

**DRAWING TO BE USED FOR BUILDING REGULATIONS APPROVAL APPLICATION PURPOSES ONLY**

**SPECIFICATION NOTES**

**SMOKE DETECTORS**  
Provide ceiling mounted mains operated interlinked smoke detectors to BS EN 1460 2005 and located in accordance with BS 5839 part 6 2004 ie 1 No alarm located adjacent to the kitchen and elsewhere detectors are to be installed within 3000mm of a bedroom doors.

**ENERGY EFFICIENT LIGHTING**  
Provision to be made for energy efficient lighting, ie fittings that only take lamps having a luminous efficacy greater than 40 lumens per circuit watt, provided at a rate of 1 per 25m<sup>2</sup> of floor area or 1 per fixed light fitting.

**ELECTRICAL INSTALLATION**  
All electrical work is to be carried out in accordance AD 'P' and must be designed, installed and tested by a person competent to do so and appropriate BS7671 electrical certificate to be issued to the LA upon completion.

**SWITCHES AND SOCKETS**  
Electrical switches and sockets outlets for lighting and other equipment in habitable rooms at appropriate heights between 450mm and 1200mm from finished floor level.

**CENTRAL & WATER HEATING**  
It is intended that the new extension is to utilise the existing boiler but it is recommended that the applicant/building owner seeks advice from a Heating and Plumbing engineer or contractor to confirm the boilers suitability for these increased requirements. Thermostatic valves to be fitted to all new radiators.

**STEELWORK/BEAMS/LINTOLS**  
For details of lintels refer plans and or Structural Engineers details.

**FIRE PROTECTION**  
All steel beams, steel lintels in load bearing walls to be encased with 1 layer of 12.5mm plasterboard to provide a minimum of 1/2hr fire protection. Steel floor support beams to be painted in the relevant thickness of intumescent paint for the size of steel to give min 1/2hr fire protection.

**TIMBER STAIRS AND STAIRCASE**  
Timber staircase to meet specification conforming to the following:-  
Floor to floor 6 width of staircase as indicated on the plans.  
Note:- nosing pitch not to exceed 42°. Minimum going to tapered treads to be 50mm. Provide Balustrade 900mm above nosing line 1000mm above landing level. 19m headroom to be provided above stair string line. Staircase to be in accordance with BS 585 part 1.  
Safes to be finished with 12.5mm plasterboard & 50mm treated timber battens at approx 300mm vertical centres. The top is to be wrapped for the whole of its length in min. 25mm thick rigid mineral wool insulation quilt to include any branches in the duct. Suitable access points are to be provided as required to allow inspection/rodding of the ssp.

**PLUMBING**  
All hot and cold water supply pipework is to be in either copper tube to EN1057:1996 formerly BS2871 P1:1971 to be installed in accordance with current codes of practice and local water authority requirements or in high quality flexible plastic pipe to be installed in accordance with the manufacturers instructions and details. All pipework is to be insulated using an insulation material having a thermal conductivity of 0.045w/m<sup>2</sup>k and a thickness equal to the outside dia of the pipe up to a max thickness of 40mm. Applies to all pipework located in ducts, voids and roofspaces. The incoming water supply is to be provided with an external stopcock to the local water authority requirement.

**DOORS AND WINDOWS**  
All frames to be built in as work proceeds wherever possible. All doors and windows are to be double glazed using low-E coated sealed double glazed units to achieve a u value of approx 1.6W/m<sup>2</sup>k. Doors and windows are to be glazed in accordance with part II of the Building Regulations 1992 edition and BS206 1981 which requires any glass within 800mm of finished floor level and in door and side panels within 300mm horizontal distance of a door to a max height of 1500mm above finished floor level to be glazed using toughened or laminated glass. Windows (location as noted on the plans) are to be provided with trickle ventilators (typically giving 8000 cc/m<sup>2</sup> of vent area) set into the head of the window to provide throughout the dwelling a minimum total of min 40,000 cc/m<sup>2</sup> of controllable ventilation. Opening windows, below 400mm above finished floor level, are to be fitted with a restricting device allowing window to open no more than 100mm.

**WINDOWS FOR 'MEANS OF ESCAPE'**  
Habitable room windows to have opening light(s) sized for 'means of escape' purposes having a min area of 0.3m<sup>2</sup> and being min 450mm in either direction. Where single opening light does not provide sufficient area 2no opening lights are to be provided utilising 'flying' mullion on the trailing light to give required overall clear opening.

**FLASHINGS**  
Flashings generally to be code 4 lead sheet in lengths not exceeding 1500mm and to be installed in accordance with LSA recommendations and details. Stepped lead flashings are to be secured using lead wedges dressed a min 25mm into brick joints. Flashings to be located min. 100mm above pitched roofs. Cavities aprons above lintels are to have a min. lap over lintel length of 600mm. Cavity aprons over raking abutments. Where exposure demands horizontal flashings to be code 3 lead. All leadwork is to be treated with patination oil upon completion to reduce staining.

**GABLE WALL CONSTRUCTION - TO RECEIVE RENDERED FINISH**  
235mm thick 3.5N/m<sup>2</sup> density blockwork to BS6073 Part 1:1981 bedded in 1:1:6 mortar with recessed joints. Masonry walls to be constructed in accordance with BS5628 Part 3:1995. Walls to be finished internally with 12mm plaster finish applied in 2 coats. min. 11mm undercut with 2-3mm finish coat. All plaster should be used in accordance with the recommendations in BS5492 code of practice for internal plastering. Overall 'u' value of external walls is to be min 0.27W/m<sup>2</sup>K.

**EXTERNAL RENDERING** to new and existing walls  
All rendering to comply with BS 5262 'External Rendered Finishes'. The contractor shall supply and fix all necessary 'Expamer' or similar approved stainless steel strip beads, and render in accordance with the manufacturers instructions. New construction to give an overall u value of 0.28W/m<sup>2</sup>K.

**EXISTING WALLS AS PARTY SEPARATING WALLS**  
Existing walls to be drilled using 80mm overall thickness of Rockwool acoustic 'liner board' to achieve sound index Rw of 50dB. Lining to be installed in accordance with manufacturers instructions/recommendations. Lining to be taken up to underside of roof decking material and fire stopped using a resilient fire stopping material to give min 1 hour fire resistance.

**TILED DORMER WALL CONSTRUCTION**  
Vertically hung concrete plain tiles (colour/texture to match new roof tiles) @ 115mm gauge on 38x25 tanalised battens on sheathing felt on 50x100 sw timber wall studs @ max 450mm cts (doubled up either side of window jamba). Wall insulated using 90mm Celotex GA4000 insulation board between studs with Celotex PL4000 overall thickness 57.5 (12.5mm vapour resistant plasterboard & 45mm PIR insulation) fixed internally with skim finish. Overall construction to achieve min 'u' value of 0.18W/m<sup>2</sup>K.

**INTERNAL STUD PARTITIONS**  
Internal partitions to be 70x63 sw studs @ max 600ccs with 70x70 sole and head plates with noggin as required. Partitions to be finished either side with 12.5mm Gyproc Wallboard and 2-3mm skim coat. Walls to have 75mm Rockwool mineral fibre insulation (density 10kg/m<sup>3</sup>) within cavity. Allow for pattresses for fixing of light switches and socket outlets within the stud framing.

**SECOND FLOOR CONSTRUCTION** Design Loading - Domestic imposed 1.5kN/m<sup>2</sup>  
22mm tongued and grooved softwood boarding or 22mm flooring grade chipboard on floor joists (size as stated on plans/section) at 450mm centres. 38x38mm softwood herringbone strutting to be provided in between joists @ maximum 2000mm centres. 5x30x1200mm girth galvanised m.s. straps to be fixed across joists and fixed to gable walls at maximum 200mm centres. Straps to be carried over at least three joists with noggin to be provided in between. Noggin size to be at least half the depth of the joist and a minimum of 38 mm thick. Where first joist is not tight to face of wall provide a packing piece at least half the depth of the joist. 12mm thick plasterboard ceiling fixed to the underside of the lower batten. Ceiling is to be installed in accordance with the manufacturer's current technical literature and recommendations. Ceiling to be finished with nom. 2-3mm plaster skim coat. 100mm Rockwool RW2 quilt, density 10kg/m<sup>3</sup>, to be provided for sound insulation, laid on chicken wire to underside of flooring and between joists.

**ROOF CONSTRUCTION (cut roof)**  
Nom 38x25 treated timber battens at the manufacturers recommended gauge laid over Tyvek 'Supra' breathable membrane to BBA Certificate 94/3054 over rafters (size as indicated on plans/sections) at max. 450mm centres. Rafters are to be installed at max 1200mm centres and are to be fixed in accordance with manufacturers recommendations. Rafters are to be strapped at gable walls at max. 200mm centres using 30x5 galv. ms straps fixed to inner leaf of external wall and taken across at least 3 No rafters and supported on min. 30x50 timber noggin fixed between rafters. Lateral restraint to be provided at ceiling the level using 30x5 galv. ms straps at max. 200mm centres with strap bent once over rear leaf of external wall and taken across at least 3no joists supported on min. 50 x 50 treated timber noggin fixed between joists.

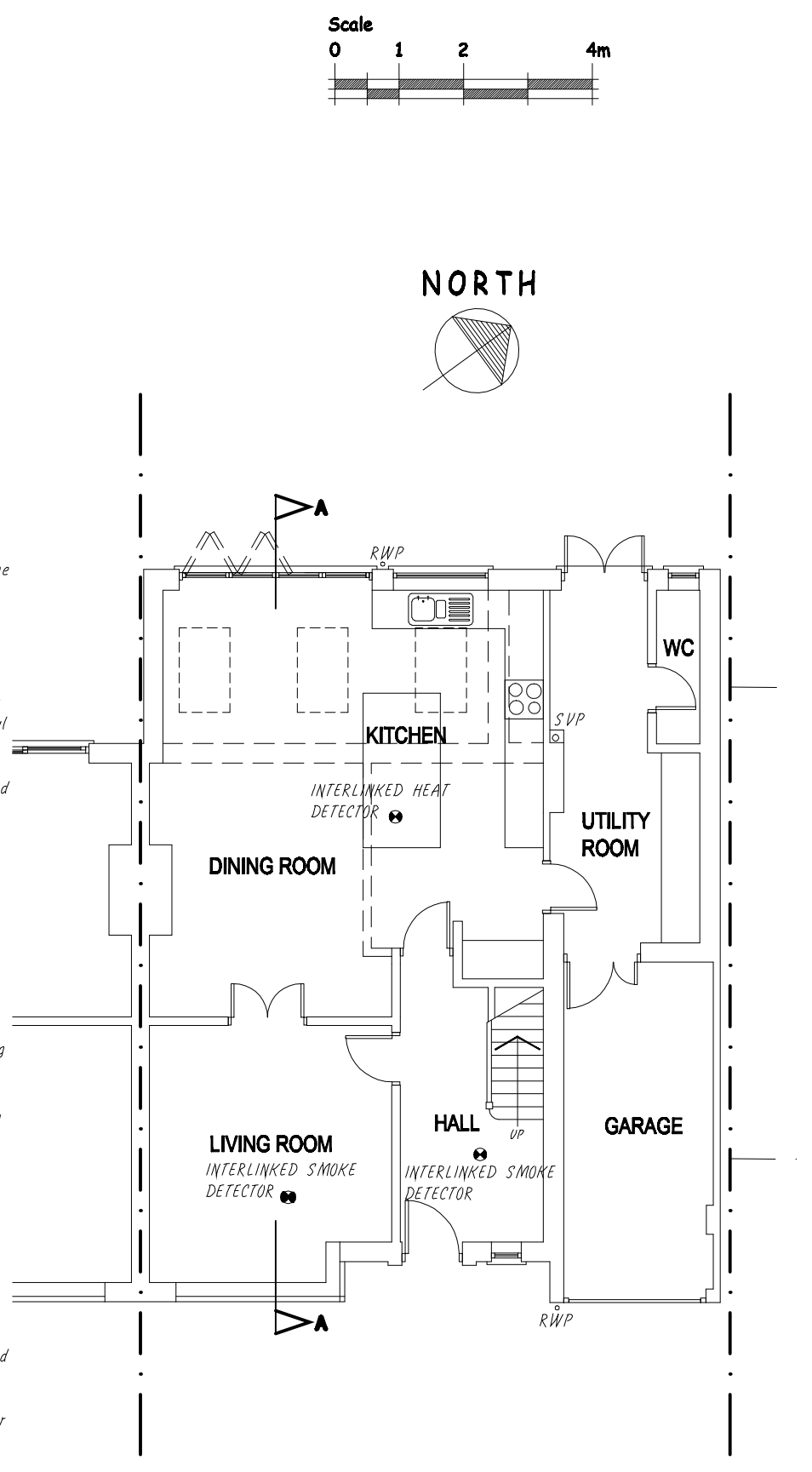
**CLAY OR CONCRETE TILE ROOFING**  
Supply and fix clay or concrete tiles as specified to comply with B.S.C.P. S536 slating and tiling. Cut tiles to form clean straight junctions in such a manner that its width is not less than half the width of a full tile and its length is intact. Twice not every fifth course, every tile in top two courses at ridge and every tile at verge using aluminium not to BS 1202 pt 3. Clay tiles slightly open jointed with straight horizontal and vertical joints centred over the below. Maintain bands at ends with courses of width and a half tile. Form verges with an inward tilt using an undercloak of asbestos free board or a course of plain tiles. Do not cut tiles at verges. Form ridges using half round or angles ridge fittings as specified to match tiles as specified and bed units in 1:3 mortar. Clay tiles to be laid to minimum pitch 42.5° and concrete plain tiles to a minimum pitch of 35° where recommended by the manufacturer. Min. lap to be 100 mm unless otherwise specified. Tiles fixed to nom 38x25 treated timber battens at manufacturers recommended gauge.

**ROOF INSULATION AND VENTILATION - Loft Conversion:-**  
Roof to be insulated using 100mm Celotex GA4000 insulation board laid between rafters with Celotex PL4000 overall thickness 57.5 (12.5mm vapour resistant plasterboard & 45mm PIR insulation) and skim finish to underside of rafters and fixed in accordance with the manufacturers instructions. Construction to give an minimum overall u value of 0.18W/m<sup>2</sup>K. Construction to equip a clear 50mm ventilator air space is maintained above the insulation line. Roof to be non ventilated using 'Tyvek' breathable membrane.

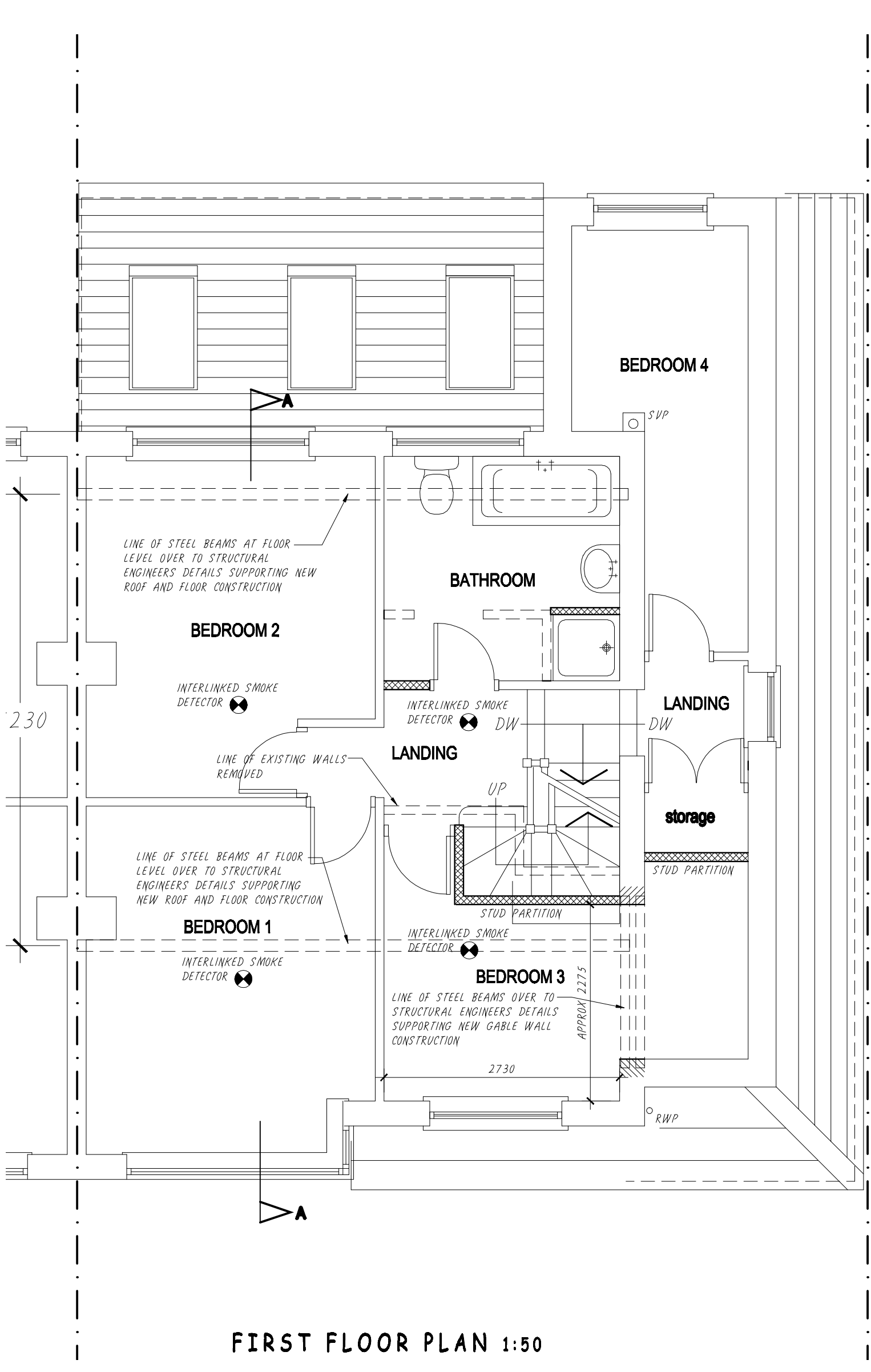
**FLAT 'WARM' ROOF CONSTRUCTION**  
Proprietary single ply membrane (Sarnafil or similar) on 120mm Celotex insulation on 1000 gauge vapour control layer on 18mm OSB strutting board decking on flat roof joists (size as stated on plans/sections) @ 400mm cts with fixings to give falls of 1 in 60. 38x38mm softwood herringbone strutting to be provided in between joists @ maximum 2000mm centres. 5x30x1200mm girth galvanised m.s. straps to be fixed across joists and tucked into cavity at max 200mm centres. Straps to be carried over at least three joists with noggin to be provided in between. Noggin size to be at least half the depth of the joist and a minimum of 38 mm thick. Where first joist is not tight to face of wall provide a packing piece at least half the depth of the joist. Vertical strapping min 1m in length to be provided at eaves level @ max 2m cts. Ceiling to be 1no. Layer 12.5mm plasterboard and skim. Total 'U' value 0.18W/m<sup>2</sup>K.

**CEILING FINISHES**  
Surface finishes to sloping ceilings to achieve a min class 1 surface spread of flame

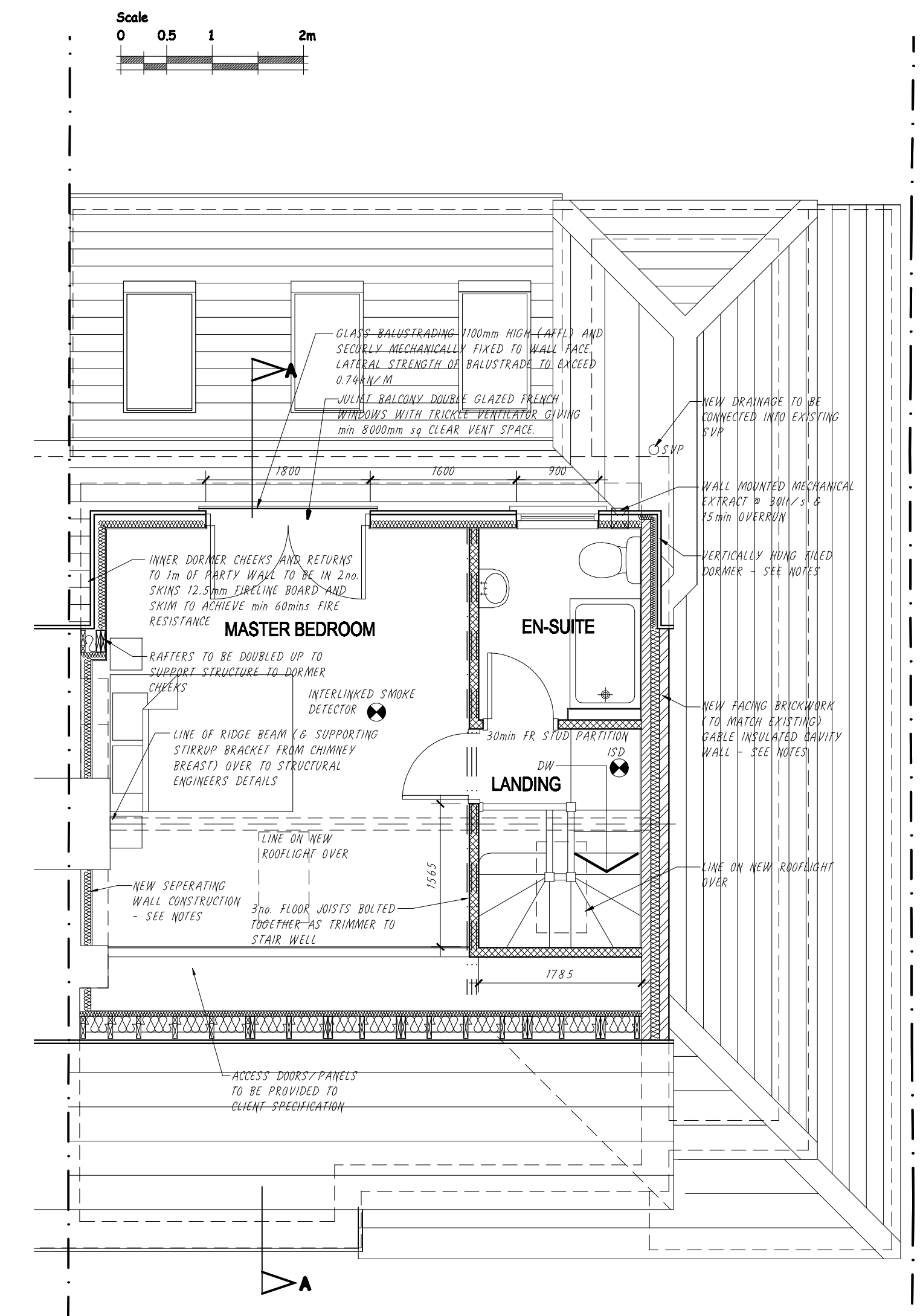
**ROOF WINDOWS**  
Roof windows to be supplied by Velux ref GGL/M06 or similar approved rooflights/windows. Windows to be installed in accordance with manufacturers instructions utilising the correct performed flashing for the roofing material and window type specified. Windows to be supplied with standard lining. Windows to be double glazed with low-E coated glass to give min U value 1.6W/m<sup>2</sup>K. Inner pane to double glazed units to all windows to be fitted with toughened or laminated glass.



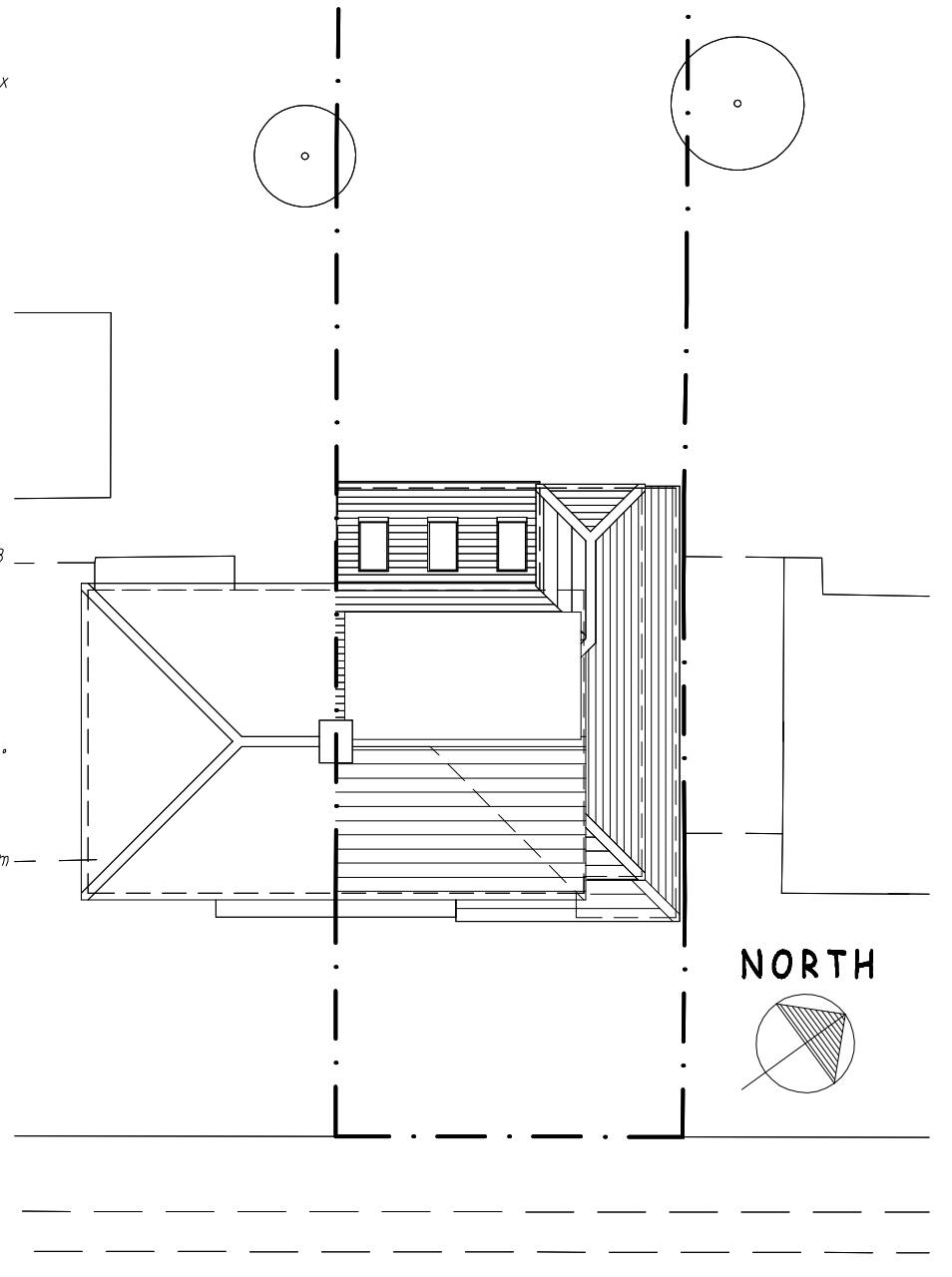
**GROUND FLOOR PLAN 1:100**



**FIRST FLOOR PLAN 1:50**



**SECOND (LOFT) FLOOR PLAN 1:50**

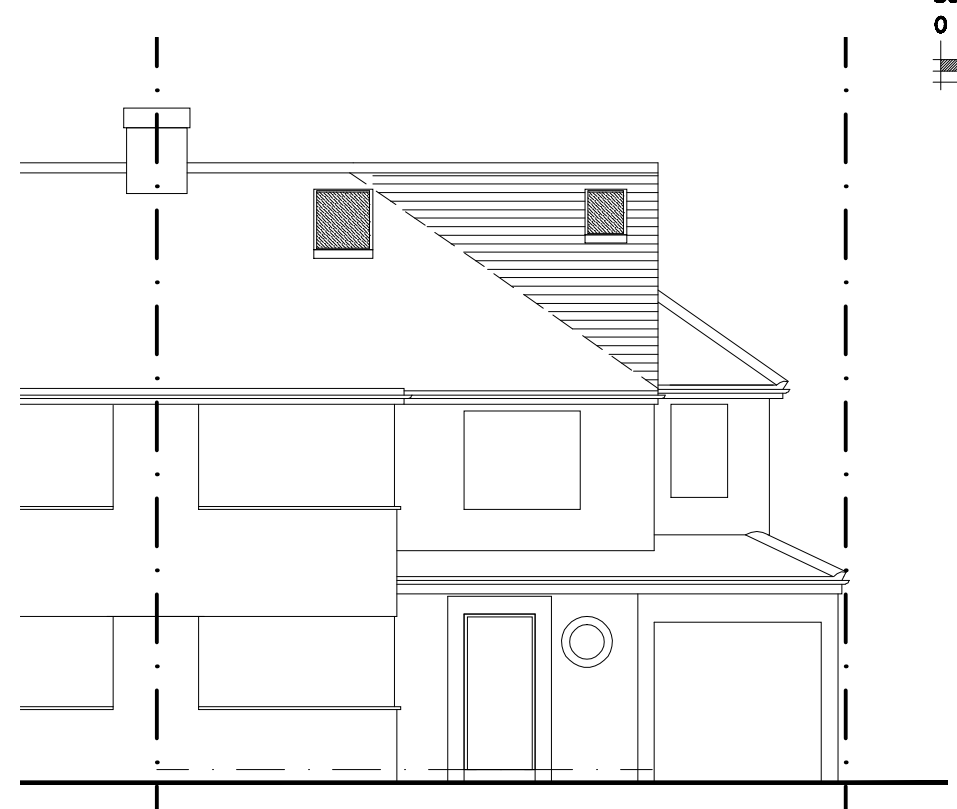


**BLOCK PLAN 1:200**

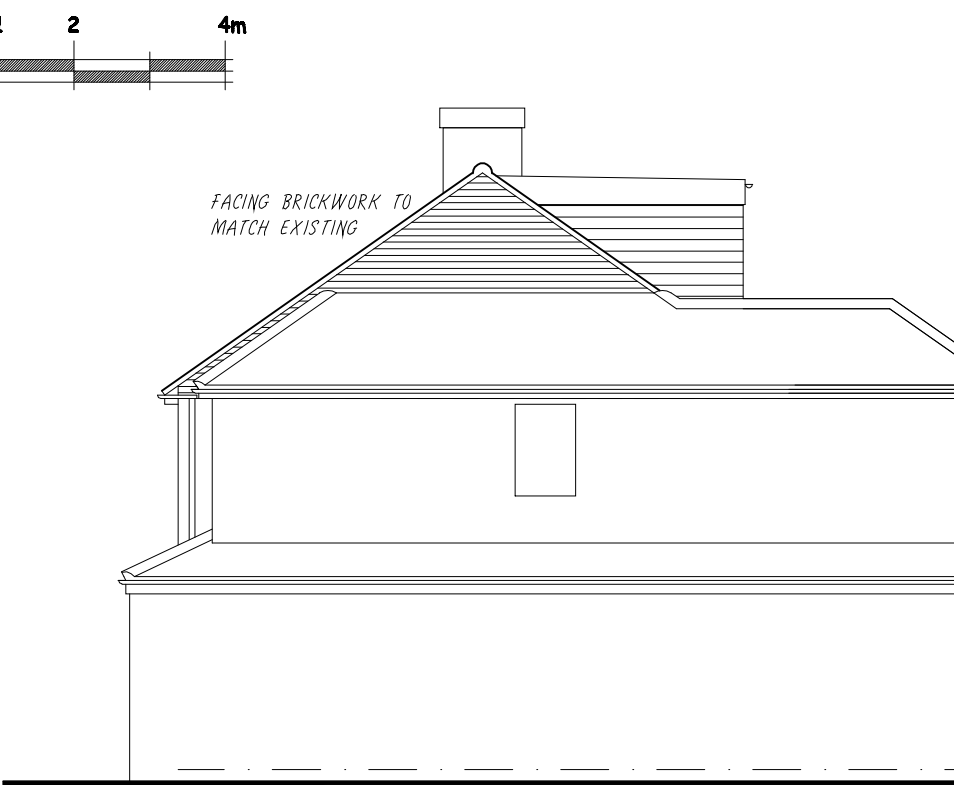
NOTE: ALL DOORS FROM THE HALLWAY OR LANDINGS FROM TO HABITABLE ROOMS TO BE OF SOLID CONSTRUCTION WITH NO GLAZING OF GLASS APPARATUS

OVERALL ROOF VOLUMES:-

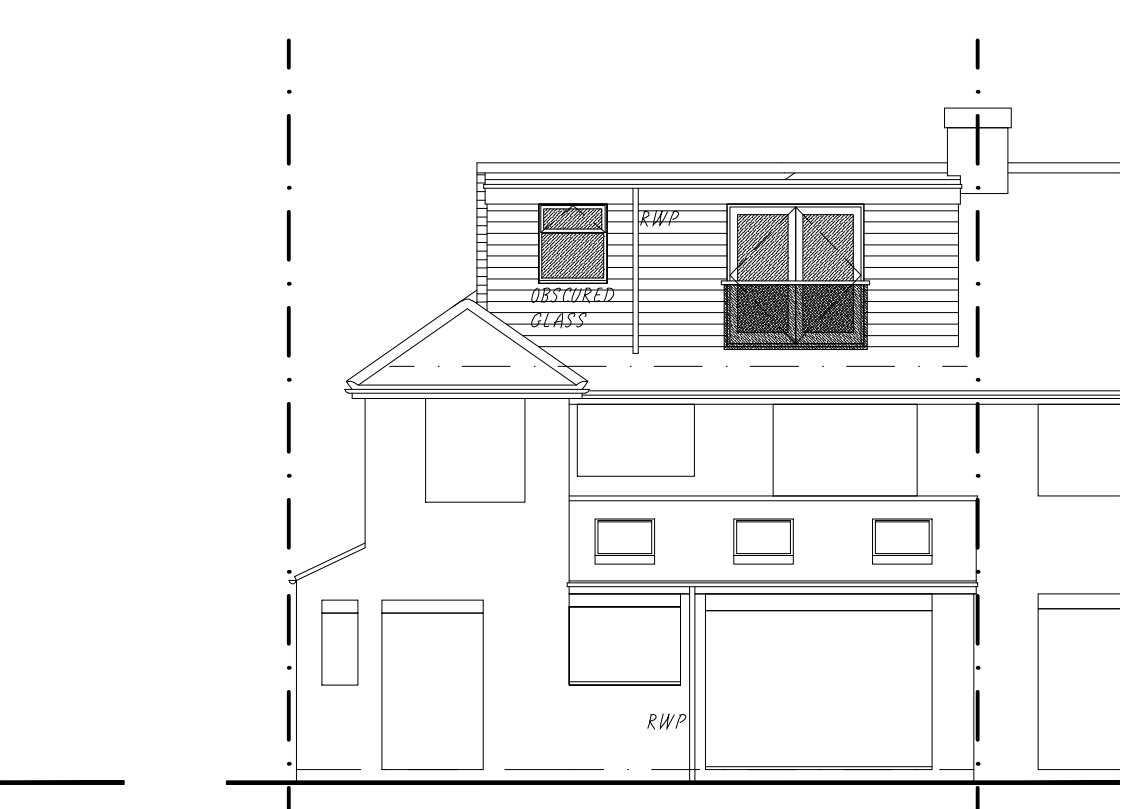
REMAINING EXISTING EXTENSION ROOF	- 8.5m <sup>3</sup>
'HIP TO GABLE' CONVERSION	- 16m <sup>3</sup>
BOX DORMER	- 22.9m <sup>3</sup>
<b>TOTAL</b>	<b>- 47.9m<sup>3</sup></b>



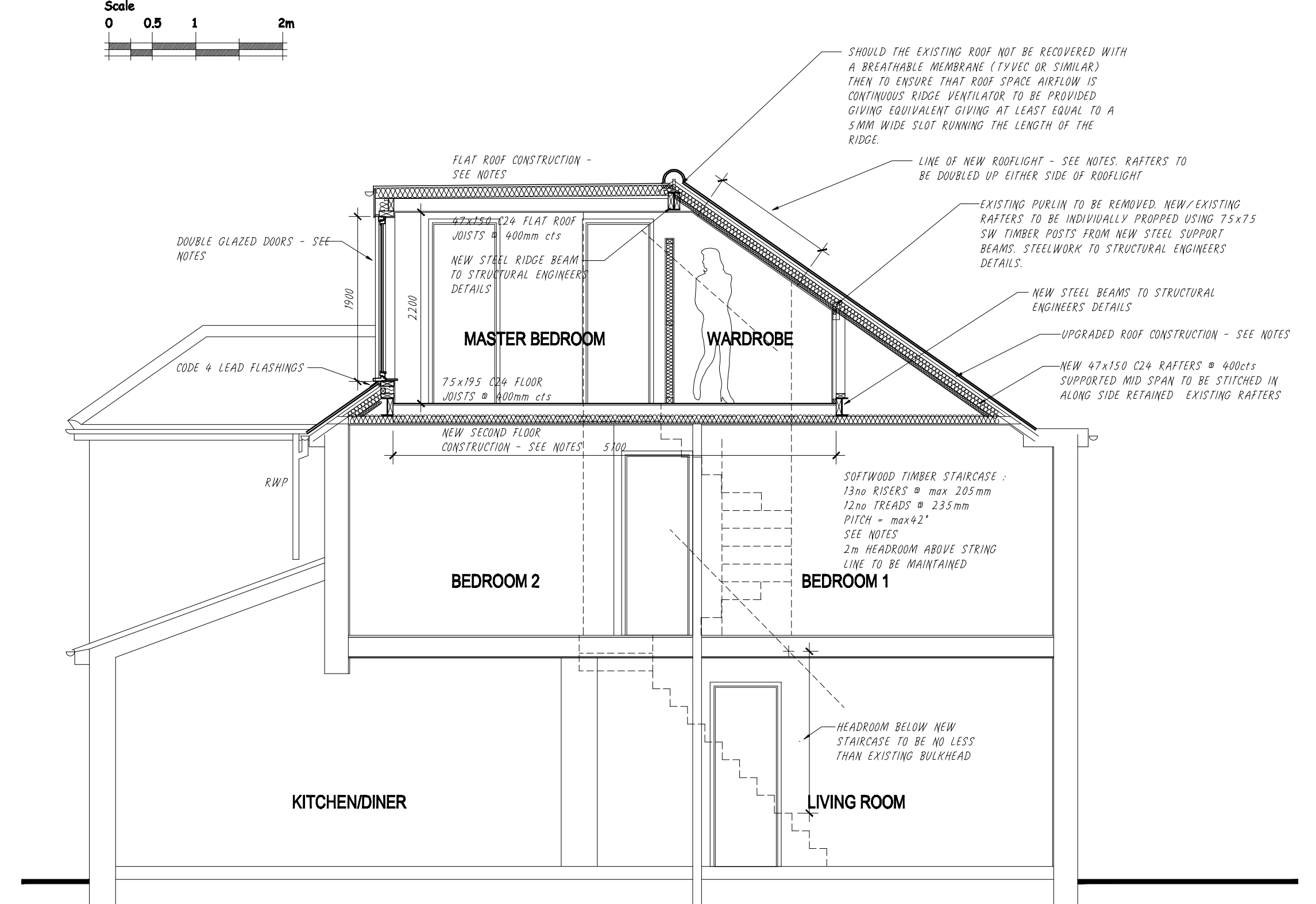
**SOUTHEAST ELEVATION**



**NORTHEAST ELEVATION**



**NORTH WEST ELEVATION**



**SECTION A - A 1:50**

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Project Description: PROPOSED 'HIP TO GABLE' LOFT CONVERSION at 12 HELMSDALE ROAD, ILLINGTON, LEAMINGTON SPA for Mr & Mrs WELLI

Drawing Description: PROPOSED PLANS, ELEVATIONS, SECTION A - A AND BLOCK PLAN

Scale @ A1 1:50/1:100/1:200

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