

— EXISTING WALL

EXISTING TILED GROUND FLOOR

DRY PACK WELL RAMMED BETWEEN

SEPARATELY BEFORE REMOVAL OF

UNDERSIDE OF WALL & TOP OF BEAMS. BEAMS MAY NEED TO BE INSTALLED

EXISTING BASEMENT WALL UNDER TO

FULLY SUPPORTED. CONTRACTOR TO

PROVIDE METHOD STATEMENT FOR

TEMPORARY SUPPORT AND BEAM

INSTALLATION.

**ENSURE EXISTING PIER & WALL OVER IS** 

EXISTING FLOOR STRUCTURE

& STRENGTHENING TO BE CONFIRMED

EXISTING FLOOR JOIST

NEEDLE PROPPING

2/ 203 UC71 BEAMS.

SECTION 5~5 1:10

ZONE.

## SPECIFICATION FOR UNDERPINNING

- 1.0 Responsibilities
  The Contractor shall be completely responsible for the safety of the existing structure during the underpinning operations and he shall design, supply and erect all the temporary supports that may be required or prove necessary during the course of the work. The details of such supports shall be agreed with the Engineer and other interested parties prior to their erection/
- 2.0 Survey & Condition of Building Before commencing work the Contractor shall carry out an inspection and produce a Schedule of Condition for the building to be underpinned. This shall be agreed with the Architect before commencing work. Where necessary repairs shall be effected to enable the underpinning
- to be carried out. 3.0 Programme & Sequence The Contractor shall produce a complete programme for the underpinning
- which must show the sequence of excavation and construction of each section. The programme must be agreed with the Engineer and other interested parties prior to work commencing.
- 4.0 <u>Protection</u>

  The Contractor shall protect the area in which the work is being carried

  The Contractor shall protect the area in which the work is being carried out by the provision of suitable hoardings, fences etc.
- 5.0 Unless otherwise instructed by the Architect all work shall be carried out from within the site. The underpinning shall be carried out in sections not exceeding 1100mm.
- The excavation and construction of the sections shall be carried out in a "hit and miss" pattern such that a maximum degree of support is offered to the wall at all times.
- 6.0 Excavation Where excavations exceed 1000mm in depth or wherever it is found necessary or called for on the drawings, all excavations shall be fully
- The material providing the support to the remote earth face below the foundations shall, if necessary, be left in position. It must not therefore be subject to deterioration. Any gaps between this support and the earth face shall be filled with cementatious grout.
- All timber planking and strutting shall be removed.
- The underside of the exposed foundations shall be thoroughly cleaned of all soil and other loose material before the section of underpinning is constructed.
- Excavations which are left open overnight shall be blinded with 50mm of 1:8 concrete with sulphate resisting cement.
- If water is struck during excavation, excavation shall cease until a method of dewatering has been devised which will not be detrimental to the
- 7.0 Construction of Underpinning
  It is recommended that the underpinning is carried out in concrete sections
- In the event that the Contractor requests that the work be carried out in
- brickwork then his alternative proposals will be considered by the Engineer.
- unless noted otherwise on the drawings,
- or toggle joints at 1/3 positions as noted on the drawings.
- c) The concrete shall be brought to within 75mm of the underside of the

**ISSUE** 

### A period of 24 hours shall elapse between completion of new concrete foundations and the commencement of the dry packing.

A period of 24 hours shall elapse between the dry packing operation and the commencement of excavations to the adjoining section of underpinning.

CONTRACTOR TO PROVIDE METHOD STATEMENTS & DESIGN FOR ALL TEMPORARY WORKS AND CONSTRUCTION OF UNDERPINNING AND RC WALLS.

- 1. This drawing is to be read in conjunction with all drawings and specifications issued by the Engineer, Architect and other
  - 2. DO NOT SCALE THIS DRAWING. Use figured dimensions only.
  - 3. Any apparent discrepancies in dimensions or details should be referred to DOUGLAS KENNEY.

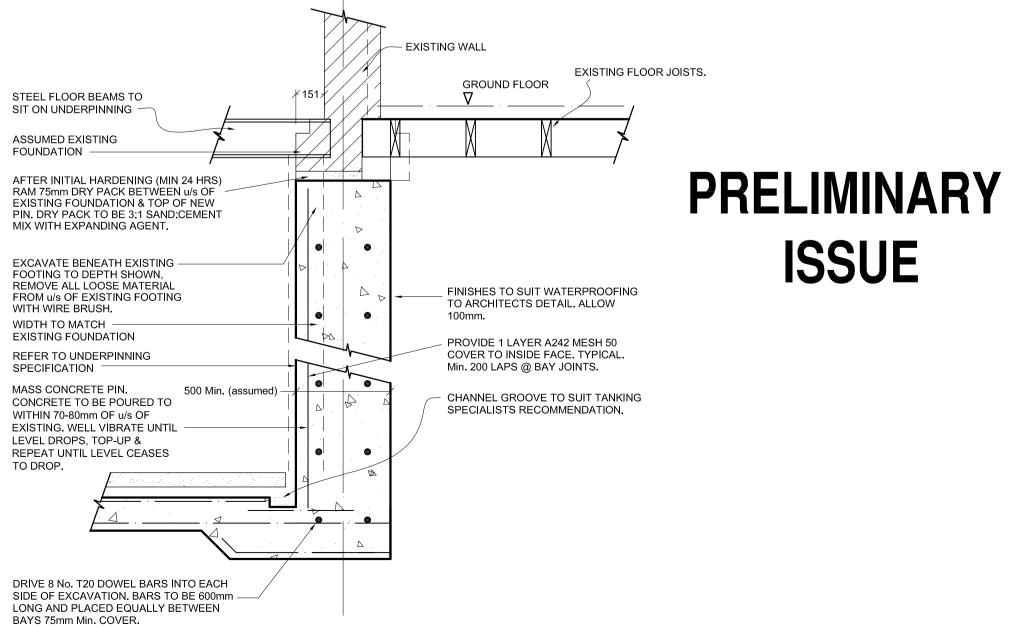
## **MASONRY**

and blocks.

<u>GENERAL</u>

- 1. Unless noted otherwise all walls shown are to be built of bricks
- 2. All bed and perpendicular joints are to be properly filled with
- 3. All blocks used below dpc level are to be dense concrete blocks.
- 4. All mortar used below dpc level is to be 1:3 Ordinary Portland
- Cement:Sand by volume.
- 5. Unless noted otherwise all mortar above dpc is to be 1:1:6 Ordinary Portland Cement:Lime:Sand by volume or an equivalent mix with plasticiser.
- 6. The maximum spacing and type of cavity wall ties used is to be in accordance with Table 6 of the Building Regulations 1991 Approved Document A.
- 5. Spacing requirements of vertical movement joints in block and brick walls to manufacturers recommendations.
- 6. All load bearing block walls to be constructed in strength 7N/mm2 blocks. Blockwork above 1st floor may be constructed in strength 4N/mm2 blocks if practicable.
- 7. Provide BRC Bricktor bed joint reinforcement for two courses above and below all openings, extending 600mm beyond opening. Reinforcement in external leaf to be stainless steel.

- All concrete is to be produced in accordance with BS8110:1997.
- All concrete is to be properly vibrated to ensure compaction.
- 3. All mass concrete is to be Grade 20 with minimum cement content of 240 kg/m³ and a maximum water/cement ratio of 0.6 unless noted otherwise. Adopt sulphate resisting cement unless site investigation carried out.
- 4. The position of any construction joints not shown on the drawing are to be approved by Douglas Kenney.
- 5. All holes through structural members are to be approved by Douglas Kenney prior to casting concrete. **FOUNDATIONS**
- 1. The foundation design is based upon a safe groundbearing capacity of 100 kN/m².
- 2. All foundations are to be positioned centrally beneath walls unless shown otherwise. For full setting out dimensions of walls refer to the Architects drawings.
- 3. All foundations are to be taken to the minimum depth defined on
- 4. Douglas Kenney are to be given the opportunity to inspect all excavations with a minimum notice period of 24 hours.
- 5. All foundation depths to be approved on site by Building Control.



Basement area amended Mar 10 Basement extended Dec 08 General Revisions Sept 08 Amendments Date

DOUGLAS KENNEY STRUCTURAL ENGINEERS AND BUILDING CONSULTANTS The Studio

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Project 82 HIGHGATE WEST HILL LONDON N6

BASEMENT PLAN AS PROPOSED

Client Mr & Mrs Gee

Drawn RS

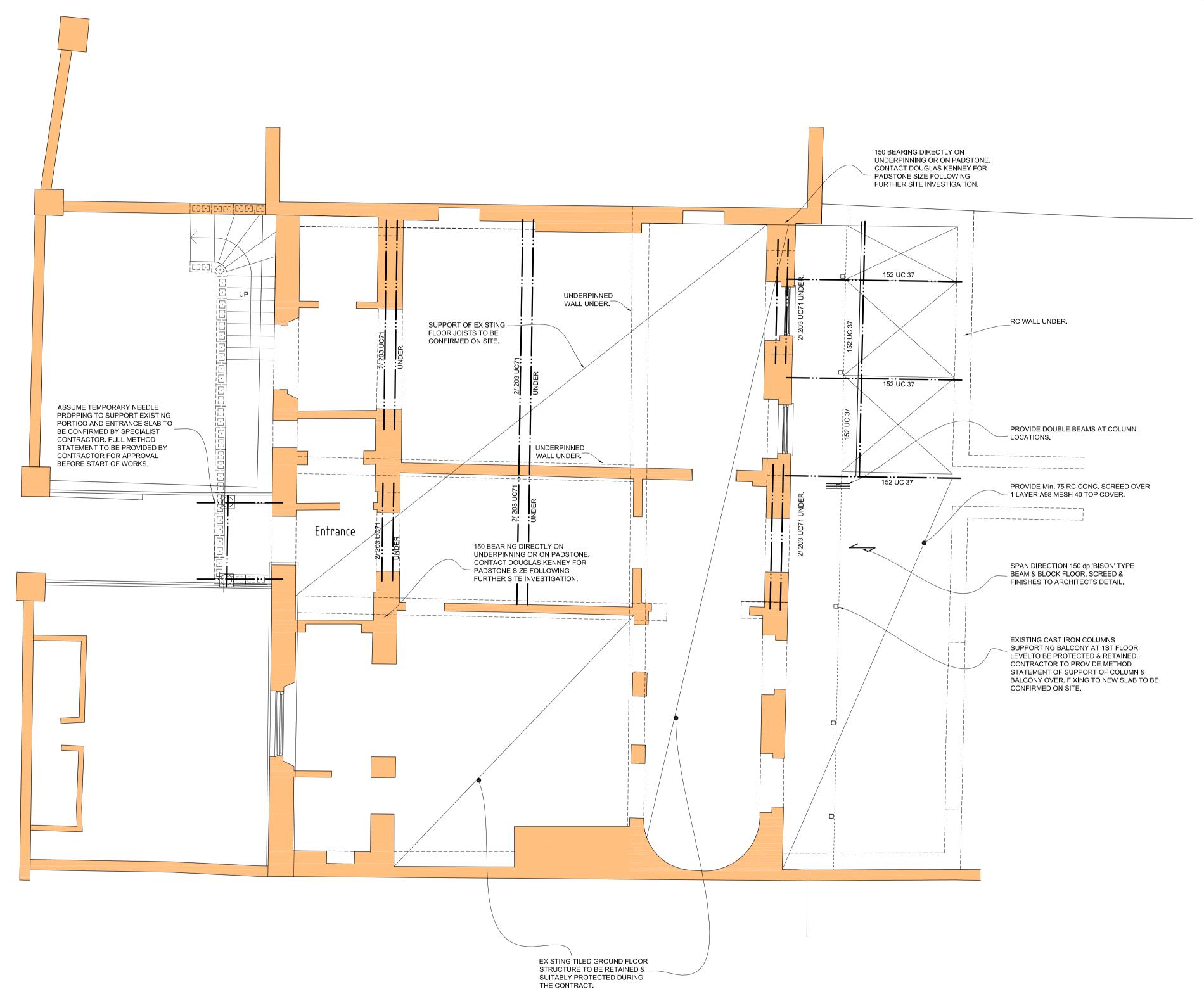
Date

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Drawing Number

Date Scales 1:50

SECTION 4~4 1:20



GROUND FLOOR

# PRELIMINARY ISSUE

## BEAM AND BLOCK FLOORS

- All precast concrete floors are assumed to comprise 150mm nom. deep beams and blocks unless noted otherwise.
- The Specialist designer/supplier is to submit all general arrangement/detail drawings and calculations to Douglas Kenney allowing 14 days for approval prior to manufacture.
- The Specialist/designer supplier is to ensure that the precast concrete floor conforms with both the distributed and concentrated imposed loadings given in BS6399:Pt.1:1996.
- 4. Design loads:

65mm Screed - 1.56 kN/m<sup>2</sup>

Live loadings - General: 1.5 kN/m²

Garage: -: 2.5kN/m²

Partition loads: -: 1.5 kN/m run

- <u>GENERAL</u>
- This drawing is to be read in conjunction with all drawings and specifications issued by the Engineer, Architect and other Specialists
- 2. DO NOT SCALE THIS DRAWING. Use figured dimensions only.
- Any apparent discrepancies in dimensions or details should be referred to DOUGLAS KENNEY.
- <u>STEELWORK</u>
- All steel is to be of British manufacture to BS4360 and fabricated in accordance with BS5950:Pt.1:1990 and any revision.
- 2. Unless noted otherwise all steelwork sections are to be Grade 43.
- Unless noted otherwise all structural steelwork is to be thoroughly cleaned by shot blasting to SA 2.5 standard and primed with one coat of high build zinc phosphate primer prior to dispatch from the works. Top coats are to be as specified by the Architect.
- Unless noted otherwise, all permanently encased steelwork other than concrete cased is to be given two coats of high build bitumen paint.
- Steelwork located below ground is to be encased in Grade 30 concrete with A98 wrapping mesh reinforcement.
- The design of all steelwork connections is to be the responsibility
  of the steelwork fabricator/supplier. Calculations and fabrication
  drawings are to be submitted to DOUGLAS KENNEY for approval at
  least 14 days prior to fabrication.
- The steelwork contractor is to provide temporary erection bracing to ensure a stable structure at all times during erection.
- The steelwork contractor is to clean all mud and deleterious materials from steelwork and make good all damaged areas areas of paintwork prior to handing over structure to main contractor.
- The steelwork contractor is to make allowance for any special crainage or access requirements due to site location and dimensions.
- Roof cladding, vertical cladding, doors, windows etc all to be in accordance with the Architects specification.
- 11. No erection marks are to be visible on the finished structure.
- No site welding, burning or drilling will be allowed without the Engineers written permission.

## <u>TIMBER</u>

- Unless noted otherwise all timber is to be Redwood or Whitewood, Grade as specified.
- 2. Only timber treated with preservative in accordance with BS5268: Pt.5:1989 may be used.
- 3. All wall restraint straps are to be 30mm x 5mm hot dipped galvanised mild steel. All strap flanges are to be fixed flush to and make close contact with the wall. Where there is a gap between the adjacent joist/rafter, the gap is to be packed. Minimum restraint strap size is to be 1350mm long with 4 No. fixings using either No.12 x 50mm long galvanised wood screws or 8swg x 75mm long galvanised nails.
- 4. Noggins should be provided between each strapped joist or rafter.
- 5. All wallplates to be strapped down using 30mm x 2.5mm hot dipped galvanised mild steel straps at 2m max centres. Minimum strap size to be 100mm x 900mm with 5 No. fixings using No.12 x 50mm long galvanised screws plugged into the wall. All strap flanges to be fixed flush to and make close contact with the wall plate.
- Timber plates are to be fixed to steel/concrete beams as indicated on the drawing or min. M10 bolts at 600 crs..
- All proprietary fixings, joist hangers etc. are to be used and installed strictly in accordance with the manufacturer's recommendations.
- 8. All joist hangers to BS6178:Pt.1, size and type to suit joist, design load and crushing strength of supporting structure.
- 8. All plywood to floors to be 19mm thick, grade and finish to suit floor suppliers requirements.

	С	Basement under amended	Mar 10
	В	Basement under extended rooflight extended	Dec 08
	A	General Revisions	Sept 08
	Rev	Amendments	Date



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Project 82 HIGHGATE WEST HILL LONDON N6

Drawing

GROUND FLOOR PLAN AS PROPOSED

Client Mr & Mrs Gee

Drawn RS
Date Aug 08
Checked 1745/0

Date
Scales 1:50
Revisions A B (