Mr L Williams
5 Nelson Avenue
Monk Bretton
Barnsley
S71 2LY

Proposed two-storey side extension to the above property with extension to ground floor garage space with 1Nr ensuite bedroom over.

> **Any building work, which is subject to requirements imposed by Schedule 1, to the Building Regulations should, in accordance with regulation 7, be carried out with proper materials and in a workmanlike manner!**

Roof Construction: -
Pitch to match existing @ 22°
Matching concrete roof tiles, onto 38mm x 50mm battens laid over reinforced sarking felt onto 150mm x 45mm rafters and joists @ 600mm c/c
Roof Stability: -
Diagonal wind bracing to new roof to comply with B.S. 5628 Part 3
Roof strapped to gable wall using 30mm x 5mm x 1200 mm galvanised steel straps turned down over un-cut block work.
Insulation: -
200mm thickness mineral wool laid between joists and lapped over into soffits to provide 0.25W/m²K continuity with walls.
Walls: -
All external brickwork to match existing and to comply with B.S. 3921: 1985. Brick sizes 220mm x 105mm x 70mm facings. Compressive strength 5N/mm²
Internal block work to consist of partial cavity fill

- 25mm extruded polystyrene foam composite bonded to one face

Mean Compressive Strength

4.2 N/mm² and 7.3 N/mm²
10.4 N/mm² to special order.

Thermal Properties

k = 0.32 W/m°C. Aglite Ultima blocks are Part L compliant.

Fire Resistance

Aglite Ultima is manufactured from Class 1 Fire Resistant Aggregate as defined in BS 5628 Part 3.

Block work below DPC
Strength
7.3 N/mm2.

Sulphate Resistance
Class 1 – standard

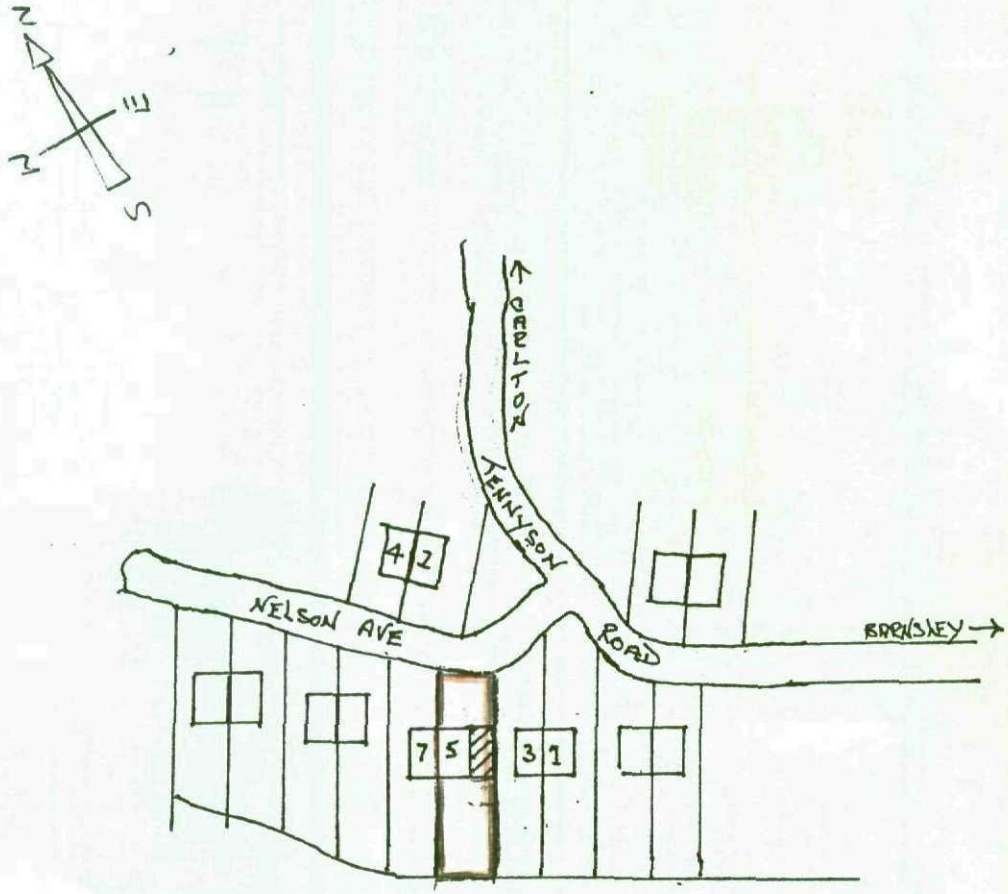
Wall ties of galvanized steel type to be incorporated into brick/block work course @ 400mm verticle and 900mm horizontal.

***Lintels:* -**
Manufactured from Z1 grade galvanized steel to B.S. 2989: 1989. Tested in accordance with B.S.5977: Part 2 1983
Lintels to be filled with CFC free insulation ensuring continuity with walls to reduce thermal bridging. These to be used over all formed masonry openings.
Floors: -
First floor joists to be 50mm x 220mm timbers of strength SC4 0.25KN/m² @ 600mm c/c and braced at central span. Ends to be taken into block work and to remain clear of cavity.

Minimum Depth of Strip Foundations
The strip foundations should be carried out under BS 8004: 1986 Code of practice for foundations and have a minimum depth of 0.45m to their underside to avoid the action of frost. This depth however, may need to be increased in areas subject to long periods of frost or in order to transfer the loading onto satisfactory ground. In clay soils subject to volume change on drying ('shrinkable clays', with Plasticity Index anticipated ground movements will not impair the stability of any part of the building taking due consideration of the influence of vegetation and trees on the ground. The depth to the underside of foundations on clay soils should not be less than 0.75m although this depth will commonly need to be increased in order to transfer the loading onto satisfactory ground.

This decision will be taken by the buildings inspector on which foundation detail to adopt at the time of his/her inspection.

Fire Protection: -
The building shall be designed and constructed so that there are appropriate provisions for the early warning of fire, and appropriate means of escape in case of fire from the building to a place of safety outside the building capable of being safely and effectively used at all material times.
Integrated Garage:
The Wall and any floor between garage and house to have 30 minutes fire resistance with a self-closing fire door.
Floor to fall away from door to the outside.
The provision of a sloping floor must be included as an alternative to the 100mm step between dwelling houses and integral garages.
Fire Alarms: The guidance on smoke alarms has been amended such that alarms should be installed in accordance with BS 5839- 6:2004.
Smoke alarms should normally be positioned in the circulation spaces between sleeping spaces and places where fires are most likely to start (e.g. kitchens and living rooms) to pick up smoke in the early stages of a fire.
There should be at least one smoke alarm provided in the circulation spaces which should have a standby power supply.



LOCATION PLAN APPROX 1/1250.

FOR 5 NELSON AVE MONK BRETTON

▨ PROPOSED EXTENSION