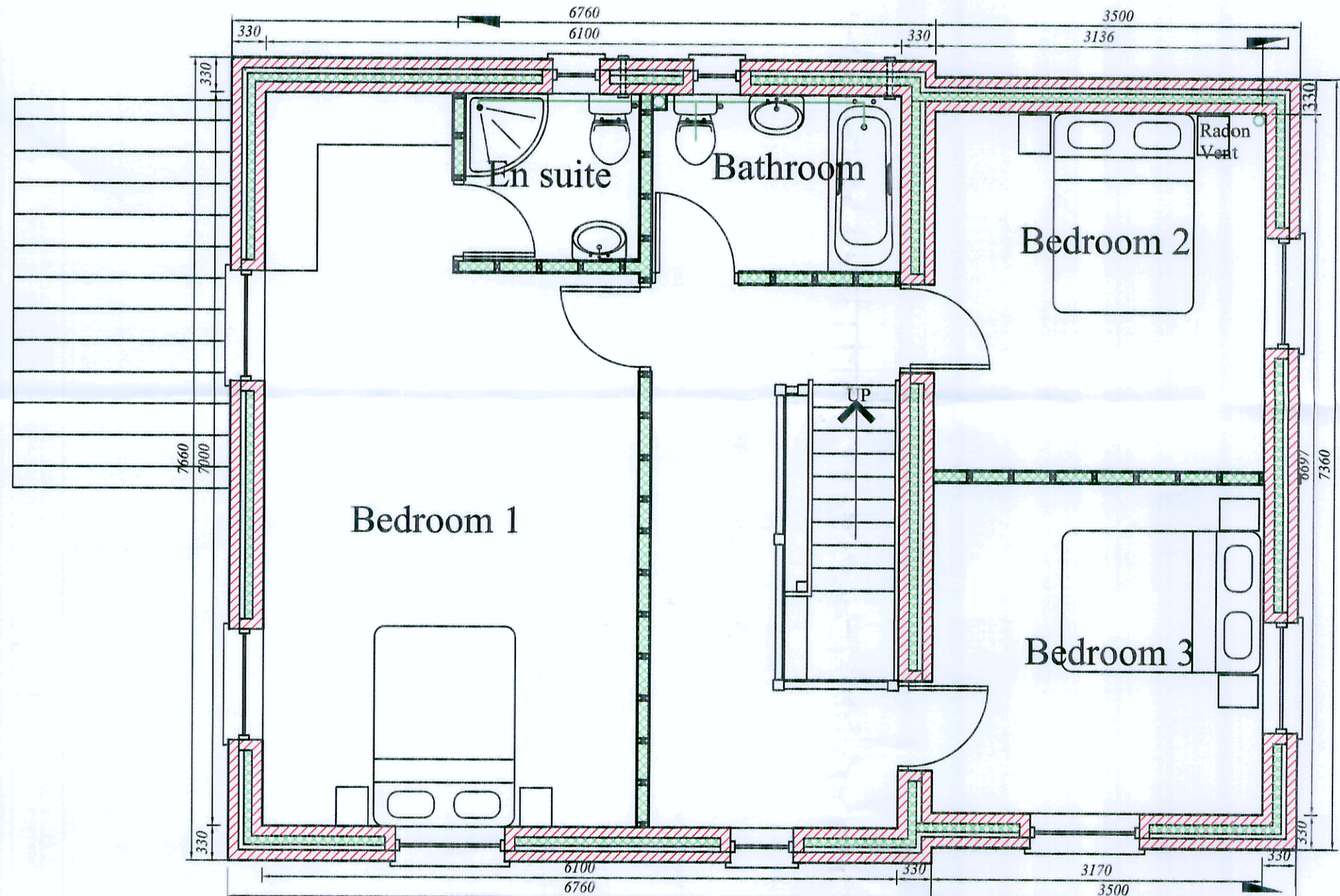


① Proposed  
Ground Floor Plan Scale 1-50



First Floor Plan  
scale 1-50

**Water Efficiency**  
Fittings and fixed appliances should be installed to prevent undue consumption of wholesome water, such that the potential consumption by persons occupying the building must not exceed 125 litres per person per day.

**hot water supply**  
the hot water supply to the bath is to have thermostatically controlled mixer/ blending valve or other appropriate temperature control device with a maximum temperature stop and suitable arrangement of pipe work fitted to ensure that the temperature of the water delivered does not exceed 48 degrees

**THERMAL BRIDGING**  
Care shall be taken to limit the occurrence of thermal bridging in the insulation layers caused by gaps within the thermal element, (i.e. around windows and door openings). Reasonable provision shall also be made to ensure the extension is constructed to minimise unwanted air leakage through the new building fabric.

**FULL RADON PROTECTION**  
Provide a 2000g radon membrane under floor slab lapped 300mm double welded and taped with gas proof tape at joints and service entry points. Carry membrane over cavity and provide suitable cavity tray and weep holes. Sumps to be provided and vented to the outside

**SITE PREPARATION**  
Ground to be prepared for new works by removing all unsuitable material, vegetable matter and tree or shrub roots to a suitable depth to prevent future growth. Seal up, cap off, disconnect and remove existing redundant services as necessary. Reasonable precautions must also be taken to avoid danger to health and safety caused by contaminants and ground gases e.g. landfill gases, radon, vapours etc on or in the ground covered, or to be covered by the building.

**EXISTING STRUCTURE**  
Existing structure including foundations, beams, walls and lintels carrying new and altered loads are to be exposed and checked for adequacy prior to commencement of work and as required by the Building Control Officer.

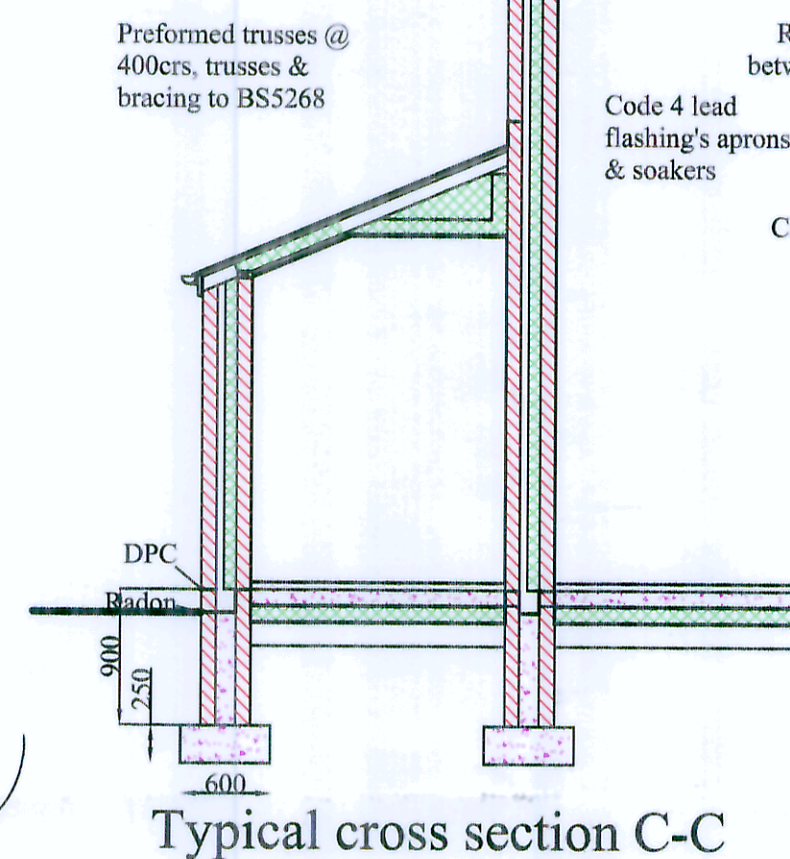
**BEAMS**  
Supply and install new structural elements such as new beams, roof structure, floor structure, bearings, and padstones in accordance with the Structural Engineer's calculations and details. New steel beams to be encased in 12.5mm Gyproc fireline board with staggered joints nailed to timber cradles or painted in Nullifire S or similar intumescent paint to provide 1/2 hour fire resistance.

**LINTELS**  
- For uniformly distributed loads and standard 2 storey domestic loadings only  
Lintel widths are to be equal to wall thickness. All lintels over 750mm sized internal door openings to be 65mm deep pre-stressed concrete plank lintels. 150mm deep lintels are to be used for 900mm sized internal door openings. Lintels to have a minimum bearing of 150mm on each end. Any existing lintels carrying additional loads are to be exposed for inspection at commencement of work on site. All pre-stressed concrete lintels to be designed and manufactured in accordance with BS 8110, with a concrete strength of 50 or 40 N/mm<sup>2</sup> and incorporating steel strands to BS 5896 to support loadings assessed to BS 4977 Part 1. For other structural openings provide proprietary insulated steel lintels suitable for spans and loadings in compliance with Approved Document A and lintel manufacture standard tables. Stop ends, DPC trays and weep holes to be provided above all externally located lintels.

**STRAPPING FOR PITCHED ROOF**  
Gable walls should be strapped to roofs at 2m centres. All external walls running parallel to roof rafters to be restrained at roof level using 1000mm x 30mm x 5mm galvanised mild steel horizontal straps or other approved to BS EN 845-1 built into walls at max 2000mm centres and to be taken across minimum 3 rafters and screw fixed. Provide solid noggins between rafters at strap positions. All wall plates to be 100 x 50mm fixed to inner skin of cavity wall using 30mm x 5mm x 1000mm galvanised metal straps or other approved to BS EN 845-1 at maximum 2m centres.

**SOLID FLOOR INSULATION UNDER SLAB**  
To meet min U value required of 0.22 W/m<sup>2</sup>K  
Solid ground floor to consist of 150mm consolidated well-ramped hardcore. Blinded with 50mm sand blinding. Provide a 2000mm gauge polythene DPM, DPM to be lapped in with DPC in walls. Floor to be insulated over DPM with 190mm thick Celotex. 25mm insulation to continue around floor perimeters to avoid thermal bridging. A VCL should be laid over the insulation boards and turned up 100mm at room perimeters behind the skirting, all joints to be lapped 150mm and sealed, provide 100mm ST2 or Gen2 ground bearing slab concrete mix to conform to BS 8500-2 over VCL. Finish with 70mm sand/cement finishing screed with light mesh reinforcement.  
Where drain runs pass under new floor, provide A142 mesh 1.0m wide within bottom of slab min 50mm concrete cover over length of drain.  
Where existing suspended timber floor air bricks are covered by new extension, ensure cross-ventilation is maintained by connecting to 100mm dia UPVC pipes to terminate at new 65mm x 215mm air bricks built into new cavity wall with 100mm concrete cover laid under the extension. Ducts to be sleeved through cavity with cavity tray over.

**WALLS BELOW GROUND**  
All new walls to have Class A blockwork below ground level or alternatively semi engineering brickwork in 1:4 masonry cement or equal approved specification. Cavities below ground level to be filled with lean mix concrete min 225mm below damp proof course. Or provide lean mix backfill at base of cavity wall (150mm below damp course) laid to fall to weepholes.



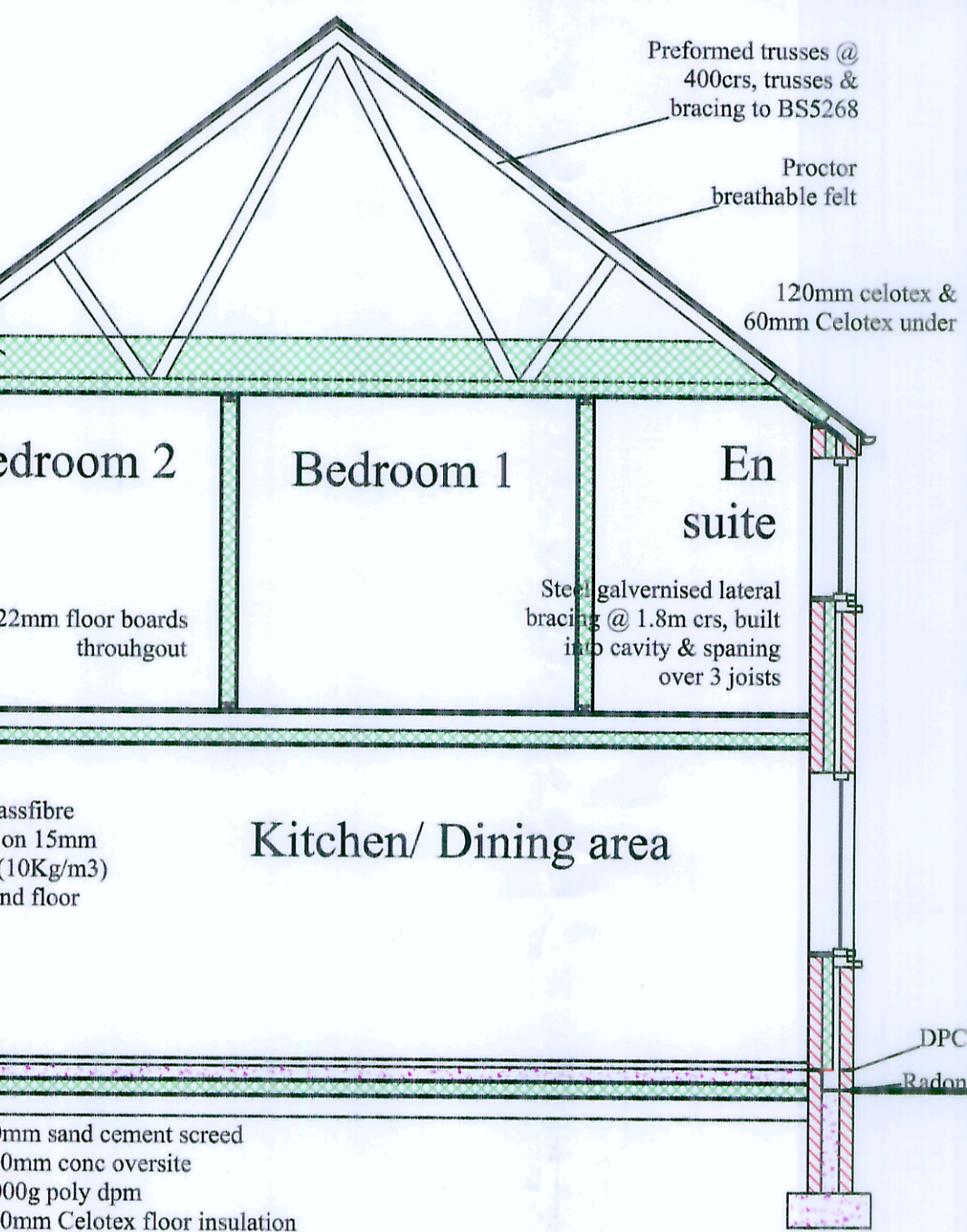
Typical cross section C-C

Depth of foundations to be decided on site

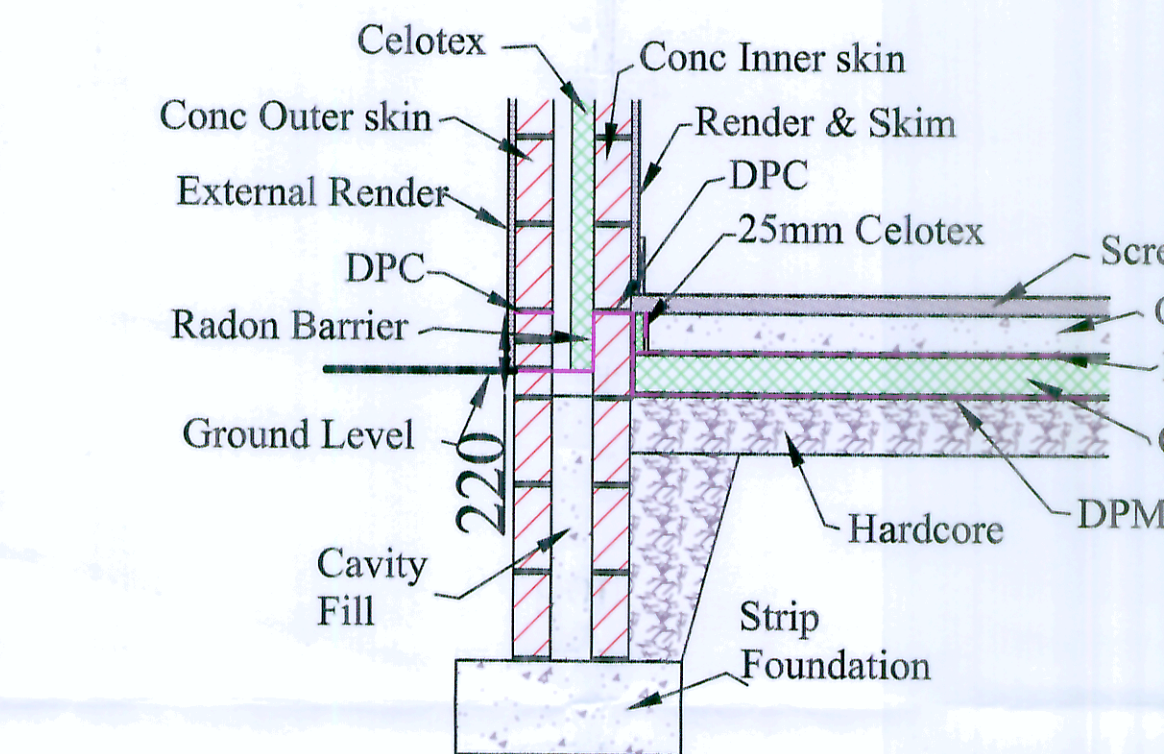
**STRAPPING OF FLOORS**  
Provide lateral restraint where joists run parallel to walls, floors are to be strapped to walls with 1000mm x 30mm x 5mm galvanised mild steel straps or other approved in compliance with BS EN 845-1 at max 2.0m centres, straps to be taken across minimum of 3 joists. Straps to be built into walls. Provide 38mm wide x 1/4 depth solid noggins between joists at strap positions.

**OPENINGS AND RETURNS**  
An opening or recess greater than 0.1m<sup>2</sup> shall be at least 550mm from the supported wall (measured internally).

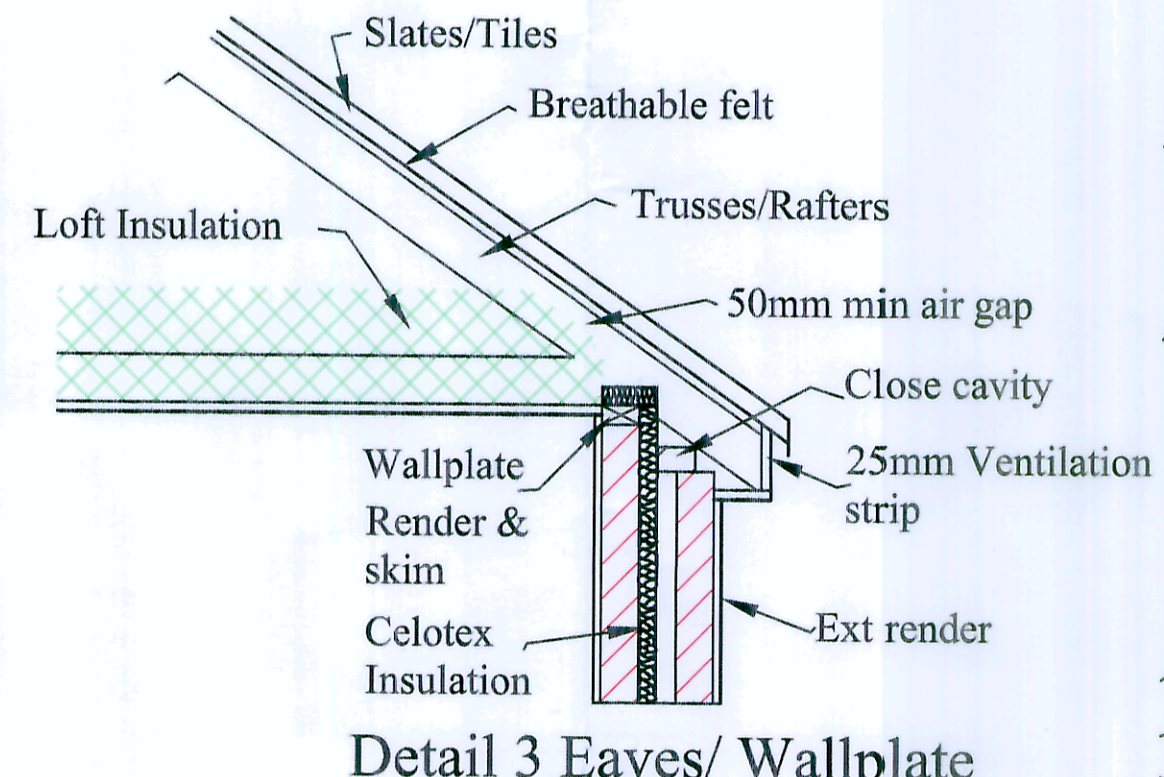
**STRIP FOUNDATION**  
Provide 225mm x 600mm concrete foundation, concrete mix to conform to BS EN 206-1 and BS 8500-2. All foundations to be a minimum of 1000mm below ground level, exact depth to be agreed on site with Building Control Officer to suit site conditions. All constructed in accordance with 2004 Building Regulations A1/2 and BS 8004:1986 Code of Practice for Foundations. Ensure foundations are constructed below invert level of any adjacent drains. Base of foundations supporting internal walls to be min 600mm below ground level. Sulphate resistant cement to be used if required. Please note that should any adverse soil conditions be found or any major tree roots in excavations, the Building Control Officer is to be contacted and the advice of a structural engineer should be sought.



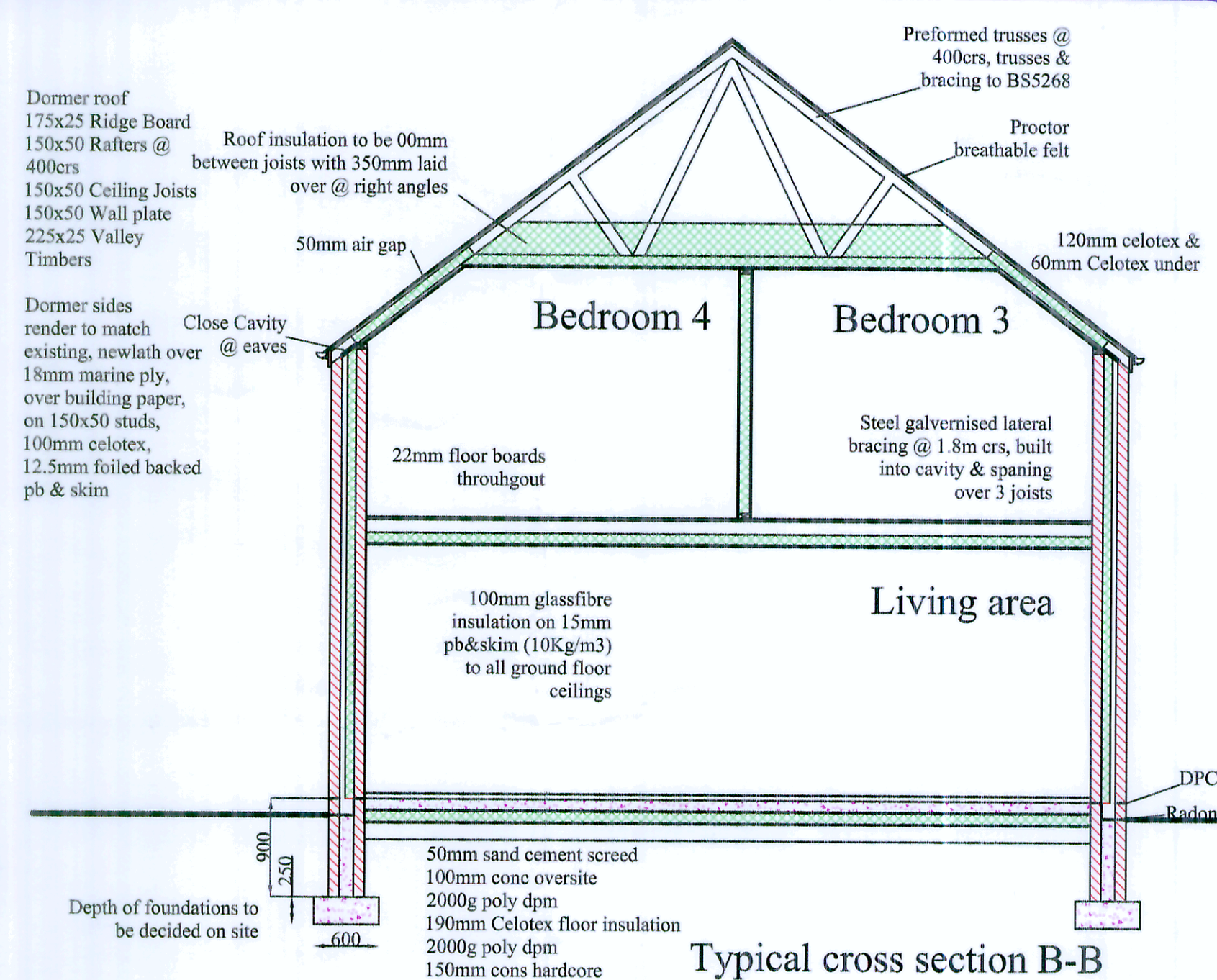
Typical cross section A-A



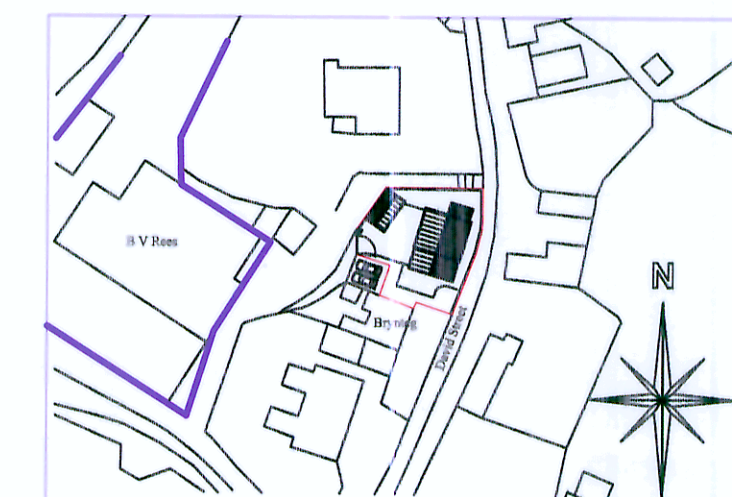
Detail 1 Foundation /



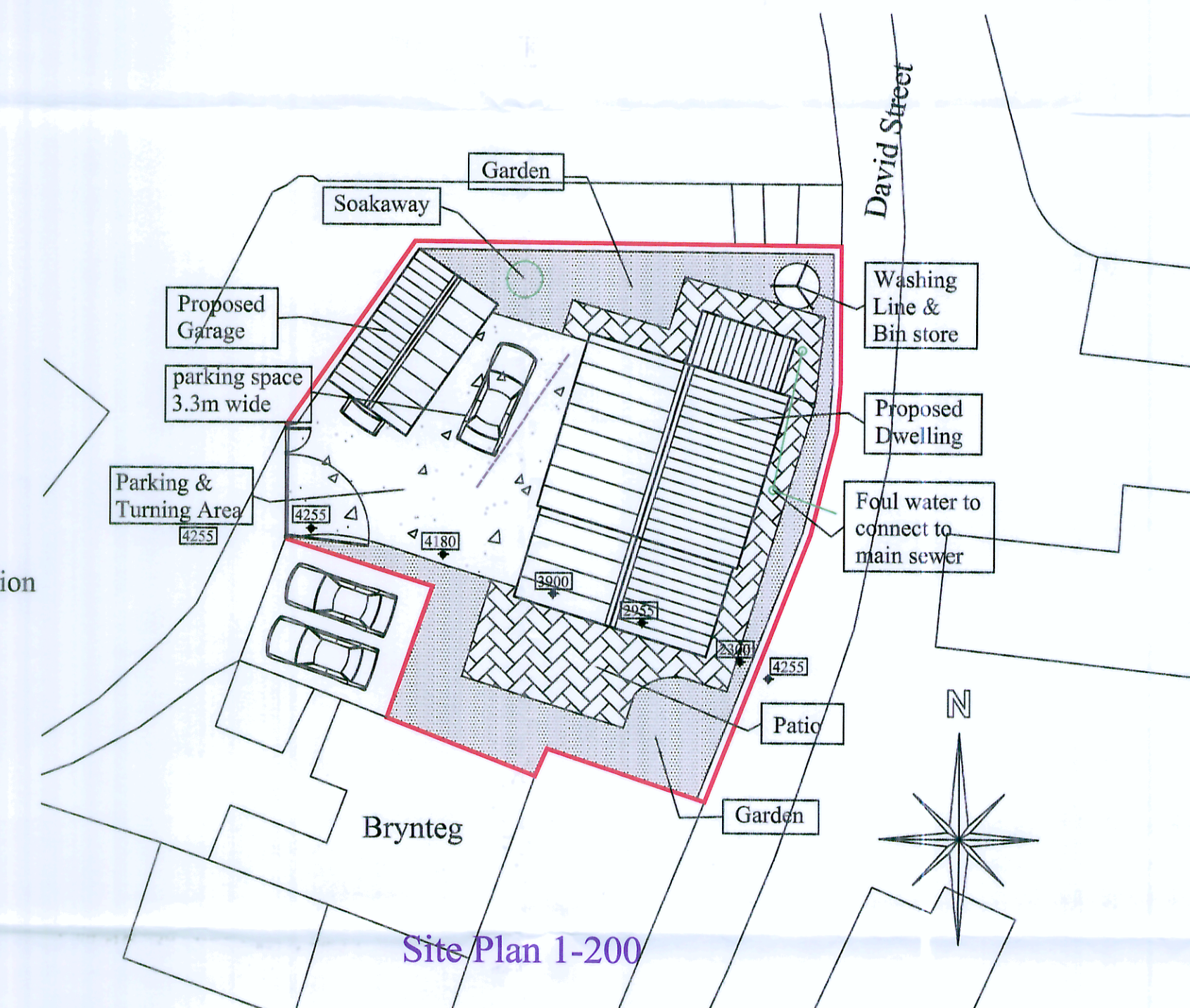
Detail 3 Eaves/ Wallplate



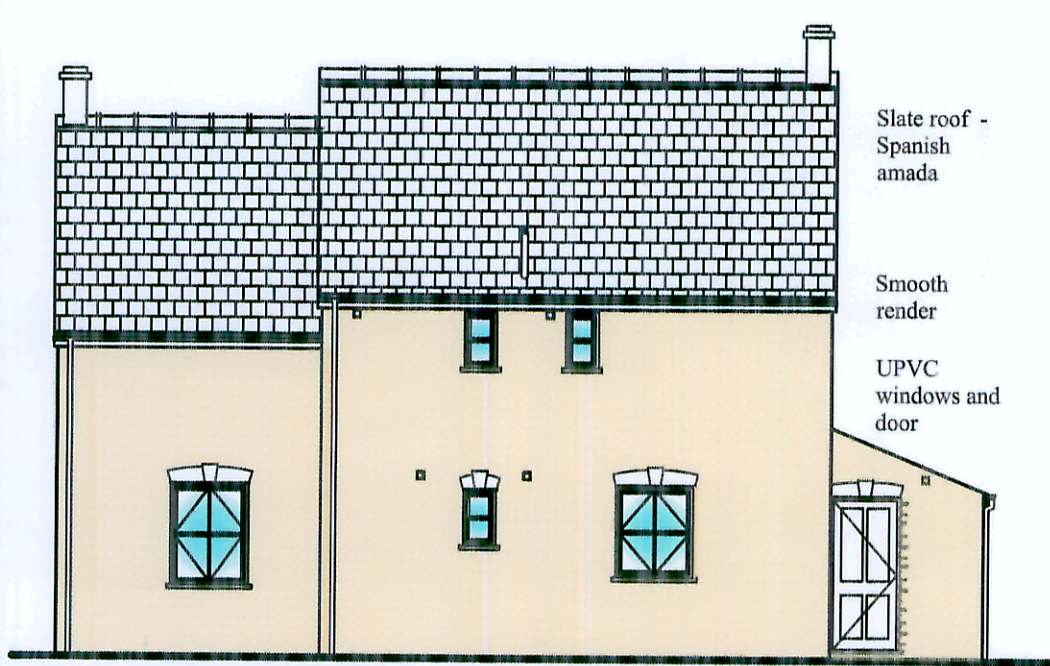
Typical cross section B-B



Location Plan 1-1250



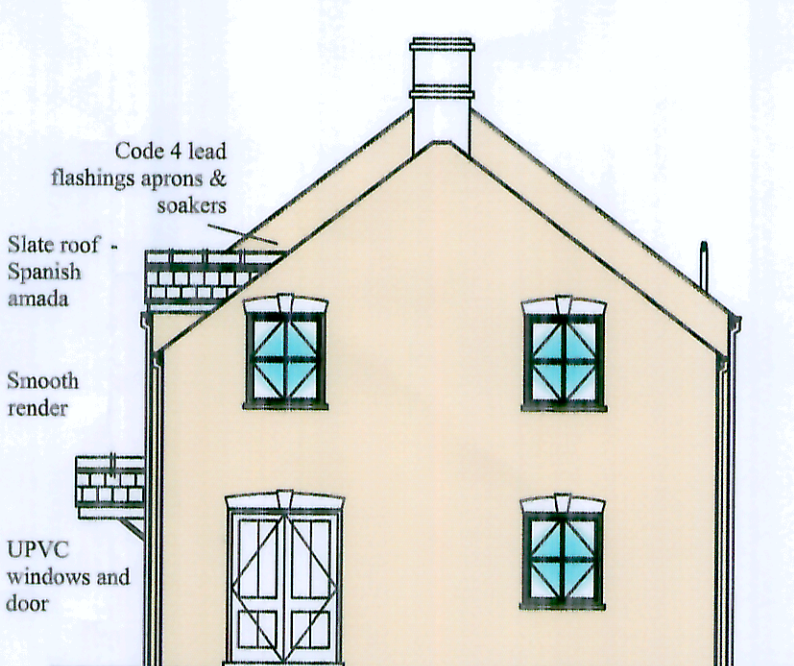
Site Plan 1-200



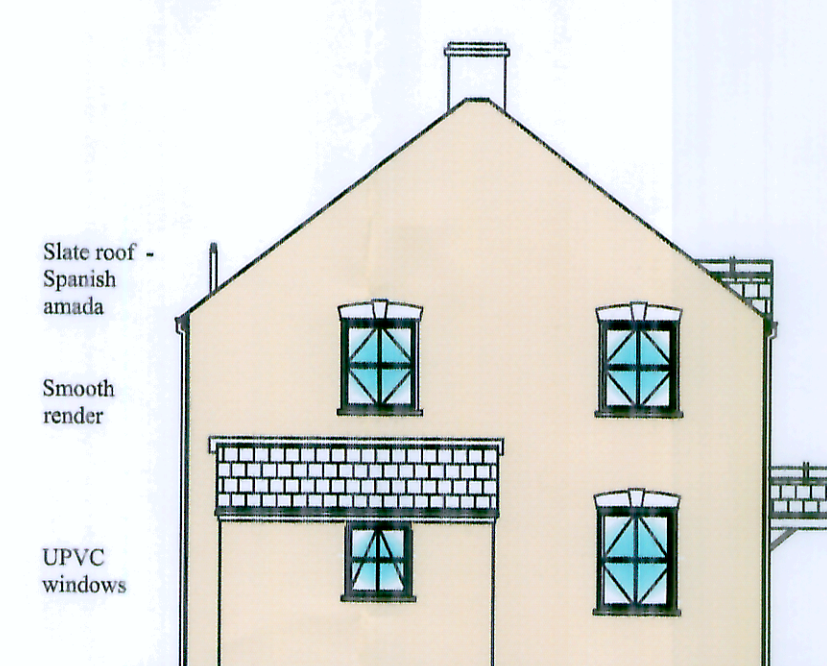
Rear Elevation  
Scale 1/100



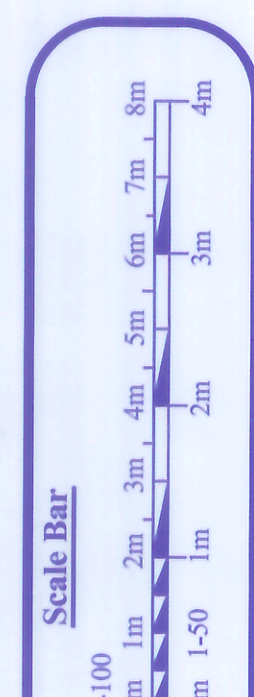
Front Elevation  
scale 1/100



Side Elevation  
scale 1/100



Side Elevation  
Scale 1/100



**PROJECT**  
Proposed Dwelling  
Adj to Brynteg  
David Street  
St Dogmaels

Drng No-  
**CD397-01**  
Scale: 1/100, 1/50.  
10th February 2017

**Archi-Tech**  
STEWART CORBETT  
CHARTERED ARCHITECTURAL DESIGN  
& MANAGEMENT.  
Workspace 2, Creative Mwlidan, Bath House, Cardigan,  
Tel: (01239) 622402. Mob: 07968941849. Em: stewart.corbett@virgin.net  
Archi-Tech is the trading name of Stewart J Corbett Architectural Design & Management