

B/2/X01 - Existing joist size sufficient for access load and assumed roof build ups. MEP Engineer to confirm existing/ proposed plant loading. Additional fixings and steel angle required to support the roof.

B/2/X02 - No change to current loading of roof. No proposed structural alterations to reinforced concrete roof.

B/2/X03 - Existing joist size insufficient for access load and assumed roof build ups. Replace existing joists with new 175x47mm C24 timber joists at 400mm c/c. No plant loading allowance made, assumed that proposed water tanks are to be supported off existing steelwork.

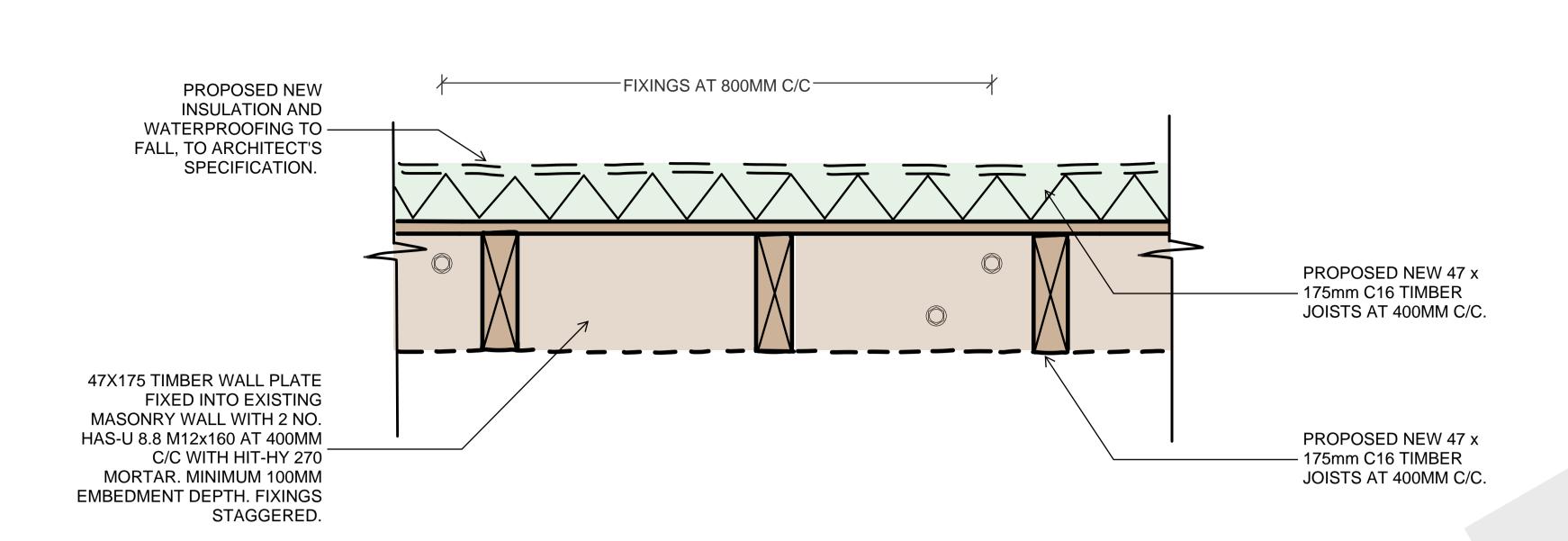
B/3/X03 (Contractors desk room) - Ceiling carefully dismantled and roof strengthened with 47x200mm C24 timber joists at max. 600mm centres. New joists to be supported off existing cast iron beam. 18mm ply sheeting installed below existing slate/stone roof panel.

B/3/X03 (*Room with sky light*) - Ceiling carefully dismantled and roof strengthened with 47x200mm C24 timber joists at max. 400mm centres. 18mm ply sheeting installed below existing slate/stone roof panel. Connection details to existing building subject to further opening up works.

B/3/X04 (*Corridor*) - Ceiling carefully dismantled and roof strengthened with 47x225mm C24 timber joists at max. 400mm centres. 18mm ply sheeting installed below existing slate/stone roof panel.

B/3/X04 (West) - Roof strengthened with 47x225mm C24 timber joists at max. 400mm centres. 18mm ply topping below existing slate/stone roof panel. Refer to drawing 1635-10-CIV-XX-ZZ-S-S-92001 for assumed sequence of construction.





KEY PLAN:

STANDARD NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATIONS.
- 2. THIS DRAWING SHOULD NOT BE SCALED. 3. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR ON SITE.
- 4. ALL DISCREPANCIES SHOULD BE REPORTED TO C.A./E.A. PRIOR TO THE COMMENCEMENT OF

© CIVIC ENGINEERS LIMITED

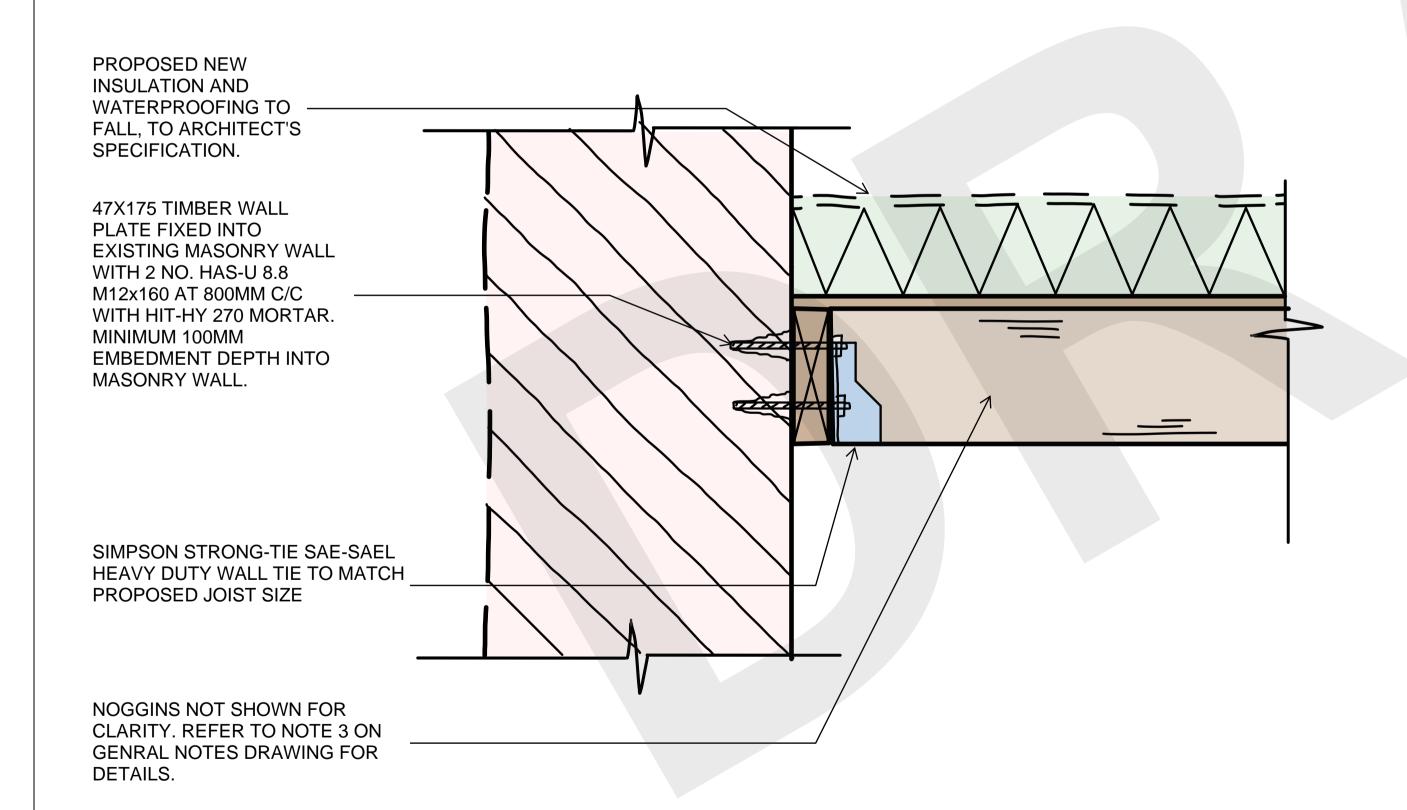
1. PROPOSED DETAILS TO BE CONFIRMED FOLLOWING REMOVAL OF CEILING PANEL/ OPENING UP WORKS TO EXPOSE STRUCTURE.

2. REFER TO EXISTING STRUCTURE DRAWINGS FOR ASSUMPTIONS ON EXISTING STRUCTURE.

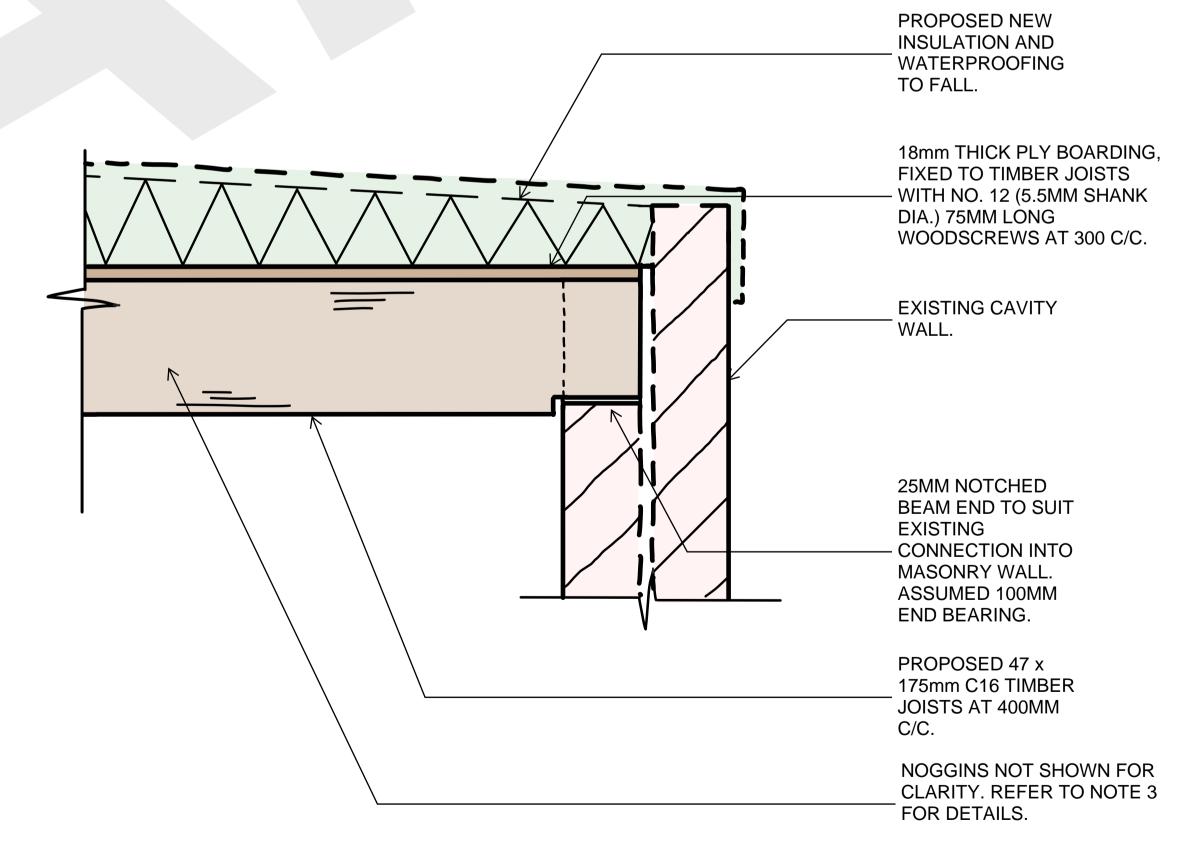
3. REFER TO GENERAL NOTES DRAWING.

DETAIL D-D, TYPICAL DETAIL

SCALE - 1:5 @ A1



DETAIL C-C



DETAIL B-B SCALE - 1:5 @ A1

PN JB 15.05.23 PO2 SECOND DRAFT STAGE 3 ISSUE 03.05.23 P01 DRAFT STAGE 3 ISSUE

DATE REV DESCRIPTION



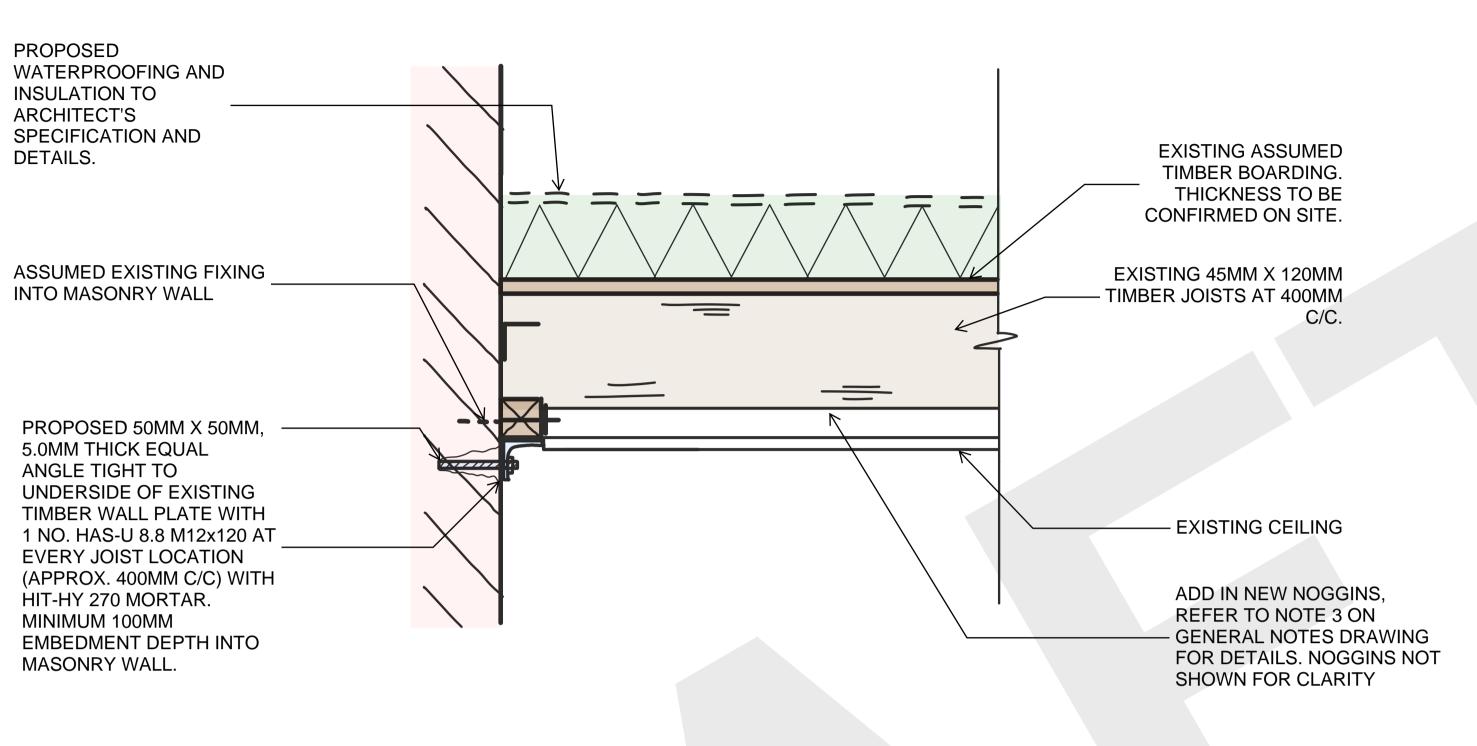
www.civicengineers.com PROJECT

THE BRITISH MUSEUM, **ESSENTIAL WATER INGRESS** PROTECTION WORKS

PROPOSED STRUCTURE DETAILS ROOF B/2/X03 KITCHEN BUILDING DETAILS, B,C & D

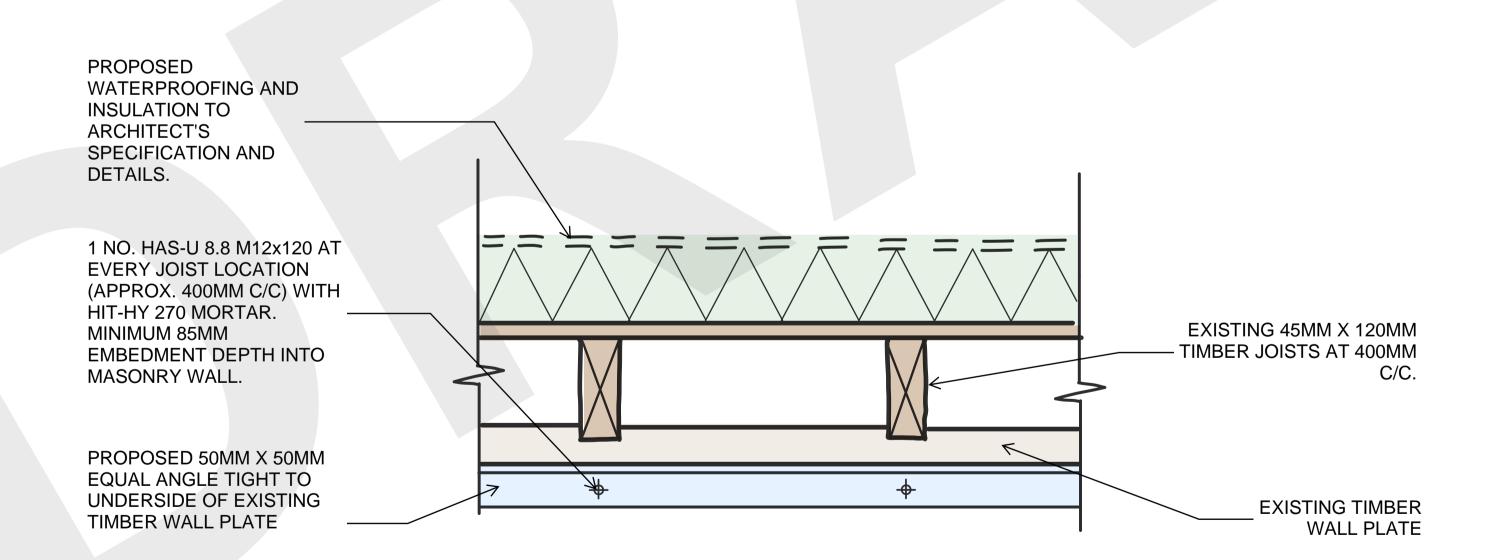
STATUS CODE WN CHECKED N JB 1635-10-CIV-XX-ZZ-S-S-91001

SCALE - 1:5 @ A1	SCALE - 1:5 @ A1	KITCHEN BUILDING DETAILS, B,C & L
		DRAWING STATUS STATU
		INFORMATION
		CE PROJECT No. SCALE @ A1 DATE CREATED DRAWN
		1635/10 AS MAY '23 PN
		DRAWING No.



DETAIL E-E

SCALE - 1:5 @ A1



DETAIL F-F

SCALE - 1:5 @ A1



KEY PLAN:

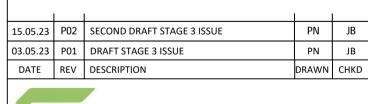
- . THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATIONS.
- 2. THIS DRAWING SHOULD NOT BE SCALED. 3. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR ON SITE.
- 4. ALL DISCREPANCIES SHOULD BE REPORTED TO C.A./E.A. PRIOR TO THE COMMENCEMENT OF

© CIVIC ENGINEERS LIMITED

1. PROPOSED DETAILS TO BE CONFIRMED FOLLOWING REMOVAL OF CEILING PANEL/ OPENING UP WORKS TO EXPOSE STRUCTURE.

2. REFER TO EXISTING STRUCTURE DRAWINGS FOR ASSUMPTIONS ON EXISTING STRUCTURE.

3. REFER TO GENERAL NOTES DRAWING.





www.civicengineers.com

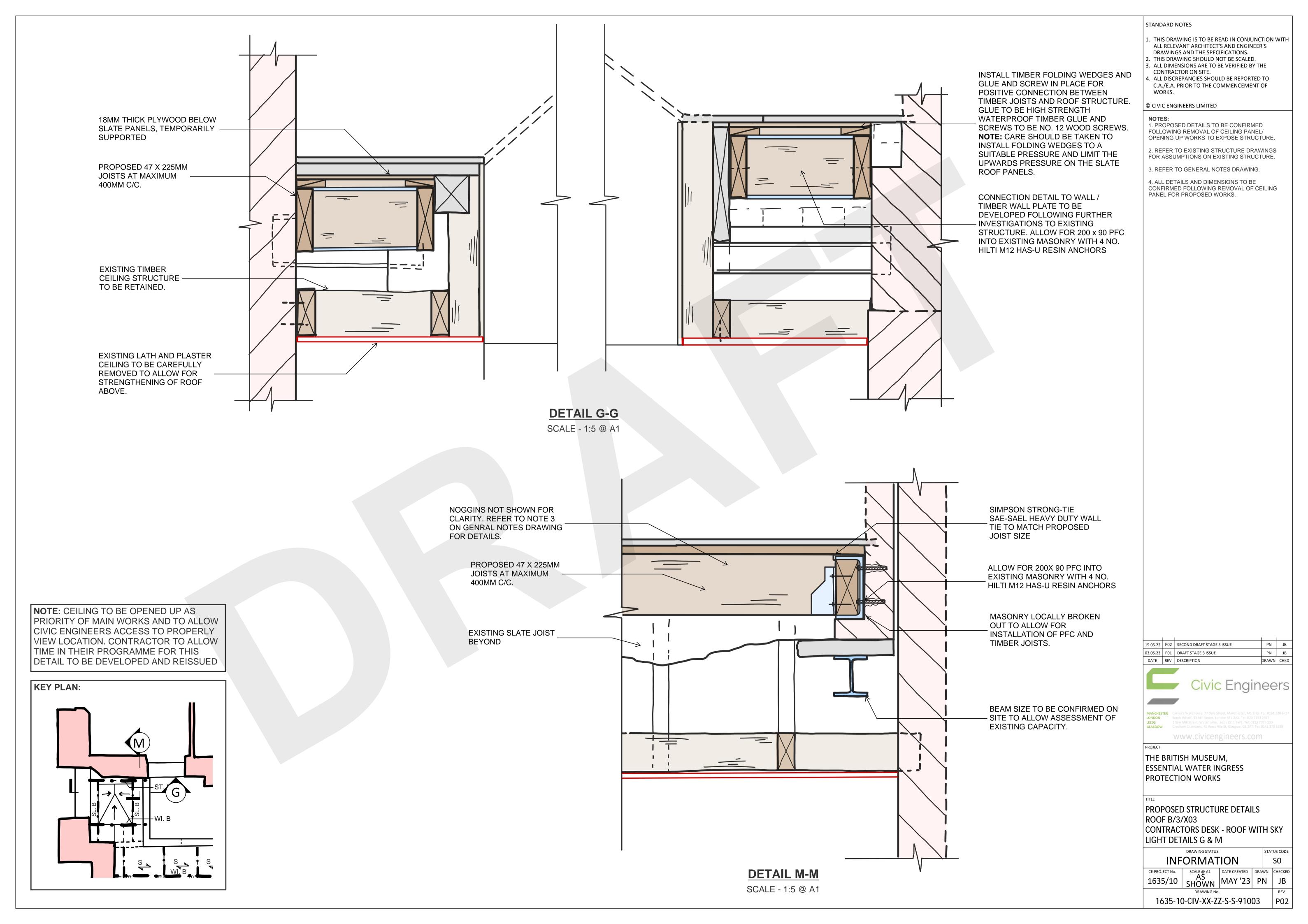
ESSENTIAL WATER INGRESS PROTECTION WORKS

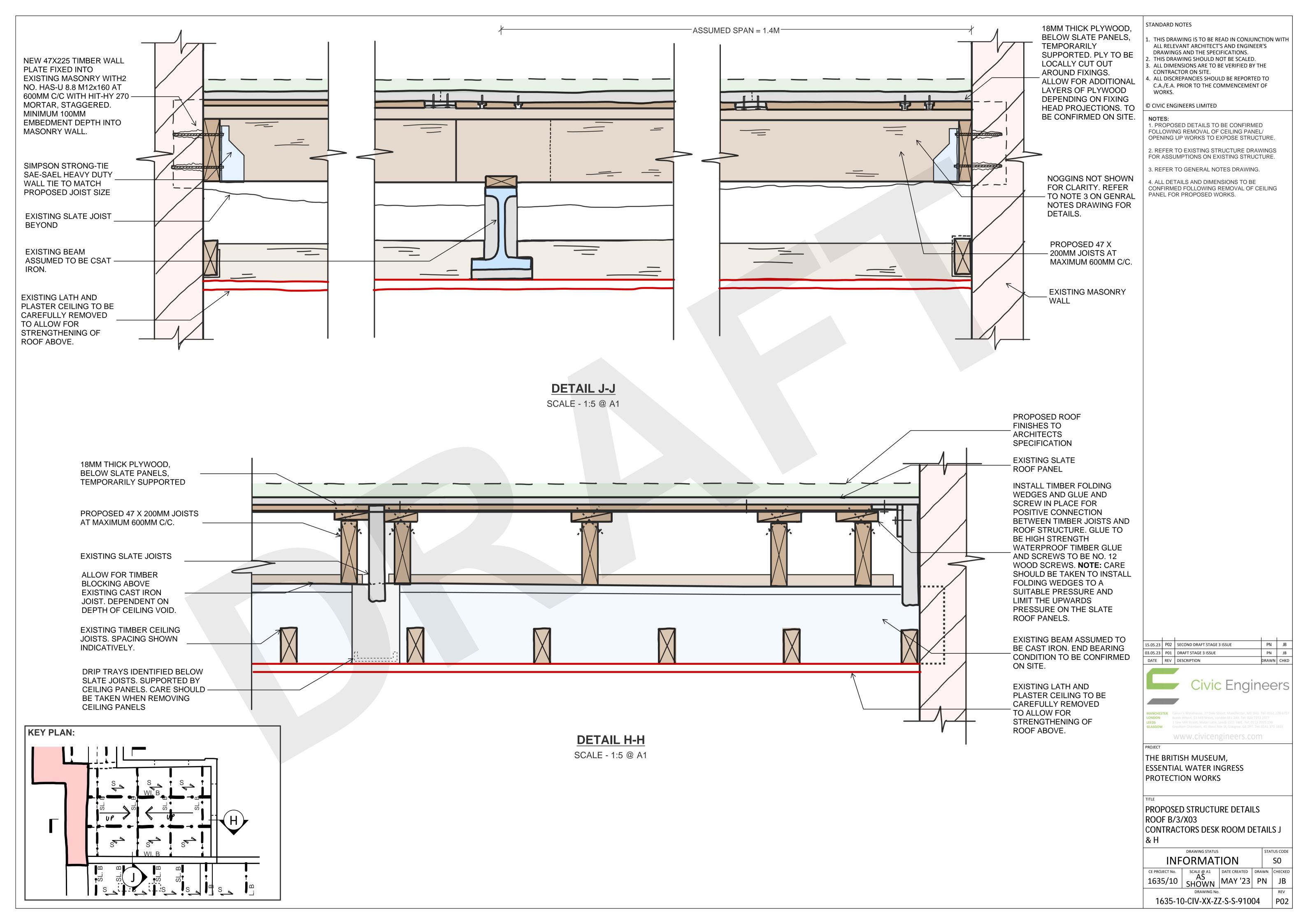
THE BRITISH MUSEUM,

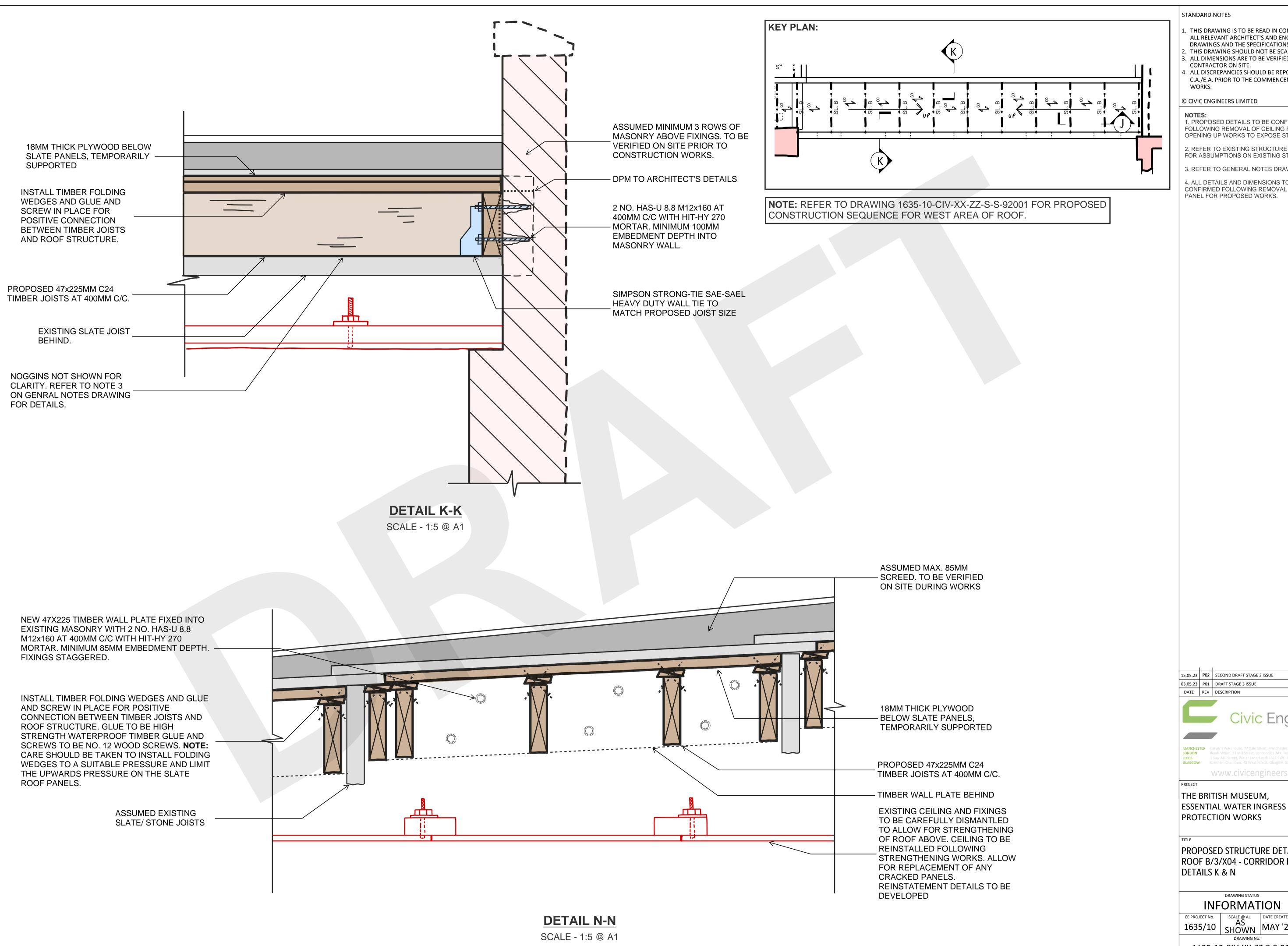
PROPOSED STRUCTURE DETAILS

ROOF B/2/X01 STORE ROOM BUILDING DETAILS E & F

DRAWING STATUS				STATUS CODE		
INFORMATION					S0	
CE PROJECT No.	SCALE @ A1	DATE CREATED	DRA	WN	CHECKED	
1635/10	AS SHOWN	MAY '23	Р	Ν	JB	
DRAWING No.					REV	
1635-10-CIV-XX-ZZ-S-S-91002					P02	







STANDARD NOTES

- . THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATIONS.
 - 2. THIS DRAWING SHOULD NOT BE SCALED. 3. ALL DIMENSIONS ARE TO BE VERIFIED BY THE
 - 4. ALL DISCREPANCIES SHOULD BE REPORTED TO C.A./E.A. PRIOR TO THE COMMENCEMENT OF

© CIVIC ENGINEERS LIMITED

1. PROPOSED DETAILS TO BE CONFIRMED FOLLOWING REMOVAL OF CEILING PANEL/ OPENING UP WORKS TO EXPOSE STRUCTURE

2. REFER TO EXISTING STRUCTURE DRAWINGS FOR ASSUMPTIONS ON EXISTING STRUCTURE.

3. REFER TO GENERAL NOTES DRAWING.

4. ALL DETAILS AND DIMENSIONS TO BE CONFIRMED FOLLOWING REMOVAL OF CEILING PANEL FOR PROPOSED WORKS.

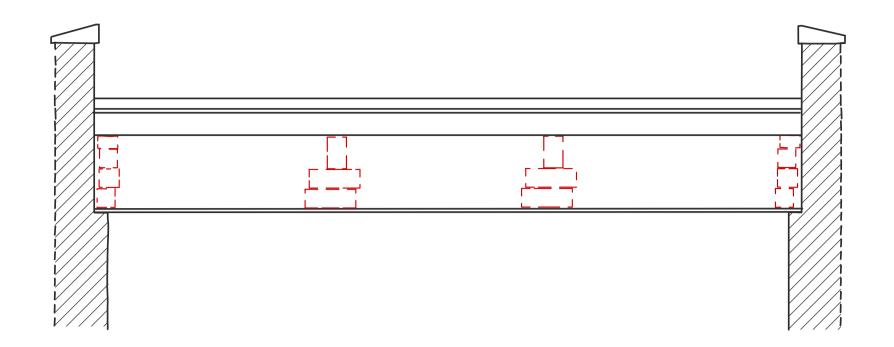
Civic Engineers

www.civicengineers.com

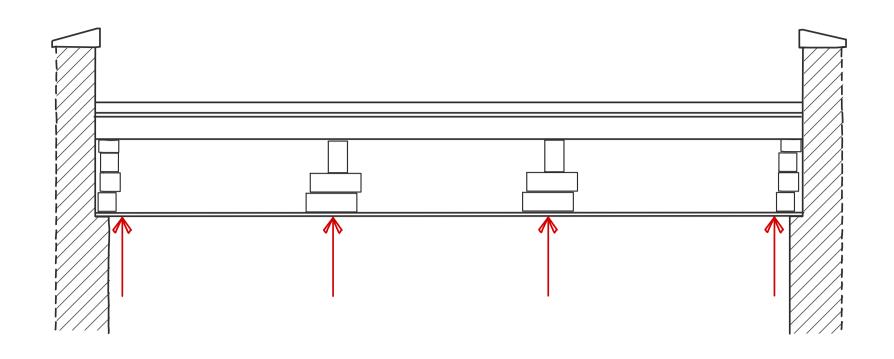
PN JB

PROPOSED STRUCTURE DETAILS ROOF B/3/X04 - CORRIDOR ROOF DETAILS K & N

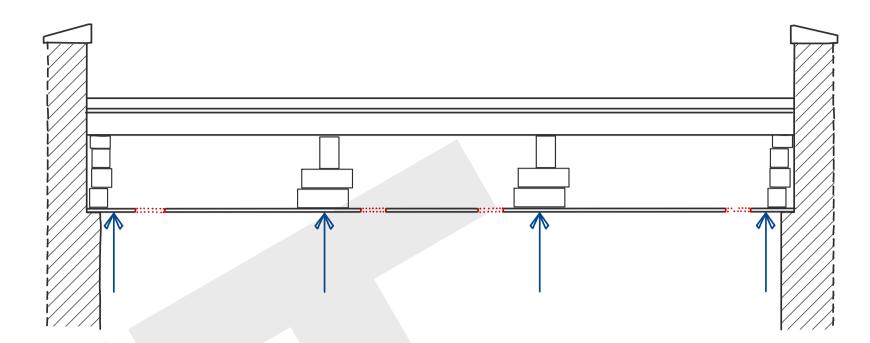
DRAWING STATUS					STATUS CODE	
INFORMATION						
CE PROJECT No.	SCALE @ A1	DATE CREATED	DRA	WN	CHECKED	
1635/10	AS SHOWN	MAY '23	Р	N	JB	
DRAWING No.						
1635-10-CIV-XX-ZZ-S-S-91006						



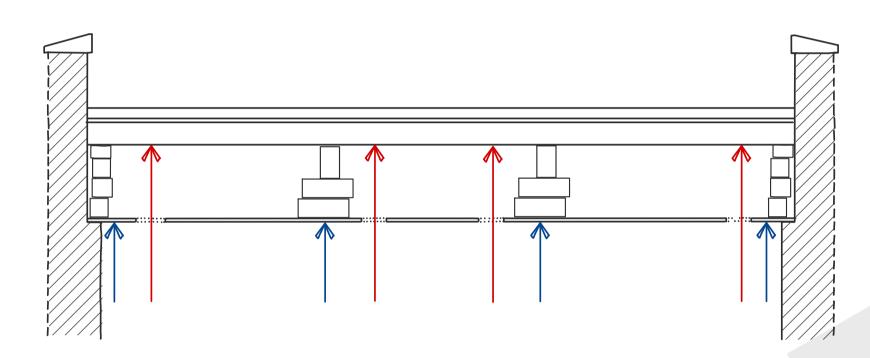
1. LOCATE MASONRY PIERS WITHIN ROOF VOID. INTRUSIVE INVESTIGATIONS INVOLVING A SERIES OF DRILL HOLES MAY BE REQUIRED AND VIEWED WITH ENDOSCOPE.



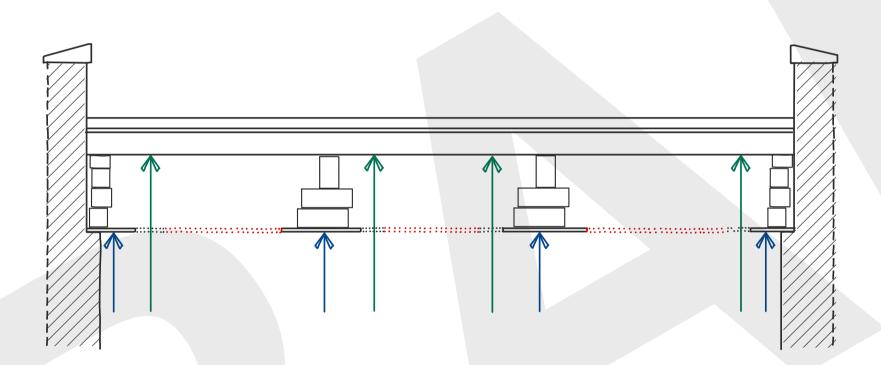
2. PROP BELOW CEILING PANEL IN IDENTIFIED MASONRY PIER LOCATIONS.



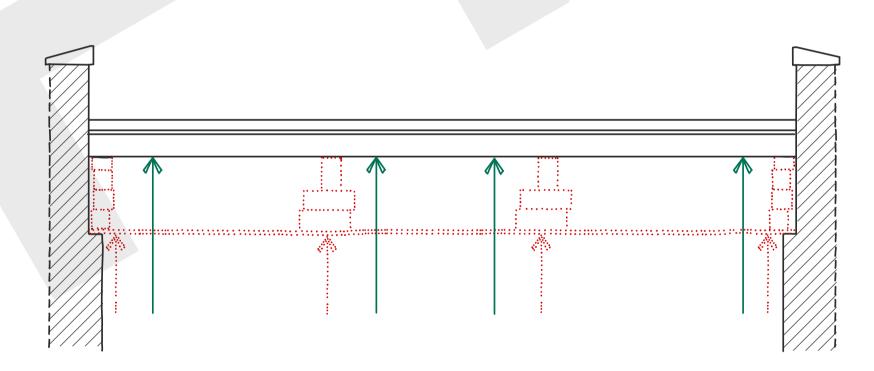
3. FORM LOCAL OPENINGS IN SLATE CEILING PANELS ALONG BEAM LINE, ADJACENT TO EACH IDENTIFIED PIER LOCATION



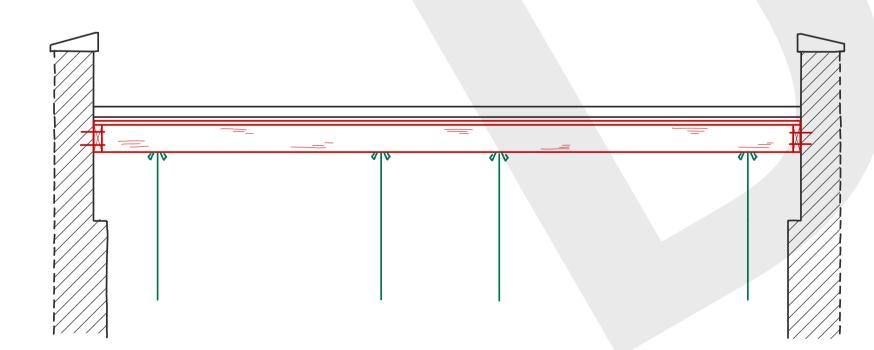
4. PROP SLATE BEAMS ADJACENT TO MASONRY PIER LOCATIONS



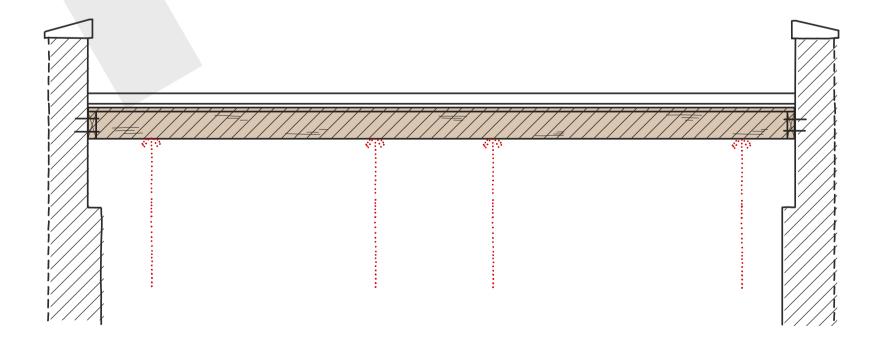
5. CAREFULLY REMOVE SECTIONS OF SLATE CEILING ADJACENT TO MASONRY PIERS TO ALLOW ACCESS TO DISMANTLE PIERS.



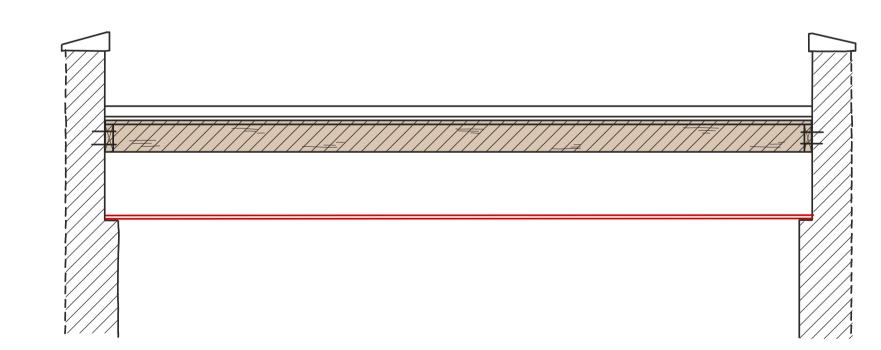
6. CAREFULLY REMOVE MASONRY PIERS AND REMAINING SLATE CEILING PANELS, REMOVING PROPS TO MASONRY PIERS AFTER PIERS HAVE BEEN DISMANTLED.



7. INSTALL PLYWOOD TIGHT TO SLATE PANELS AND PROP. FOLLOWING THIS, INSTALL TIMBER JOISTS AND FIXINGS INTO MASONRY WALLS IN BETWEEN EXISTING SLATE BEAMS FOR STRENGTHENING OF ROOF STRUCTURE. INSTALL TIMBER FOLDING WEDGES BETWEEN PLYWOOD AND TIMBER JOISTS TO PROVIDE LOAD TRANSFER ALONG FULL LENGTH OF JOIST.



8. REMOVE PROPS TO SLATE BEAMS



9. REINSTATE SLATE CEILING.



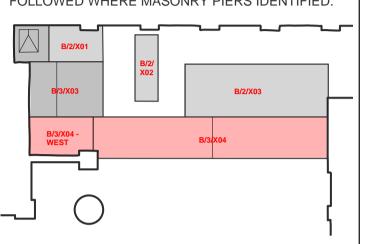
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATIONS.
- THIS DRAWING SHOULD NOT BE SCALED.
 ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR ON SITE.
- 4. ALL DISCREPANCIES SHOULD BE REPORTED TO C.A./E.A. PRIOR TO THE COMMENCEMENT OF WORKS

© CIVIC ENGINEERS LIMITED

NOTES:

1. IT IS ASSUMED THAT MASONRY PIER LOCATIONS CORRESPOND WITH LOCATIONS OF SLATE BEAMS. CIVIC ENGINEERS TO BE NOTIFIED IF MASONRY PIERS ARE FOUND TO BE PROPPING SLATE ROOF PANELS.

2. EXTENT OF ROOF SHOWN IN RED TO BE INVESTIGATED FOR MASONRY PIERS. PIERS IDENTIFIED IN WEST AREA OF ROOF. ASSUMED SEQUENCE OF CONSTRUCTION TO BE FOLLOWED WHERE MASONRY PIERS IDENTIFIED.



3. REFER TO CIVIC ENGINEERS DRAWING NO. 1635-10-CIV-XX-ZZ-S-S-91006 FOR PROPOSED STRENGTHENING WORKS.

5.23	P02	SECOND DRAFT STAGE 3 ISSUE	PN	JB
5.23	P01	DRAFT STAGE 3 ISSUE	PN	JB
TE	REV	DESCRIPTION	DRAWN	CHKD
		·		



ANCHESTER
NDON
Reeds Wharf, 33 Mill Street, London SE1 2AX. Tel: 020 7253
EDS
1 Saw Mill Street, Water Lane, Leeds LS11 SWE. Tel: 0113 20
ASGOW
Gresham Chambers, 45 West Nile St, Glasgow, G1 2PT. Tel:

Gresham Chambers, 45 West Nile St, Glasgow, G1 2PT. Tel: 01-

THE BRITISH MUSEUM,
ESSENTIAL WATER INGRESS

PROTECTION WORKS

TITLE

ASSUMED CONSTRUCTION SEQUENCE - ROOF B/3/X04 (CORRIDOR ROOF)

DRAWING STATUS				STATUS CODE		
INFORMATION					S0	
CE PROJECT No.	SCALE @ A1	DATE CREATED	DRAWN		CHECKED	
1635/10	SHOWN	MAY '23	Р	Ν	JB	
DRAWING No.						
1635-10-CIV-XX-ZZ-S-S-92001						

TIMBER:

- 1. PROPOSED WATERPROOFING AND **INSULATION TO ARCHITECT'S** SPECIFICATION.
- 2. ALL TIMBER FIXED TO SOLID MASONRY WALLS IS TO BE SEPARATED USING A SUITABLE DPM AS SPECIFIED BY THE ARCHITECT.
- 3. IN JOISTED FLOORS AND ROOFS SOLID NOGGINS ARE TO BE SPACED AT 1/3 POINTS, AT THE BEARINGS, AND AT THE POSITION OF JOINTS IN PLY SHEETING. NOGGINS TO BE FULL DEPTH OF JOISTS IN FLOORS AND 34 DEPTH IN ROOF CONSTRUCTIONS WITH GAP AT TOP FOR VENTILATION.
- 4.ALL PLY BOARDING TO BE 18MM THICK AND FIXED DOWN TO JOISTS WITH NO. 12 (5.5MM SHANK DIA.) 75MM LONG WOODSCREWS AT 300 C/C.
- 5.NEW TIMBER IN THE WORKS IS TO BE VACUUM IMPREGNATED WITH PRESERVATIVE TO BS EN 1995-1-1 AND BS EN 351-1 AND THE MANUFACTURER'S RECOMMENDATIONS. CUT ENDS ARE TO BE THOROUGHLY TREATED WITH BRUSH APPLIED COATS OF APPROPRIATE PRESERVATIVE BEFORE FIXING. ALL PRESERVATIVES ARE TO BE TO THE ARCHITECT'S APPROVAL.
- 6.TIMBER SHALL BE STORED UNDER COVER. CLEAR OF THE GROUND AND PROTECTED FROM THE WEATHER.
- 7.STRUCTURAL TIMBERS MAY ONLY BE DRILLED OR CUT FOR SERVICES WITH THE APPROVAL OF THE ENGINEER.
- 8.SIZES OF NEW STRUCTURAL TIMBERS NOTED ON THE DRAWINGS ARE SAWN BASIC SIZES.
- 9.ALL PROPRIETARY JOIST HANGERS. STRAPS, CONNECTORS ETC TO BE PROVIDED BY SIMPSON STRONG-TIE OR EXPAMET. UNLESS APPROVED OTHERWISE. AND SHALL BE FIT FOR PURPOSE AND IN ACCORDANCE WITH BS EN 1995-1-12004+ A1:2008
- 10. ALL TIMBER CONNECTORS, SCREWS. NAILS. JOIST HANGERS. STEEL STRAPS ETC ARE TO BE GALVANISED OR SHERARDISED AND IN ACCORDANCE WITH BS EN 1995-1-12004+ A1:2008.
- 11.ALL PROPRIETARY TIMBER METALWORK IS TO BE FIXED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

GENERAL:

- 12.DO NOT SCALE FROM THE DRAWINGS. ALL DIMENSIONS ARE IN MM U.N.O.
- 13.ALL SETTING OUT AND LEVELS ARE TO ARCHITECTS DETAILS.
- 14.ALL FINISHES, WATERPROOFING AND APPLIED FIRE PROTECTION TO ARCHITECTS' DETAILS.
- 15.ALL PROPRIETARY PRODUCTS TO BE INSTALLED STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S DETAILS AND SPECIFICATIONS.

- 16.THESE NOTES ARE TO BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS. IN THE EVENT OF A DISCREPANCY THE CONTRACTOR SHOULD CONTACT BOTH CIVIC ENGINEERS LTD (CE) AND THE EMPLOYERS AGENT (E.A) / CONTRACT ADMINISTRATOR (C.A.) PRIOR TO CARRYING OUT THE WORKS RELATING.
- 17.WHERE THE SPECIFICATION NOTES CONFLICT WITH NOTES ON THE DRAWING CLARIFICATION SHOULD BE SOUGHT FROM CIVIC ENGINEERS LTD.
- 18.ANY DISCREPANCIES BETWEEN ALL WORKING DRAWINGS, SPECIFICATIONS AND SCHEDULES OF ALL DISCIPLINES TO BE IMMEDIATELY NOTIFIED TO THE (E.A) / (C.A.) FOR CLARIFICATION / CORRECTION PRIOR TO CONSTRUCTION.
- 19.ITEMS NOTED ON THE DRAWINGS "TO BE CONFIRMED ON SITE" TYPICALLY RELATE TO AREAS NOT ACCESSIBLE AT DESIGN STAGE. THESE ARE TO BE EXPOSED BY THE CONTRACTOR FOR INSPECTION BY CIVIC ENGINEERS AT THE EARLIEST OPPORTUNITY. TIME IN THE PROGRAMME AND SUITABLE RESOURCE SHOULD BE ALLOWED FOR THIS WORK, AND FOR CE TO FINALISE DESIGN INFORMATION.
- 20.DO NOT CUT ANY HOLES OR CHASES THROUGH ANY STRUCTURAL MEMBERS WITHOUT FIRST OBTAINING THE WRITTEN CONSENT OF CIVIC ENGINEERS.
- 21.THE CONTRACTOR MUST ENSURE A SUITABLY QUALIFIED PRINCIPAL DESIGNER HAS BEEN APPOINTED. THEY MUST INFORM THE HEALTH AND SAFETY EXECUTIVE OF THE WORKS BY FILLING IN AND SUBMITTING AN F10 FORM PRIOR TO STARTING WORK ON SITE.
- 22.THE CONTRACTOR IS TO ENSURE THAT THE BUILDING CONTROL OFFICER AND CIVIC ENGINEERS ARE NOTIFIED TO CARRY OUT INSPECTIONS OF ANY STRUCTURAL WORK PRIOR TO COVERING UP WITH FINISHES.
- 23.THIS SPECIFICATION AND DESIGN USES **EUROCODES WHICH ARE CITED IN** BUILDING REGULATIONS PART A & ARE THE CURRENT BEST PRACTICE, ALL CONTRACTOR DESIGN AND WORKMANSHIP TO COMPLY WITH THE RELEVANT EUROPEAN STANDARDS (EUROCODES), CODES OF PRACTICE AND THE BUILDING REGULATIONS.

EXISTING STRUCTURE:

- 24.ALL DETAILS OF EXISTING STRUCTURE ARE APPROXIMATE ONLY AND NEED TO BE CONFIRMED ON SITE.
- 25.DUE CONSIDERATION SHOULD BE GIVEN TO THE CAPACITY OF EXISTING STRUCTURES TO CARRY MATERIAL LOADINGS. WHEREVER POSSIBLE MATERIALS SHOULD BE STORED SAFELY AT GROUND FLOOR LEVEL A SAFE DISTANCE AWAY FROM EXCAVATIONS AND EXISTING UNDERGROUND STRUCTURES SUCH AS EXISTING BASEMENTS, BURIED TANKS ETC.

26.THE CONTRACTOR IS TO INFORM THE ARCHITECT AND STRUCTURAL ENGINEER IF THE EXISTING FABRIC, INCLUDING FOUNDATIONS, IS OPENED UP AND FOUND TO BE INADEQUATE, UNSUITABLE TO SUPPORT THE PROPOSED WORKS, OR AT VARIANCE FROM THE DETAILS SHOWN ON THE DRAWINGS.

27.ALLOW FOR MAKING GOOD CRACKS THAT MAY APPEAR IN BRICKWORK FINISHES TO ADJOINING PROPERTIES DURING THE WORKS.

TEMPORARY WORKS:

28.THE CONTRACTOR IS ENTIRELY RESPONSIBLE FOR THE DESIGN. DETAILING, INSTALLATION AND MAINTENANCE OF THE TEMPORARY WORKS. TEMPORARY WORKS AND SEQUENCING THEREOF SHOULD BE DESIGNED BY A SUITABLY QUALIFIED INDIVIDUAL TO ENSURE THAT THE **BUILDINGS STABILITY IS MAINTAINED** THROUGHOUT THE DURATION OF THE WORKS FROM COMMENCEMENT TO PRACTICAL COMPLETION.

29.THE CONTRACTOR SHALL SUBMIT THEIR FULL PROPOSALS FOR COMMENT TO CIVIC ENGINEERS LTD A MINIMUM OF 10 DAYS PRIOR TO THE PLANNED COMMENCEMENT OF ANY WORKS. PROPOSALS MUST INCLUDE SEQUENCING, DRAWINGS, AND CALCULATIONS TO THE RELEVANT CODES.

30.IF THE CONTRACTOR WISHES TO USE THE PERMANENT STRUCTURE AS TEMPORARY WORKS THEY MUST DEMONSTRATE WITH DRAWINGS AND CALCULATIONS THAT THE TEMPORARY LOADS ARE WITHIN THE CAPACITY OF THE PERMANENT WORKS AND THAT THIS WILL NOT AFFECT THE FUTURE PERFORMANCE OF THE PERMANENT WORKS

31.THE CONTRACTOR IS TO ACCEPT FULL RESPONSIBILITY FOR THE STABILITY OF THE BUILDING AND ANY EFFECTED ADJACENT STRUCTURES OR INFRASTRUCTURE FOR THE DURATION OF THE CONTRACT.

MATERIALS AND WORKMANSHIP:

32.ALL BUILDING MATERIALS SHOULD CONFORM TO THE RELEVANT EUROCODES AND SHOULD BE OF SUITABLE QUALITY FOR THEIR PURPOSE. UNLESS SPECIFIED NO RECLAIMED MATERIALS SHALL BE SUBSTITUTED FOR SPECIFIED MATERIALS WITHOUT CERTIFICATION AND THE EXPRESS CONFIRMATION OF BOTH CIVIC ENGINEERS LTD AND THE ARCHITECT

33.UNLESS NOTED OTHERWISE. TOLERANCES SHALL BE IN ACCORDANCE WITH THE CURRENT NATIONAL SPECIFICATIONS SUCH AS THE NSSS AND THE NSCS.

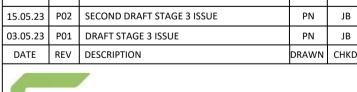
LOADING:

34. ROOF STRENGTHENING HAS BEEN DESIGNED FOR AN ACCESS LOAD OF 0.6KN/M2 (APPROXIMATELY 60KG/M2)

STANDARD NOTES

- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ARCHITECT'S AND ENGINEER'S DRAWINGS AND THE SPECIFICATIONS. . THIS DRAWING SHOULD NOT BE SCALED.
- 3. ALL DIMENSIONS ARE TO BE VERIFIED BY THE CONTRACTOR ON SITE.
- I. ALL DISCREPANCIES SHOULD BE REPORTED TO C.A./E.A. PRIOR TO THE COMMENCEMENT OF

© CIVIC ENGINEERS LIMITED





THE BRITISH MUSEUM, **ESSENTIAL WATER INGRESS** PROTECTION WORKS

GENERAL NOTES

DRAWING STATUS				STATUS CODE			
INFORMATION					S0		
CE PROJECT No.	SCALE @ A1	DATE CREATED	PN		CHECKED		
1635/10	SHOWN	MAY '23			JB		
DRAWING No.							
1635-10-CIV-XX-ZZ-S-S-00001							