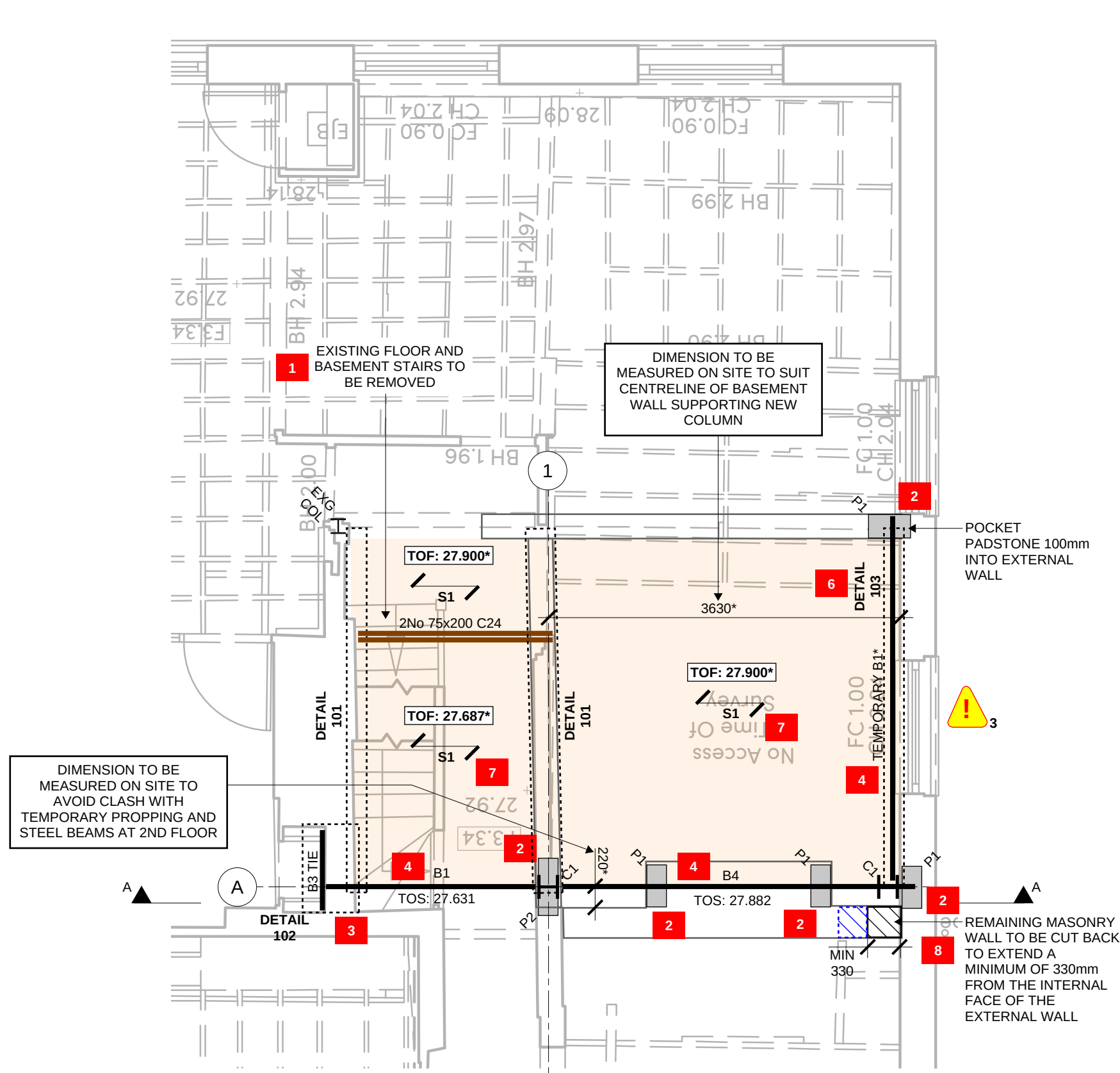
FOR INFORMATION

Size:	Date:	Drawn by:	Designed by:	Checked by:
A1	SEP'22	PW	PW	TM

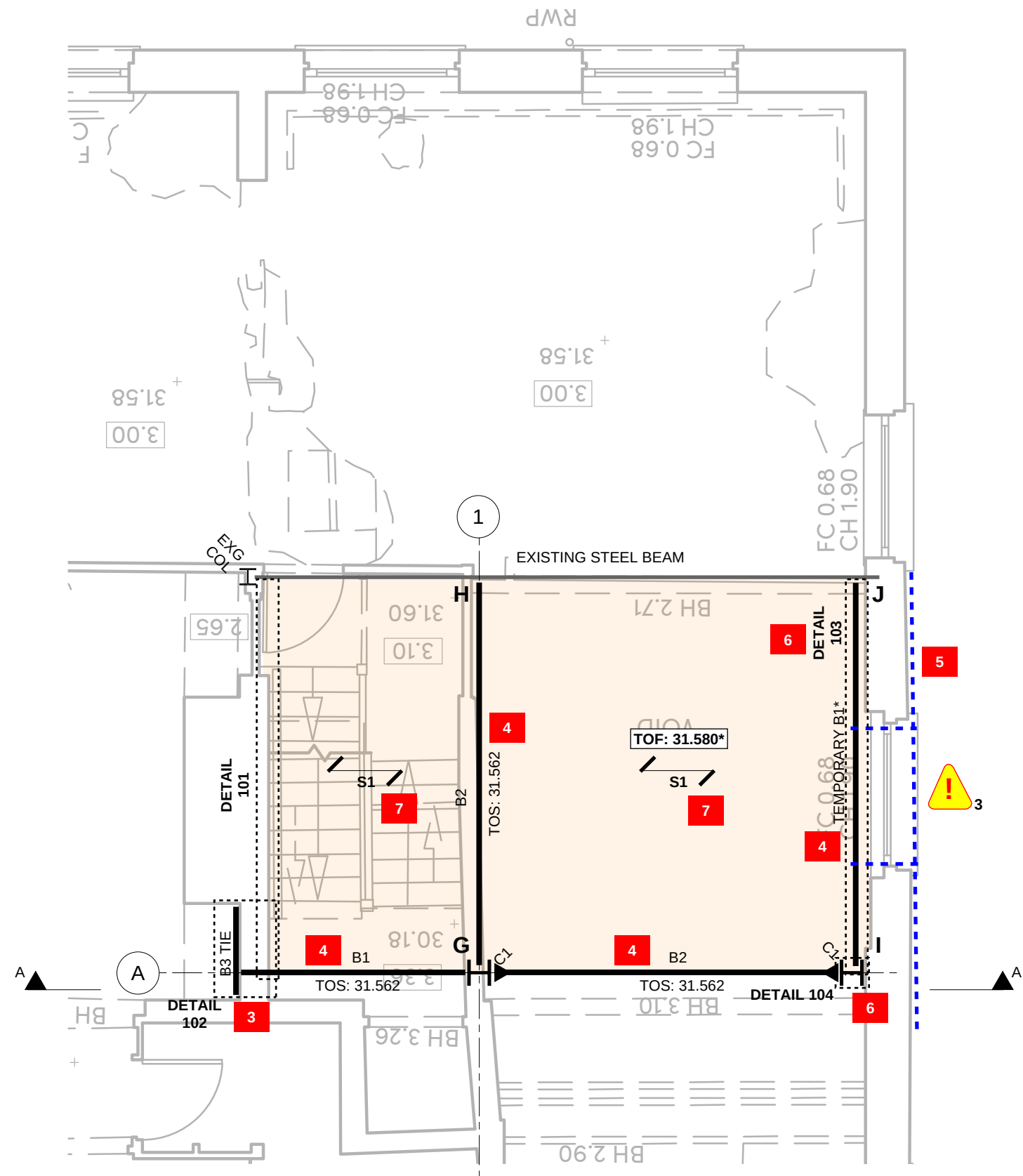
Scale:	1:50	Project No:	2205-02
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Project	Originator	Volume	Level	Type	Role	Number	Revision
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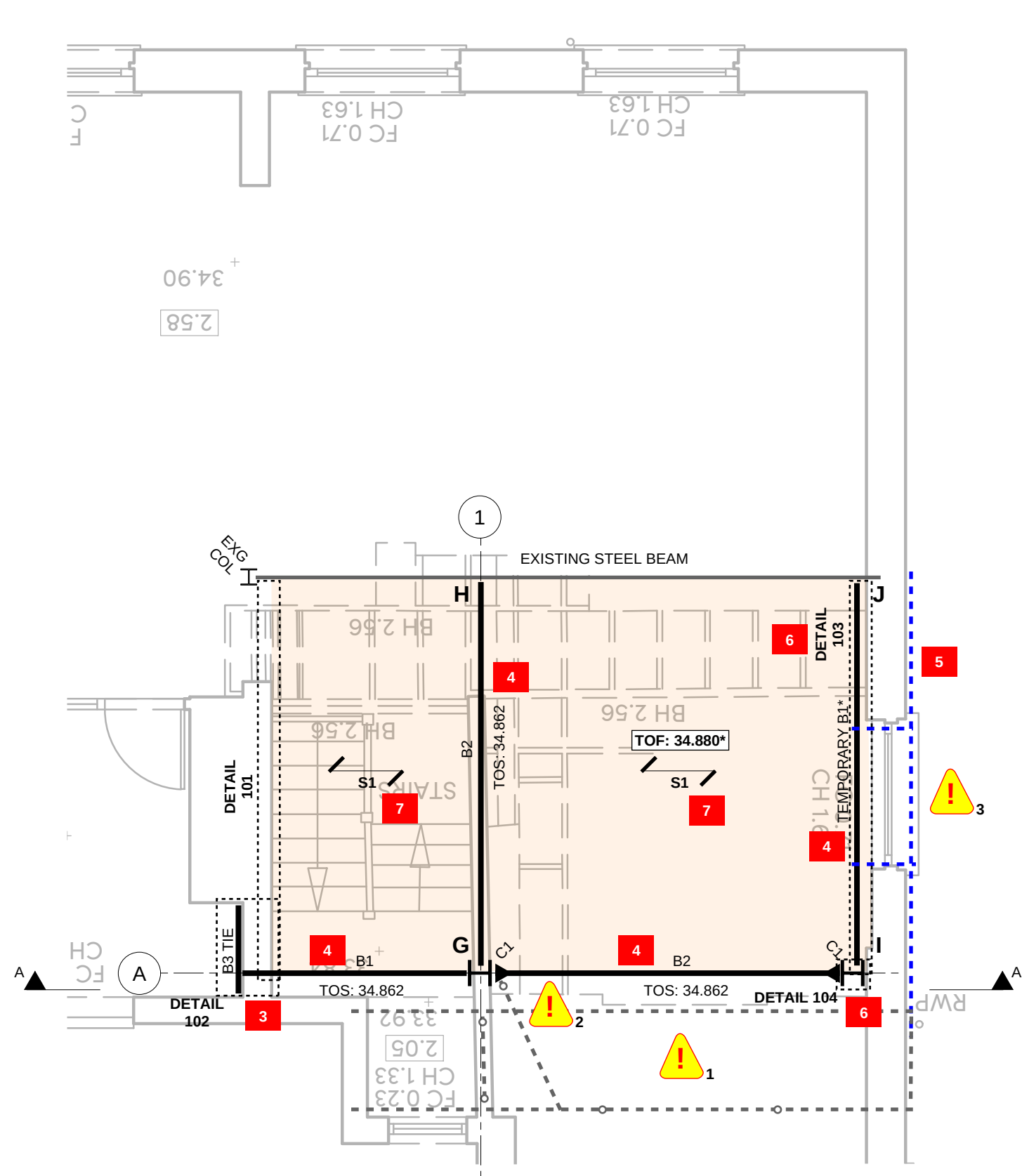
LRH-REN-XX-ZZ-DR-S-90004 P05



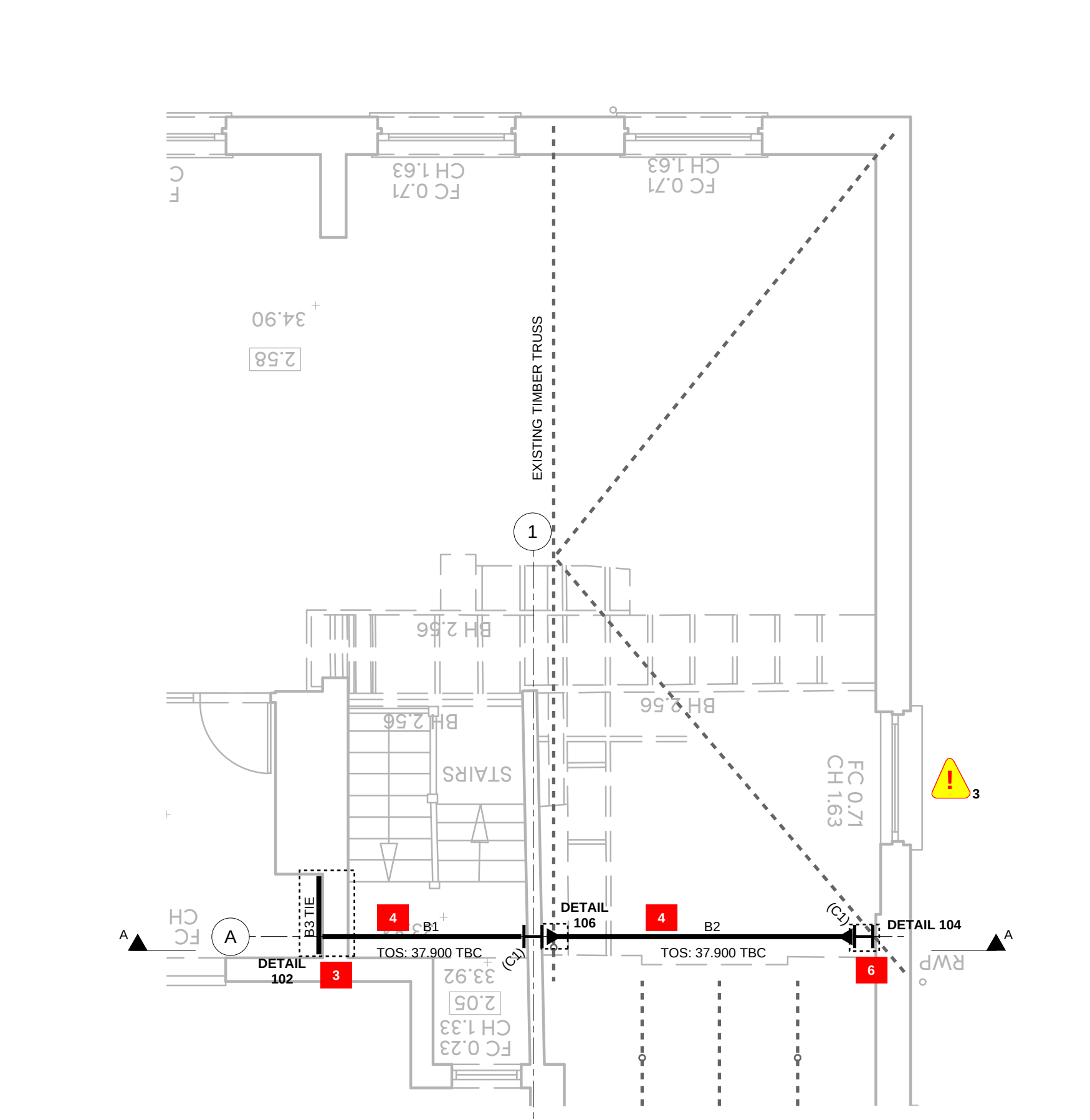
GROUND FLOOR GA PLAN



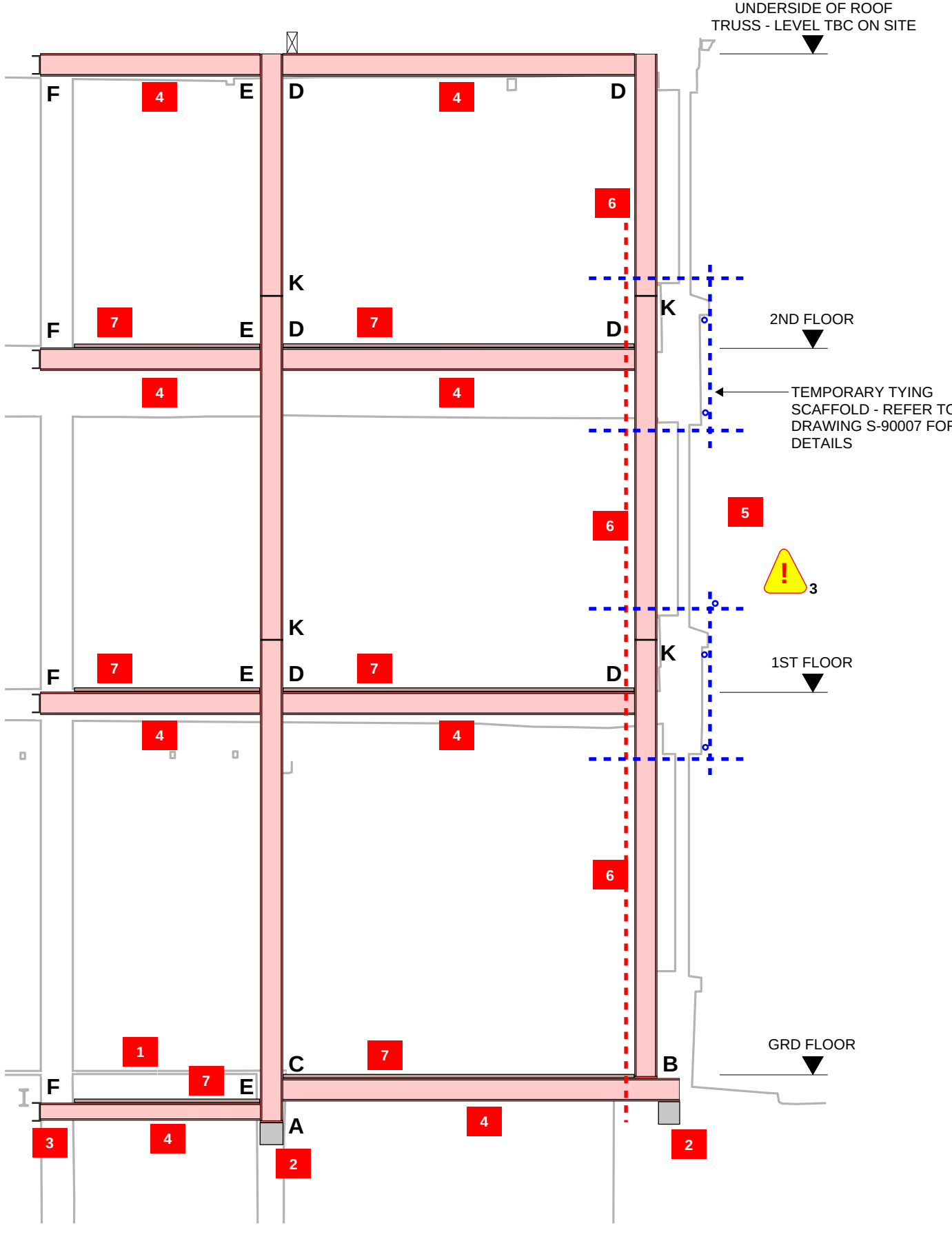
1ST FLOOR GA PLAN



2ND FLOOR GA PLAN



2ND FLOOR CEILING GA PLAN



SECTION A-A

- GENERAL NOTES:**
- REFER TO DRAWING LRH-REN-XX-XX-DR-S-00010 AND S-00011 FOR GENERAL NOTES.
 - DO NOT SCALE FROM THIS DRAWING. CONTRACTOR TO CONFIRM ALL DIMENSIONS ON SITE PRIOR TO WORKS BEING UNDERTAKEN.
 - THE CONSTRUCTION METHODOLOGY NOTED ON THIS DRAWING IS TO BE CONFIRMED BY THE CONTRACTOR AS BEING ACCEPTABLE. ANY AMENDMENTS TO THE METHODOLOGY ARE TO BE ADVISED PRIOR TO WORKS BEING UNDERTAKEN.
 - CONTRACTOR TO REVIEW EXISTING STRUCTURAL ARRANGEMENT TO ENSURE THAT METHODOLOGY SHOWN ON THIS DRAWING IS SUITABLE AND REPORT ANY AMBIGUITIES TO RENAISSANCE PRIOR TO PROCEEDING.
 - REFER TO DRAWING LRH-REN-XX-ZZ-DR-S-90007 FOR DETAILS.

- HEALTH & SAFETY NOTES:**
- TEMPORARY PROPPING INSTALLED AS PART OF PREVIOUS MAKING SAFE WORKS TO REMAIN IN PLACE UNTIL THE EXISTING STRUCTURE IS FULLY SUPPORTED AND RESTRAINED IN THE PERMANENT CONDITION.
 - WORKS TO BE CARRIED OUT ADJACENT TO TEMPORARY PROPPING INSTALLED AS PART OF PREVIOUS MAKING SAFE WORKS. CONTRACTOR IS TO DEVELOP SUITABLE METHODOLOGY TO ENSURE THAT RISK OF WORKS DESTABILISING THE TEMPORARY PROPPING IS MINIMISED.
 - EXTERNAL WALL CURRENTLY UNRESTRAINED FROM BASEMENT TO ROOF LEVEL. CONTRACTOR IS TO DEVELOP SUITABLE METHODOLOGY TO ENSURE THAT RISK OF WORKS DESTABILISING THE WALL IS MINIMISED. NO FIXINGS TO BE INSTALLED INTO WALL UNTIL TEMPORARY WALING BEAMS AND RESTRAINT SCAFFOLD HAS BEEN FULLY INSTALLED.

LISTED BUILDING CONSENT IS TO BE OBTAINED FROM MANCHESTER CITY COUNCIL PRIOR TO WORKS SHOWN ON THIS DRAWING BEING CARRIED OUT

- KEY:**
- S1 75x200 C24 TIMBER JOISTS AT 400mm CRS WITH 18mm OSB3 GLUED AND SCREWED TO TOP OF JOISTS WITH MIN 3mm DIA x 55mm LONG SELF-DRILLING WOOD SCREWS AT 100mm c/c
 - B1* INDICATES ELEMENT ROTATED ABOUT ITS MINOR AXIS
 - (C1) INDICATES COLUMN UNDER
 - INDICATES MOMENT CONNECTION
 - INDICATES CONCRETE PADSTONE: P1 - 450mm LONG x 220mm WIDE x 220mm DEEP P2 - 600mm LONG x 220mm WIDE x 220mm DEEP
 - TEMPORARY STEEL BEAMS AND PROPPING INSTALLED AS PART OF PREVIOUS MAKING SAFE WORKS. REFER TO DRAWINGS LRH-REN-XX-ZZ-DR-S-90002 TO S-90005 FOR FULL DETAILS
 - INDICATES STEP NUMBER IN CONSTRUCTION METHODOLOGY

BEAM SCHEDULE		
REF	SIZE	GRADE
B1	152x152UC37	S355 JR
B2	203x133UB30	S355 JR
B3	180x75PFC20	S355 JR
B4	203x203UC46	S355 JR

COLUMN SCHEDULE		
REF	SIZE	GRADE
C1	203x203UC46	S355 JR

DIMENSIONS MARKED * TO BE CONFIRMED BY ARCHITECT AND DETERMINED ON SITE TO MATCH TOP OF EXISTING FLOOR JOISTS

- CONSTRUCTION METHODOLOGY:**
- REMOVE EXISTING TIMBER FLOOR AT GROUND FLOOR AND BASEMENT STAIRS.
 - INSTALL CONCRETE PADSTONES AT GROUND FLOOR. WHERE POCKETS NEED TO BE FORMED IN EXISTING WALLS, THIS SHOULD BE CARRIED OUT CAREFULLY USING NON-PERCUSSIVE TECHNIQUES.
 - CAREFULLY FORM TIE OPENINGS THROUGH INTERNAL WALL USING NON-PERCUSSIVE TECHNIQUES.
 - ERECT NEW STEEL FRAME FROM GROUND FLOOR TO 2ND FLOOR CEILING LEVEL TO SUPPORT EXISTING ROOF TRUSS AS PER DETAIL ON DRAWING LRH-REN-XX-ZZ-DR-S-90007.
 - REMOVE WINDOWS AT GROUND, 1ST AND 2ND FLOOR TO ALLOW SCAFFOLD TIES TO BE INSTALLED FROM TEMPORARY WALING BEAMS TO EXTERNAL FACE OF WALL.
 - FIX TIMBER WALL PLATES AND STEEL COLUMN INTO EXTERNAL WALL FROM GROUND FLOOR TO 2ND FLOOR CEILING LEVEL AS PER DETAILS ON DRAWING LRH-REN-XX-ZZ-DR-S-90007.
 - INSTALL NEW TIMBER FLOOR JOISTS AND BOARDING AT GROUND, 1ST AND 2ND FLOOR FULLY TIED INTO NEW BEAMS AND EXISTING WALLS AS PER DETAILS ON DRAWING LRH-REN-XX-ZZ-DR-S-90007.
 - CAREFULLY CUT BACK EXISTING MASONRY WALL AT GROUND FLOOR TO EXTEND A MINIMUM OF 330mm FROM THE INTERNAL FACE OF THE EXTERNAL WALL.
 - ALLOW RENAISSANCE TO INSPECT COMPLETED EMERGENCY WORKS BEFORE REMOVING SCAFFOLD TIES AND REPLACING WINDOWS.

STEEL CONNECTIONS:

- A - COLUMN BASEPLATE ON PADSTONE
- B - COLUMN BASEPLATE ON TRANSFER BEAM
- C - 203UC BEAM INTO COLUMN FLANGE
- D - 203UB BEAM INTO COLUMN FLANGE
- E - 152UC BEAM INTO COLUMN FLANGE
- F - 152UC BEAM INTO PFC TIE
- G - 203UB BEAM INTO COLUMN WEB
- H - 203UB BEAM INTO EXISTING BEAM
- I - TEMPORARY WALING BEAM INTO COLUMN WEB
- J - TEMPORARY WALING BEAM INTO EXISTING BEAM
- K - COLUMN SPLICE (500mm ABOVE TOS)

LOCATIONS AS INDICATED ON PLANS/SECTION

REFER TO DRAWING LRH-REN-XX-ZZ-DR-S-90008 FOR CONNECTION DETAILS

P04	UPDATED WITH SCAFFOLD DESIGN	03.03.23	PW	PC
P03	STEEL CONNECTION LOCATIONS ADDED	03.02.23	PW	KG
P02	AMENDED TO SUIT ARCHITECT AND MCC COMMENTS	27.01.23	PW	KG
P01	PRELIMINARY ISSUE	18.01.23	PW	KG
Rev:	Description:	Date:	By:	Chkd:



LIVERPOOL ROAD HOTEL, MANCHESTER

EMERGENCY REINSTATEMENT WORKS - FLOOR PLANS

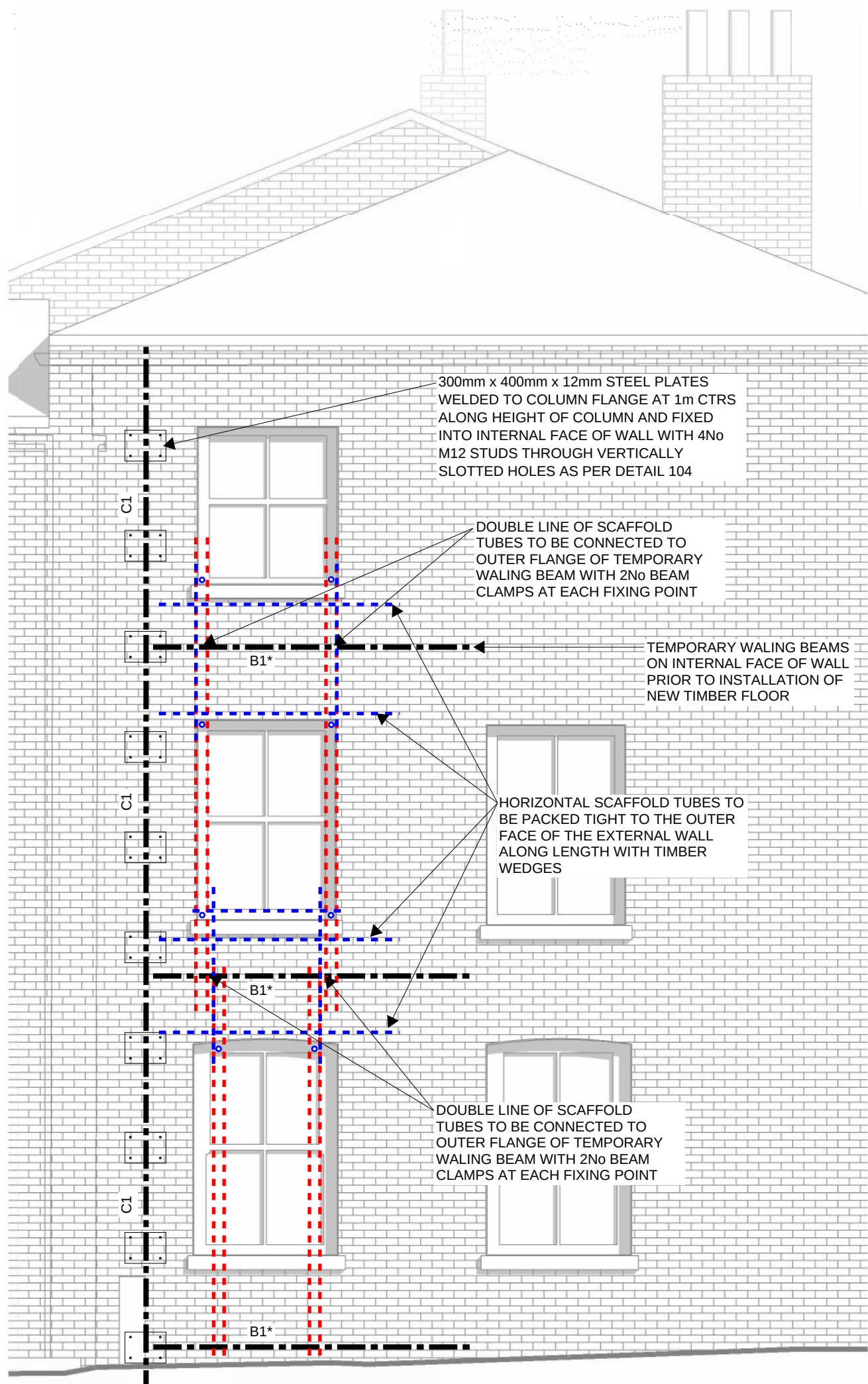
PRELIMINARY

Size:	Date:	Drawn by:	Designed by:	Checked by:
A1	JAN '23	PW	PW	KG

Scale:	Project No:
1:50	2205-02

Project:	Originator:	Volume:	Level:	Type:	Role:	Category/Number:	Rev:
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LRH-REN-XX-ZZ-DR-S-90006-P04

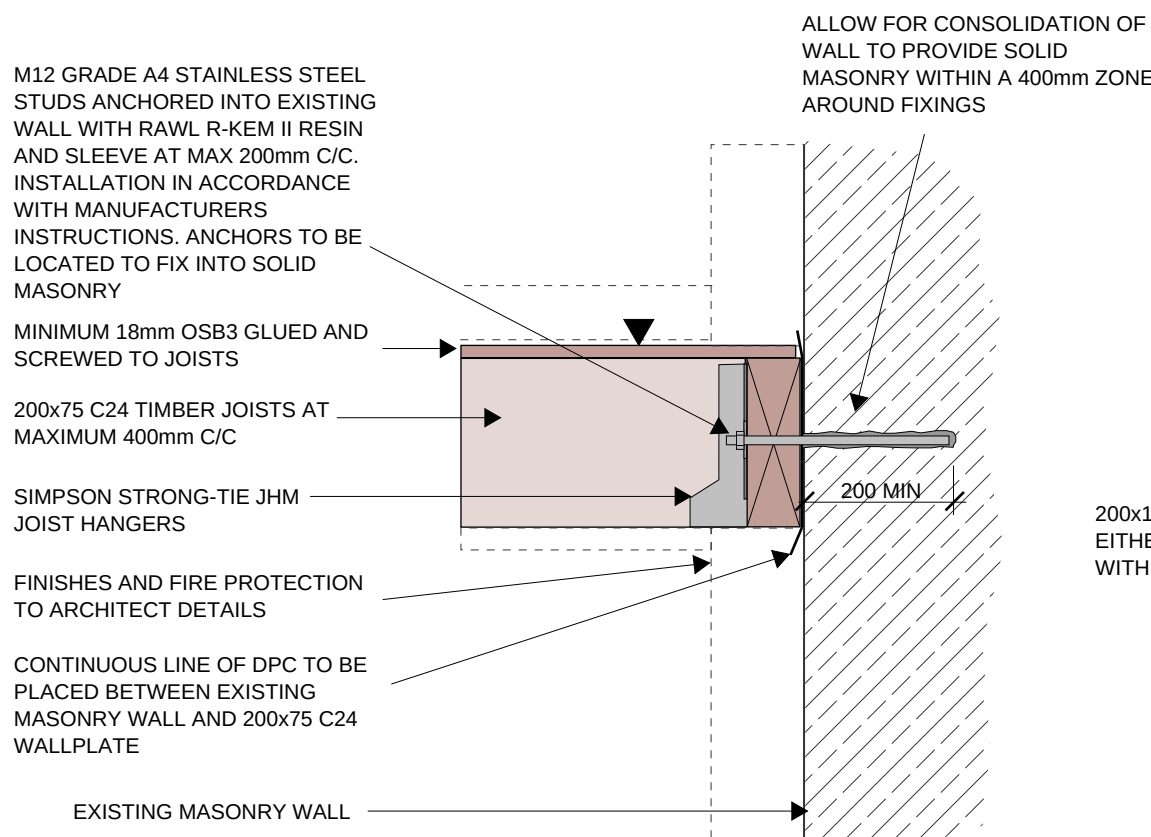


OLD MEDLOCK STREET ELEVATION
1:50

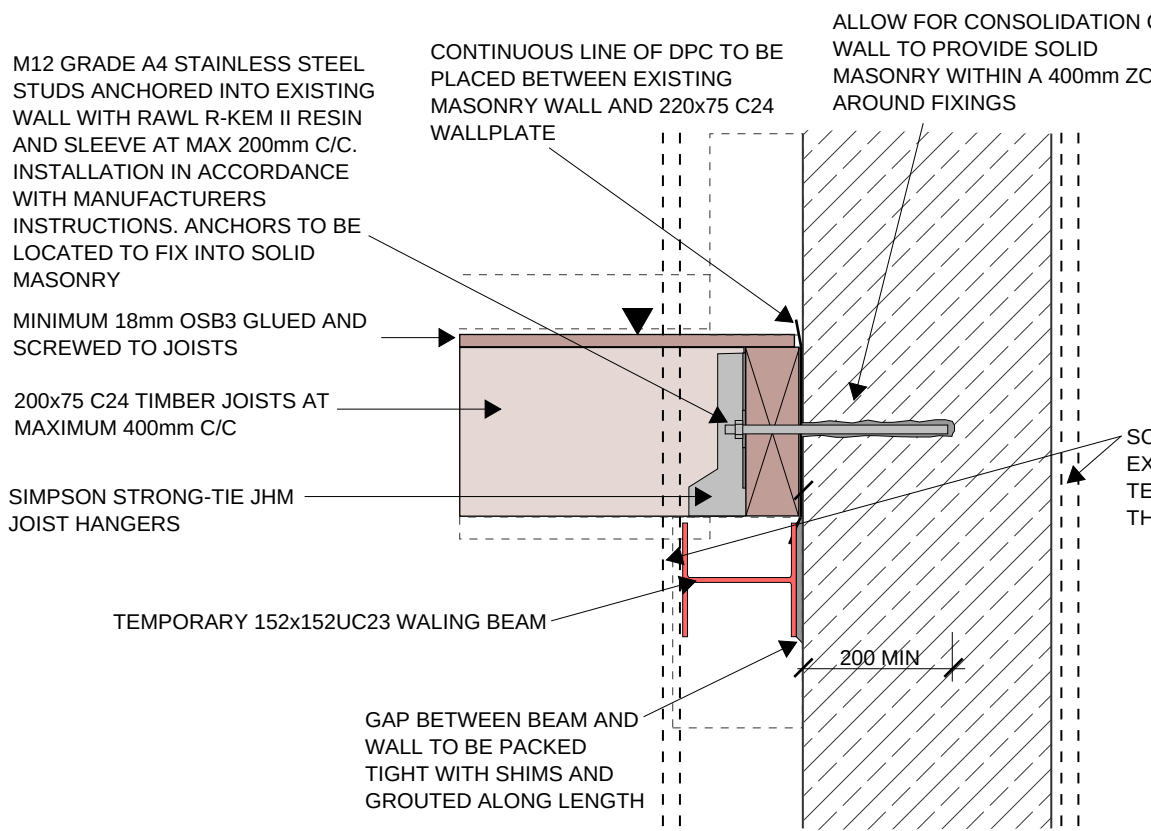
TEMPORARY TYING SCAFFOLD DESIGN KEY

- - - INDICATES TYPE 4 STEEL SCAFFOLD TUBE (TO BS EN 39) ON INSIDE FACE OF EXTERNAL WALL
- - - INDICATES TYPE 4 STEEL SCAFFOLD TUBE (TO BS EN 39) ON OUTSIDE FACE OF EXTERNAL WALL
- INDICATES TYPE 4 STEEL SCAFFOLD TUBE PASSING THROUGH WINDOW

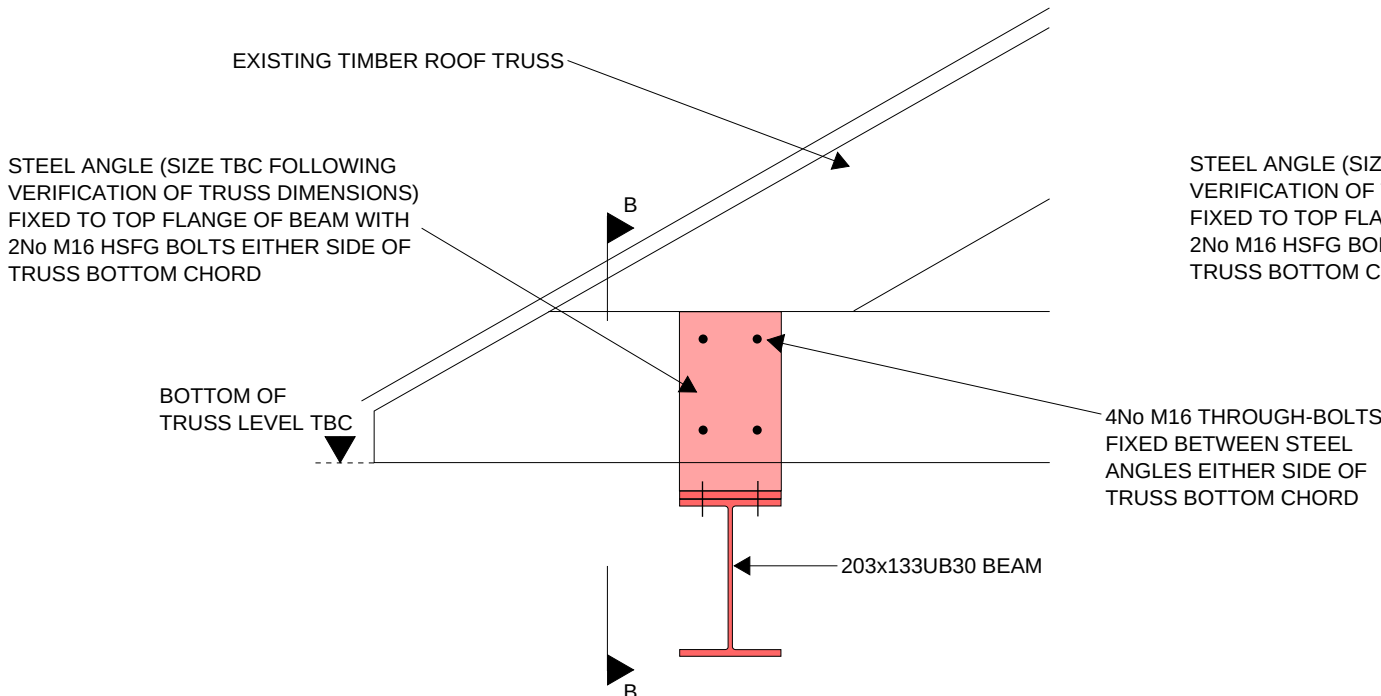
- ALL SCAFFOLD TUBES TO BE CONNECTED USING RIGHT ANGLE COUPLERS (CLASS A) TO EN 74-1 WITH MINIMUM SLIPPING CAPACITY OF 6.1kN



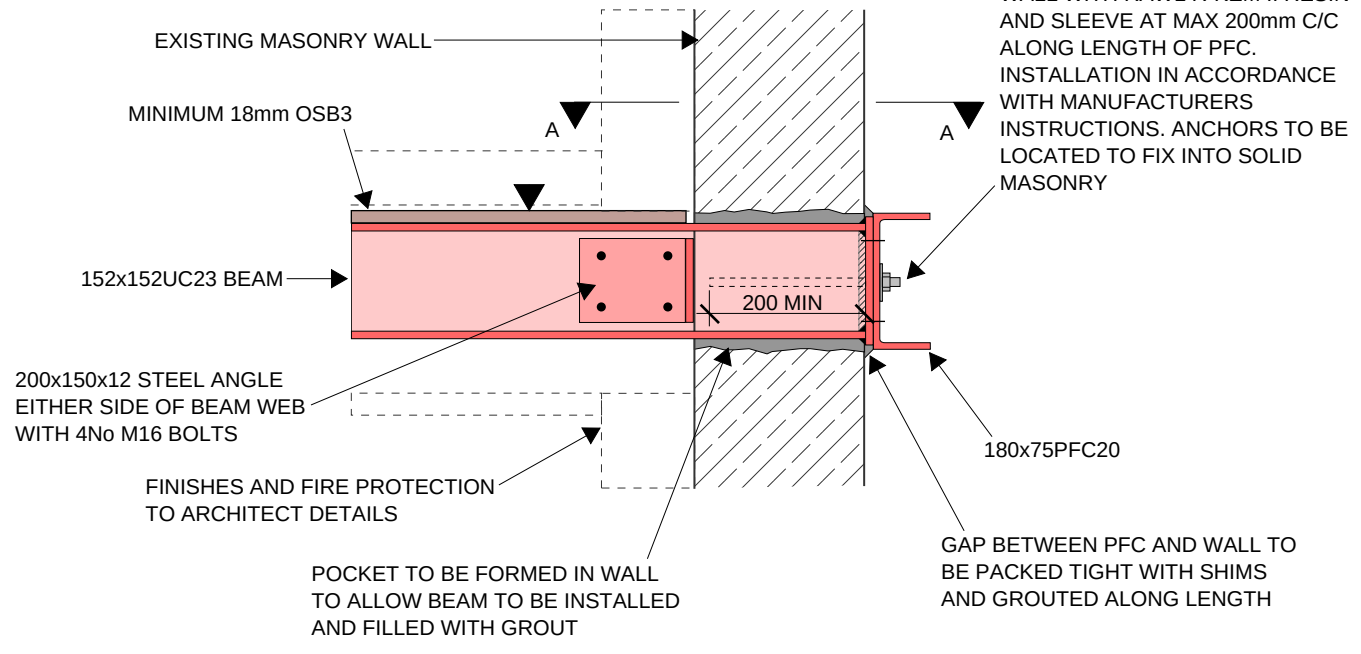
DETAIL 101
TYPICAL NEW FLOOR TO EXISTING WALL INTERFACE



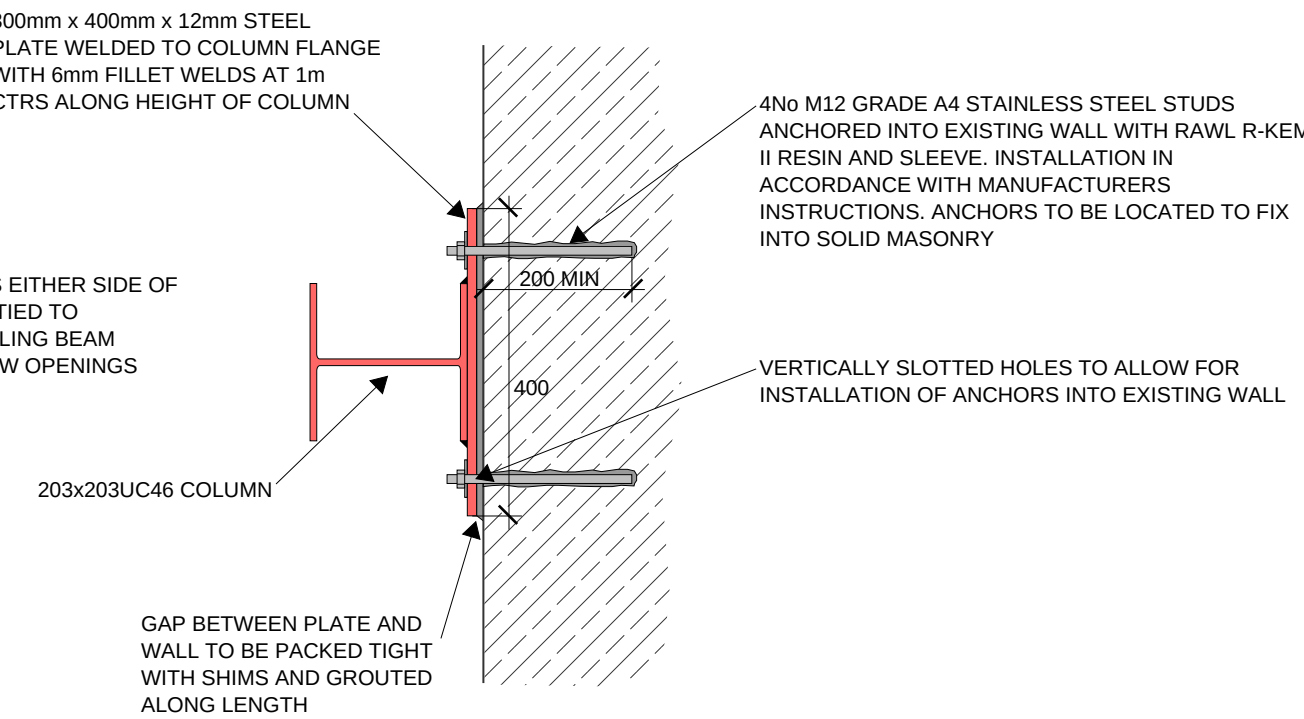
DETAIL 103
TYPICAL FLOOR TO EXISTING WALL INTERFACE WITH WALING BEAM



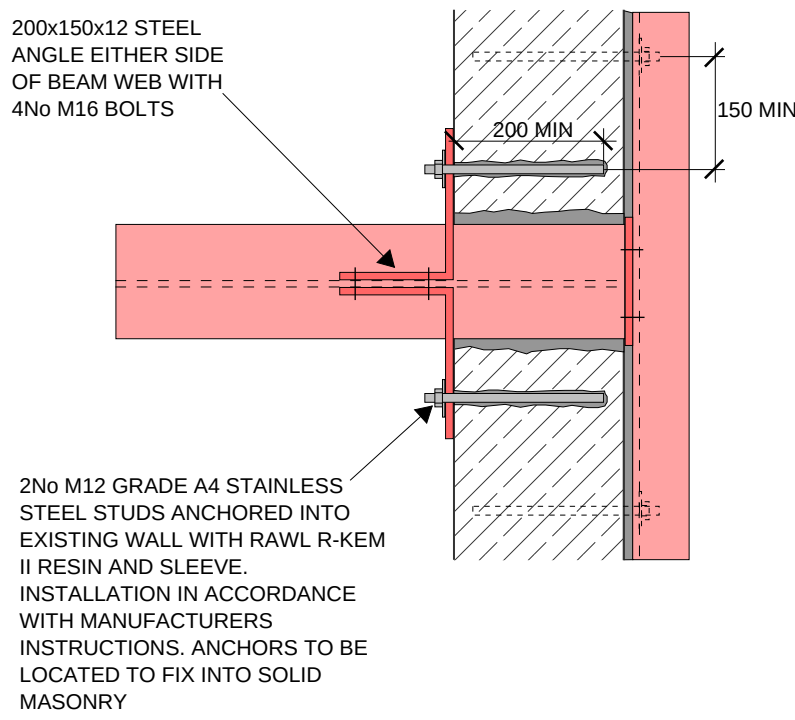
DETAIL 106
STEEL BEAM TO EXISTING TRUSS/PURLIN INTERFACE



DETAIL 102
TYPICAL BEAM TIE DETAIL THROUGH EXISTING WALL



DETAIL 104
TYPICAL COLUMN TIE DETAIL INTO EXTERNAL WALL



VIEW A
TYPICAL TIMBER JOIST TO STEEL BEAM INTERFACE

GENERAL NOTES:
1. REFER TO DRAWING LRH-REN-XX-ZZ-DR-S-90006 FOR NOTES.
LISTED BUILDING CONSENT IS TO BE OBTAINED FROM MANCHESTER CITY COUNCIL PRIOR TO WORKS SHOWN ON THIS DRAWING BEING CARRIED OUT

P03	UPDATED WITH SCAFFOLD DESIGN	03.03.23	PW	PC
P02	AMENDED TO SUIT ARCHITECT AND MCC COMMENTS	27.01.23	PW	KG
P01	PRELIMINARY ISSUE	18.01.23	PW	KG
Rev:	Description:	Date:	By:	Chkd:



Project:
LIVERPOOL ROAD HOTEL, MANCHESTER

Drawing Title:
EMERGENCY REINSTATEMENT WORKS - DETAILS

Status:
PRELIMINARY

Size:	Date:	Drawn by:	Designed by:	Checked by:
A1	JAN '23	PW	PW	KG

Scale:	1:10 U.N.O.	Project No:	2205-02
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LRH-REN-XX-ZZ-DR-S-90007-P03