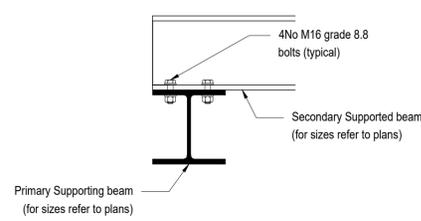
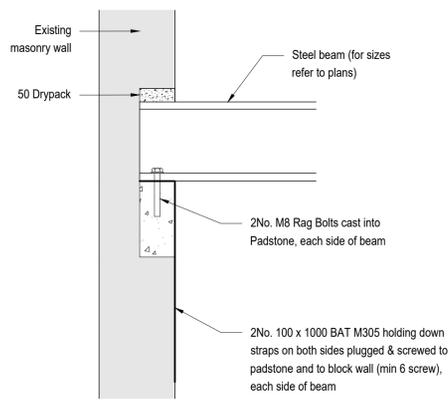


Detail 1: For New Steel Beam to Steel Beam connections



Detail 3: For New Steel Beam to Steel Beam connections



Detail 2: New Padstones



Basement Plan
(Showing Structure Above)

Notes:

Do not scale from this drawing.
This drawing must be read in conjunction with all Architect's, Services Engineer's and Specialist Contractor's drawings, details and specifications.
Any discrepancies shall be checked on-site prior to fabrication of steelwork and brought to the attention of the Architect.
Exact setting out to be agreed between Architect and Contractor.

Under no circumstances are any works to commence on-site prior to the Client appointing a Principal Designer and a Principal Contractor. Client, Principal Designer and Principal Contractor must all be fully conversant with 2015 CDM (Construction Design and Management) Regulations and ensure at all times that they carry out their roles and duties as required under the CDM 2015 at all times.

This drawing and any details must not be reproduced, copied or passed to a third party without the written consent of GeoTop.

- Denotes existing load-bearing masonry
- Denotes new RC or precast concrete slabs
- Denotes new blockwork
- Denotes new brickwork
- Denotes structure to be removed requiring Temporary Works design by Contractor
- Denotes new load-bearing timber stud partitions
- Denotes padstone as per schedule
- Denotes restraint and/or holding down straps required at 1.2m c/c
- Denotes new floor structure as noted on plan
- Denotes assumed span of existing structure
- Denotes new steel beam
- Denotes assumed existing steel beam
- Denotes wall starter required
- Denotes wall toothed into existing
- Denotes new movement joint

Steel Member Schedule

B1	152 x 152 x 37 UC Grade S355-JR *
B2	N/A
B2	N/A
B3	N/A
C1	N/A

* Refer to details sheets for additional plate & connection requirements

Padstone Schedule

P1	440 x 100 x 215 mm precast concrete padstone or 10mm Steel Plate or 3 courses Class 20N Engineering Brick 500mm long
P2	N/A
P3	N/A

Concrete for padstones to be GEN 3 mix made with 10mm maximum aggregate

Lintel Schedule

L1	'CG' galvanised steel standard type open back lintel by 'Catic' to suit cavity width and opening length plus 300mm for end bearing (150mm each end).
L2	15 mm thick continuous steel plate welded to lower flange of steel beam with 6mm intermittent fillet weld 300 mm long with 300 mm spacing. Plate width to suit site conditions
L3	For new internal openings up to 1400mm long in existing single leaf masonry construction, use Precast Concrete Lintel 145mm deep x 100mm wide by Supreme or similar. For opening lengths greater than 1400 and up to 2400mm use Steel beam type UB 178 x 102 x 19.
L4	For new openings in existing cavity masonry wall construction, use 'CG' galvanised steel standard type open back lintel by 'Catic' to suit opening length plus 450mm allowance for total end bearing (225mm each end). For existing solid external masonry construction up to 215mm wide, use 'CN' galvanised steel standard type box lintel by 'Catic' to suit opening length plus 450mm allowance for total end bearing (225mm each end). For existing solid external masonry construction up to 330mm wide, add 1no. Supreme Pre-stressed Concrete Lintel 65mm x 100mm type P100 to inner leaf.

Lintel end bearings to be minimum 225mm in existing walls and 150mm in new walls.

Construction Notes

The temporary structural works for supporting the structure during construction is not included in this drawing and shall be provided by the Principle Contractor. The Contractor shall design, install & execute the temporary structural works in accordance with BS 5975:2008. All temporary works proposals shall be issued to the Structural Engineer for comments prior to commencement of any demolition works.

Under new partitions running parallel to span, existing timber floor joists to be doubled up or new doubled up C24 timber floor joists to be provided. Timbers are to be bolted together with M10 grade 8.8 bolts staggered at 400mm c/c (typical).

Provide 47mm wide C24 timber solid noggins under new partitions running perpendicular to joists span, along supports and for spans less than 4.5m at mid-span. For spans over 4.5m at 1/3 and 2/3 span positions (typical).

All structural steel members and elements (i.e. steel beams, columns, plates, bolts) that are external or within cavity wall are to be galvanised (typical).

Setting out of all new steel beams and structure is to the architectural drawings and details and shall be verified on site prior to ordering structural steelwork. The Contractor must ensure that the headroom over the staircase leading to loft spaces (if applicable) is at least 2.2m.

All structural steel members i.e. Steel beams, columns, plates, bolts and all steel elements in general to be S355 steel (typical).

Where timber floors are to receive tiled floor finishes, joists are to be doubled up and bolted together using M10 Grade 8.8 bolts at 600 c/c and solid noggins are to be provided at 300 mm centres, positioned to ensure that the free ends of all plywood can be secured at appropriate centres. Provide two layers of external grade WBP plywood, a minimum 12.5mm thick screwed at right at right angles to each other to the joists @ 300c/c along intermediate supports and 150mm centres along the edges using 6 dia. x 50 long stainless steel screws ensuring that there are no vertical joints through this ply covering.

The existing structure indicated on this drawing is not a complete representation of all supporting structural elements. The existing structural layout indicated on this drawing is based on non-intrusive inspection where opening works were not undertaken. The Contractor shall bear responsibility to expose and identify the existing structure that are affected by the proposed works and ensure it is coherent with the structural proposals.

The Contractor has a duty and must inform the Structural Engineer if he identifies that any part of the structure differs from what has been indicated on the drawings prior to carrying on with any structural works.

DRAWING STATUS

Construction

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Surveys & Civil Engineering Solutions

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PROJECT
45a Monmouth Street, WC2H 9DG

TITLE
Proposed Basement Plan

SCALE
1:50 at A1

DATE
03/08/23

PROJECT NO.
23016

BY
RK

DRAWING NO.
23016-SD2

REV
05