



Rev	Description	Date

CODE	SUITABILITY DESCRIPTION
STATUS	PURPOSE OF ISSUE

PROJECT
31 Links Dr
Reading
RG30 4YT

TITLE
Existing Layouts

CLIENT Mr Mohammed Mir		
DRAWN BY HSE	CHECKED BY Michal Mazurek	DATE 16/10/2019
SCALE (@ A1) 1:100		PROJECT NUMBER 1
DRAWING NUMBER A000		REV

FIRE REGULATIONS
All doors, except WC Bathroom, Ensuit, etc. to be FD30 doors with 25mm x 25mm stops glued and screwed and with intumescent Smoke detectors to be mains operated, fully interlinked with battery backup. Self-contained smoke alarms are to be provided in circulation areas to conform with Approved Document Part. Smoke alarms to be interlinked and permanently wired to a separately fused circuit. Smoke alarms to be provided in the hall and landings (within 3m of the all bedrooms). Heat detector to be provided in the kitchen.

INTERNAL WALLS
Form new stud partition where indicated in 100mm x 50mm studs with 100mm x 50mm plates and face with 12.5mm plasterboard. Fill void with mineral wool acoustic insulation. Stud walls to WC to use a moisture resistant plasterboard. Thickness of existing walls to be matched where necessary.

NEW EXTERNAL WALLS
New walls of extensions to bond to existing cavity walls. 300mm cavity walls to be constructed out of 12.5mm Plasterboard on dabs, 100mm aerated blocks 3.6N, with the 100mm cavity full filled with Rockwool Cavity Insulation & finished in 100mm brickwork to match existing. U-values below 0.28W/m²K. Stainless steel butterfly wall ties with insulation retaining close to be provided at 750mm horizontal c/c, at 450mm vertical c/c and at 300mm vertical c/c at all openings. Walls to be bonded to the existing walls using Firix adjustable wall ties fixed and pointed externally. Cavity to be closed at opening with proprietary thermally insulated plastic cavity closers. DTC to be provided in both leafs a minimum of 150m above the finished ground level. Moment joints are required at 9m canters for clay bricks and every 6m for concrete blocks. The exact position if the movement joints to be determined on site by the contractor.

FOUNDATIONS
600mm wide french fill foundations to a minimum of 1.2m below existing ground level and 500mm below roof penetration (450mm wide for 100mm internal block work walls). Any soft spots to be removed until firm ground is encountered and backfilled to formation level with lean mix concrete. Depth and formation of foundations to be agreed, inspected and approved by the Building Inspector prior to placing of concrete. Where clay soils are encountered, the inner faces of the foundation are to incorporate a compressible board: "claymaster" or similar to engineers design. 1:2.4 mix to all new external walls C25/30 concrete with sulphate resistant cement. Where drains pass through foundations, the foundation to be taken down below the invert of the sewer and bridged above the sewer with 100mm wide and 65mm deep precast pre-stressed concrete lintels. A minimum of 50mm clearance to be provided around the sewer.

LINTELS TO NEW OPENINGS
Unless otherwise stated by the Structural Engineer, external lintels are to be Catric or IG galvanized and insulated steel lintels with minimum 150mm end bearings. IG lintels to have cavity tray over. Provide weep holes in brick courses above lintel at 900mm centers. Internal openings to be provided with pre-stressed concrete lintels where necessary. To be confirmed by Structural Engineer if necessary. Contractor to check adequacy of existing where re-used.

MECHANICAL VENTILATION
Extract fans capable of extracting 30 liters/second are to be fitted in the kitchen and 15 liters/second to be fitted in WC/Utility Room. Fans to client specification. All fans are to be ducted to external air.

WINDOWS & DOORS
Doors and any windows with glazing below 800mm high to be glazed in toughened glass to BS6206 in accordance with the requirements of Approved Document Part K. New windows to provide equivalent to a minimum of 5% floor area ventilation openings and to be fitted with with 800mmx2 trickle vents. All windows to be double glazed with a 16mm air gap and with a low-e coating to conform with Approved Document L1, giving a U value of 1.6 W/m²K. Window and door frames to be sealed with mastic at abutments with external course.

LEAD FLASHING
Code 4 lead flashing to be provided at abutments of new roofs with a minimum of 150 mm high upstand and to abutment of dormer cheeks to the roofs. Provide to lead cover flashing securely wedged and pointed into mortar course.

STEELWORK
Fix new steel and timber beams where indicated in accordance with the Structural Engineer details. Steel beams to be clad in plasterboards and plaster or painted with intumescent paint to give a minimum of 30 minutes fire resistance. Steel beams which stand down from the ceiling to be clad in Gyproc fire performance plasterboard and skimmed. Contractors to confirm wall structure and details prior to Any ordering of steels.

SURFACE WATER & WASTE
New 110dia PVCu guttering with new 80mm diameter down Pipes. Underground drainage to be 110mm diameter UPVC encased in pea single laid 1:40 falls incorporating flexible joint. All waste pipes to be 40 mm diameter whit traps with 75mm seal. Surface water from new roof to discharge into new soakaways whiling the rear garden. New soakaways to be constructed a minimum of 5 m from the dwelling. Soakaways to be in accordance with the requirements of BRE 365 and to provide a capacity of 0.006 cubic meters for every square meter of roof.

SOIL STACKS
100mm dia UPVC soil stacks. Stack to be vented not less than 900mm above adjacent window opening. New external drainage to be Black UPVC. All drainage to comply with the requirements of AD pt H and LABC. Any stub stacks to be 100mm dia UPVC. Air admittance valve to have push fit joints to 100 mm pipework.

PLUMBING
Internal sanitary installations - ranges to be specified by Client and layouts to be confirmed. All waste pipes to be 50mm diameter to combined waste runs with traps with 75mm seal. WC's to have 100mm dia waste and trap with 75mm seal. WC's to be connected to soil pipe using plastic pan connector. Anti-siphonic traps to be installed where there is any possibility of negative pressure occurring in the waste run. Overflow pipework to have sufficient access to allow rodding of all sections.

ROOFLIGHTS & ROOF LANTERNS
If rooflights & roof lanterns are proposed, install in accordance with manufactures instructions. Provide lead flushing around the rooflights opening and double up the trimmers around the openings. Rafter at either side of rooflights to be double up.

ELECTRICAL WORK
Electrical work to comply with IEE guidelines and to accord with the requirements of Approved Document Part P. All new electric works to be designed, installed, inspected and tested in accordance with BS 7671 and is to be carried out by a Part P Approved Contractor who is to issue Test Certificates on completion of the project. 80% of fittings to new rooms to be provided with energy efficient light fittings that will only receive lamps having a luminous efficiency greater than 45 lumens / circuit watt.

NEW FLOOR CONSTRUCTION TO THE EXTENSION - SOLID FLOOR
From new solid ground floor in 100mm concrete ground slab on 1200g Visqueen DPM on 150mm well consolidated hardcore. DPM to be dressed up to existing DPC level. Lay 75mm Celotex insulation over new floor and cover with 500g polythene vapour control layer. 25mm insulation to be dressed up to the external wall. Overlay floor with 75mm reinforced sand / cement screed.

Where existing suspended timber floor or concrete floor air bricks are to be covered by new extension ensure that cross ventilation is maintained by connecting 100mm dia UPVC Pipes with 100mm concrete cover laid under the extension. Pipes to terminate at new 65mm x 215mm air bricks with cavity tray over.

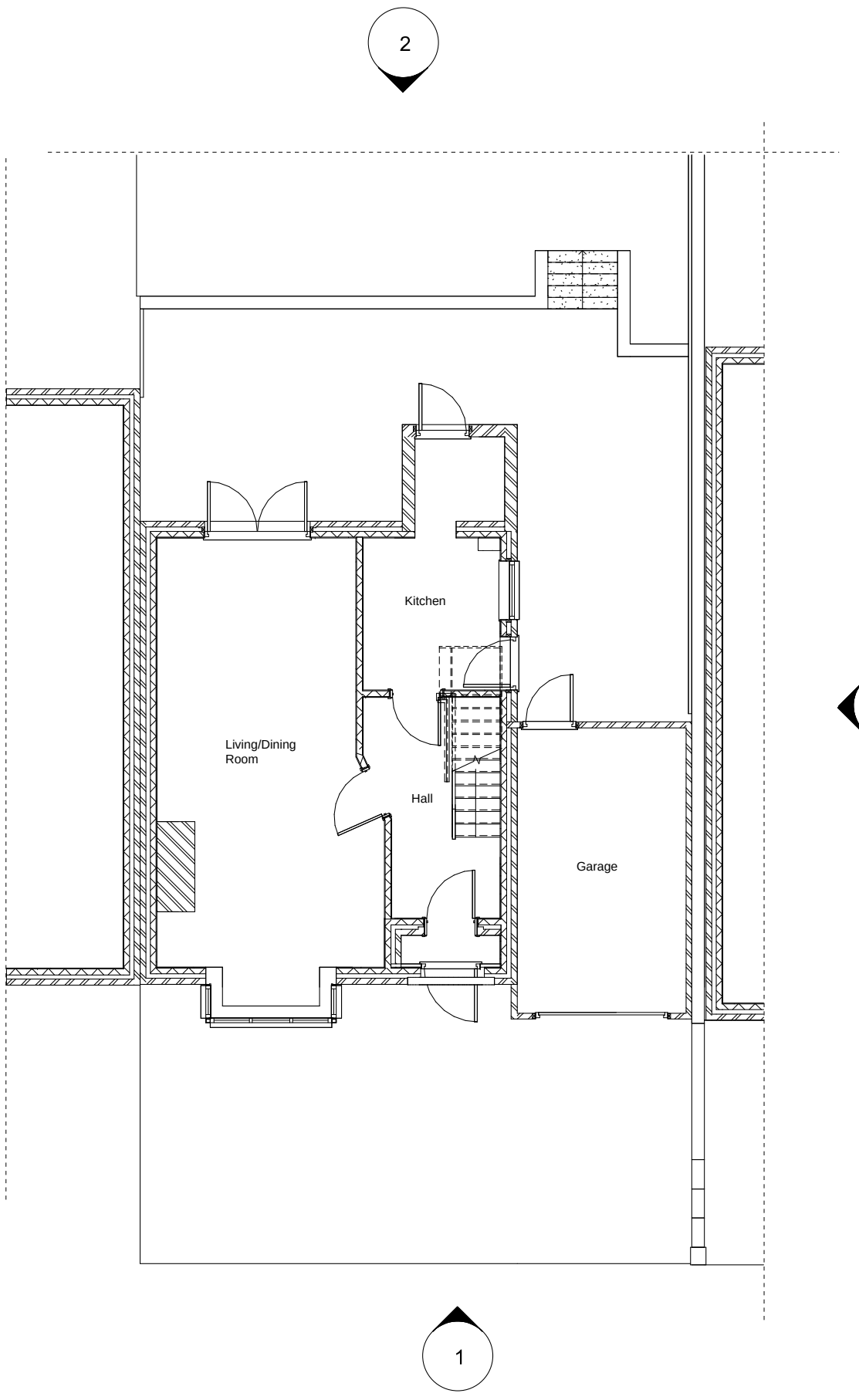
ALTERNATIVE GROUND FLOOR CONSTRUCTION - BEAM & BLOCK FLOOR
Alternatively form new floor in .Stressline" or similar pre-stressed concrete beam and block infill flooring system in accordance with manufactures specification and instruction. All topsoil and vegetable matter to be removed. From a clear 150mm void between the underside of the concrete floor system. Incorporate a hyload DPC immediately under all beam bearings and immediately on top of concrete beams and infill blocks prior to wall construction. Void to be cross ventilated via 225mm x 75mm air bricks installed at 2000mm centres in external and internal foundations walls to allow through ventilation of void. Provide 75mm Celotex insulation and 25mm Celotex insulation upstands to floor perimeter to provide a U value of 0.22 W/m²K. Lay a 500g polythene VCL over the insulation and finish with 75mm reinforced cement / sharp sand screed.

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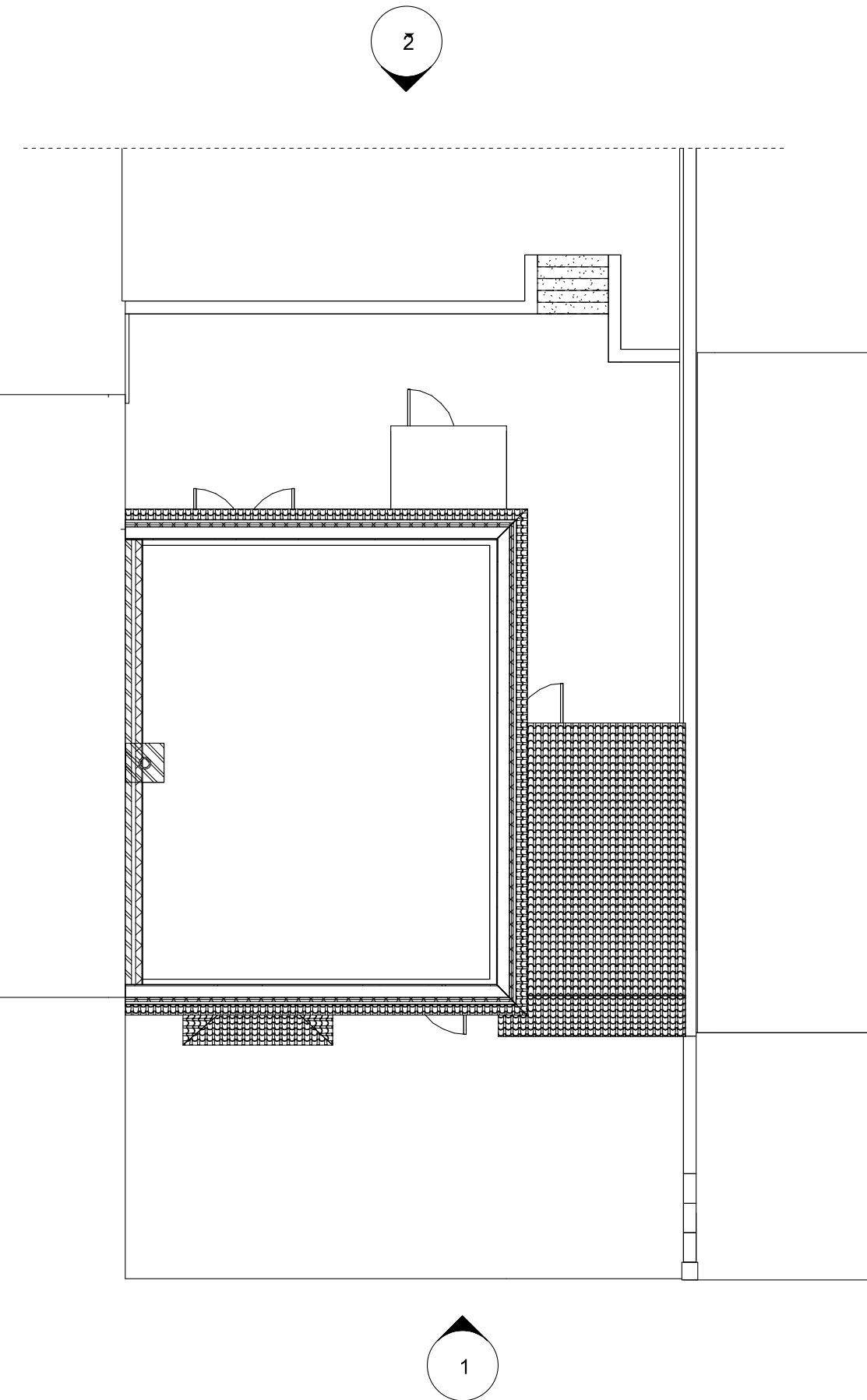
HOT WATER & HEATING INSTALLATION
New underfloor central heating to be fitted in extension. All works and any new gas condensing boiler to confirmed to the requirements of AD Part L. All plumbing, including the replacement or re-positioning of the existing boiler to be carried out by a Gas Safe registered plumber. Client to confirm new position of boiler if required. Flue to be ducted to external air.

NEW PITCHED ROOF STRUCTURE
New pitched roof to be built from 200 x 50mm rafters @ 400mm c/c bird mounted over 100 x 50mm softwood wall plate bedded to top of internal cavity skill wall and held down with 30 x 5mm mild steel straps @ 1.2m c/c, bent at right angles to give minimum 75mm fixing to the top of the wall plate. New pitched roof to abut existing masonry cavity wall. Rafter to be bird-mounted and supported at high level on 250 x 50mm SW fixing plate rawl bolted to wall. Roof to be flashed with Code 4 lead flashing. The roof shall be covered with tiles to match existing main roof. Whole roof area to be insulated with Celotex GA4000 100mm thick between the rafters and 62.5mm plasterboard with insulation fixed to underside of rafters. Roof to achieve a U-value of at least 0.18 W/m²K.

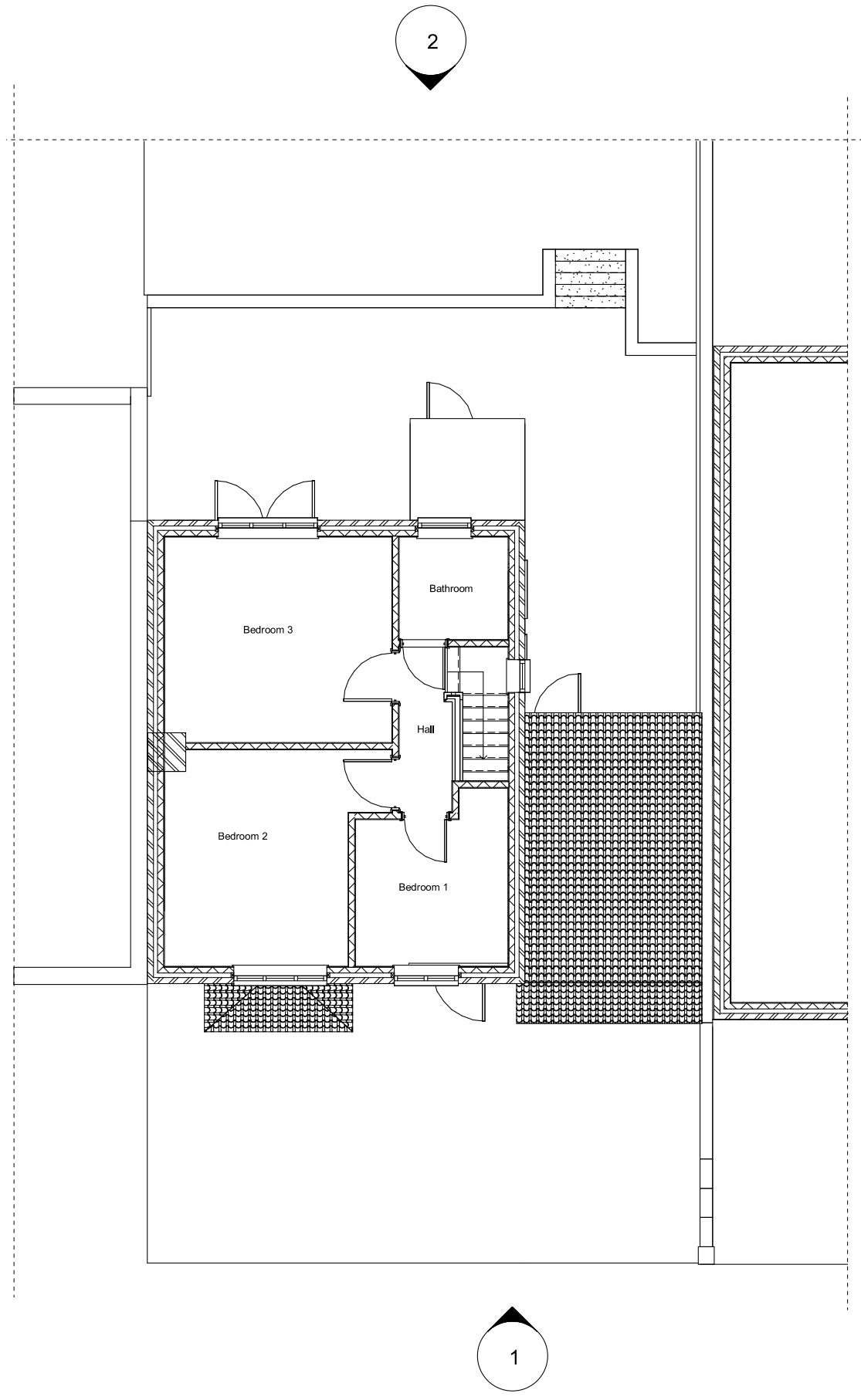
DORMER ROOF STRUCTURE
For m a cold deck Flat roof with 200 x 47mm C24 joists at 400mm c/c. Joists to be firmly anchored to walls with 150mm Rockwool insulation between the timber joists with a vapour control layer. Provides a U-value of 0.16 W/m²K. Flat roof finished in a single ply roof membrane system such as Fibreglass, use firing pieces to provide a 1:40 fall. Form ceiling in 12.5mm vapour check plasterboard and plaster. Where downlight are fitted in ceiling voids have to be fitted in sound and fire protecting hoods.



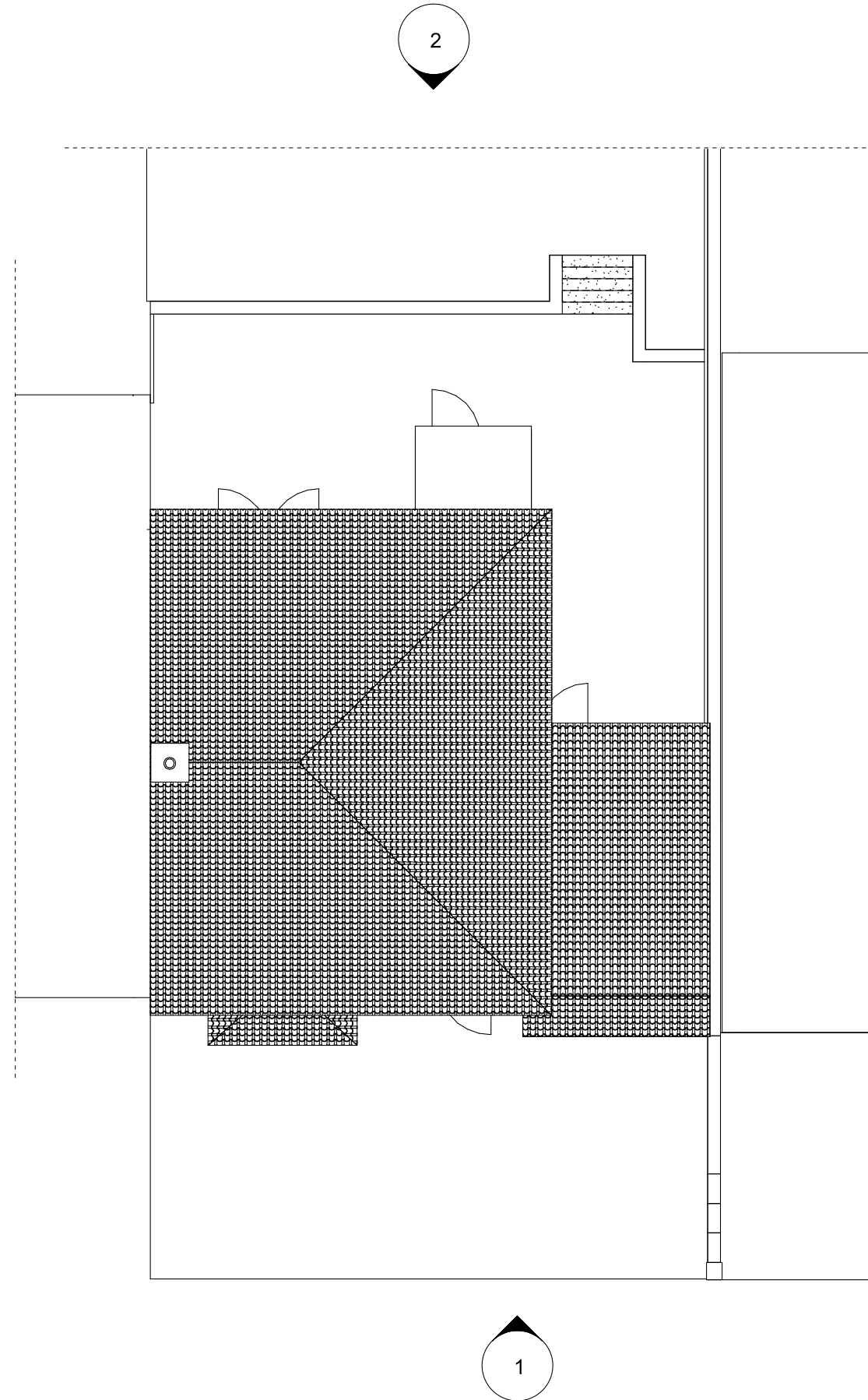
1 Ground Floor - Existing
1:100



3 Loft - Existing
1:100



2 1st Floor - Existing
1:100



4 Roof - Existing
1:100