

**ELECTRICAL**  
 All Electrical work required to meet the requirements of Part P (Electrical Safety) and BS7671 and J.E.E. Regulations (17<sup>th</sup> Edition) and must be designed, installed, inspected and tested by a person competent to do so. Prior to completion the council must be satisfied that the appropriate electrical installation certificate has been issued for the work, and has been signed by a person competent to do so. New fixed lighting to be low energy type.

**GENERAL**  
 All work to be carried out in accordance with the Building Regulations 2000 and current B.S. Codes of Practice. Adequacy of existing walls, lintels and foundations to be checked on site prior to loading. All dimensions must be checked on site. Any discrepancy in dimensions must be notified before proceeding. No responsibility will be accepted for alterations carried out without notification. Materials and workmanship are to be to the satisfaction of the client matching existing where possible. Where applicable consent from the adjoining owner should be sought under the provisions of the party wall etc. act 1996. All new electrical fittings, radiator positions etc are to be agreed on site with client. The builder is to remove all debris as it accumulates and on completion leave the site tidy to the clients satisfaction.

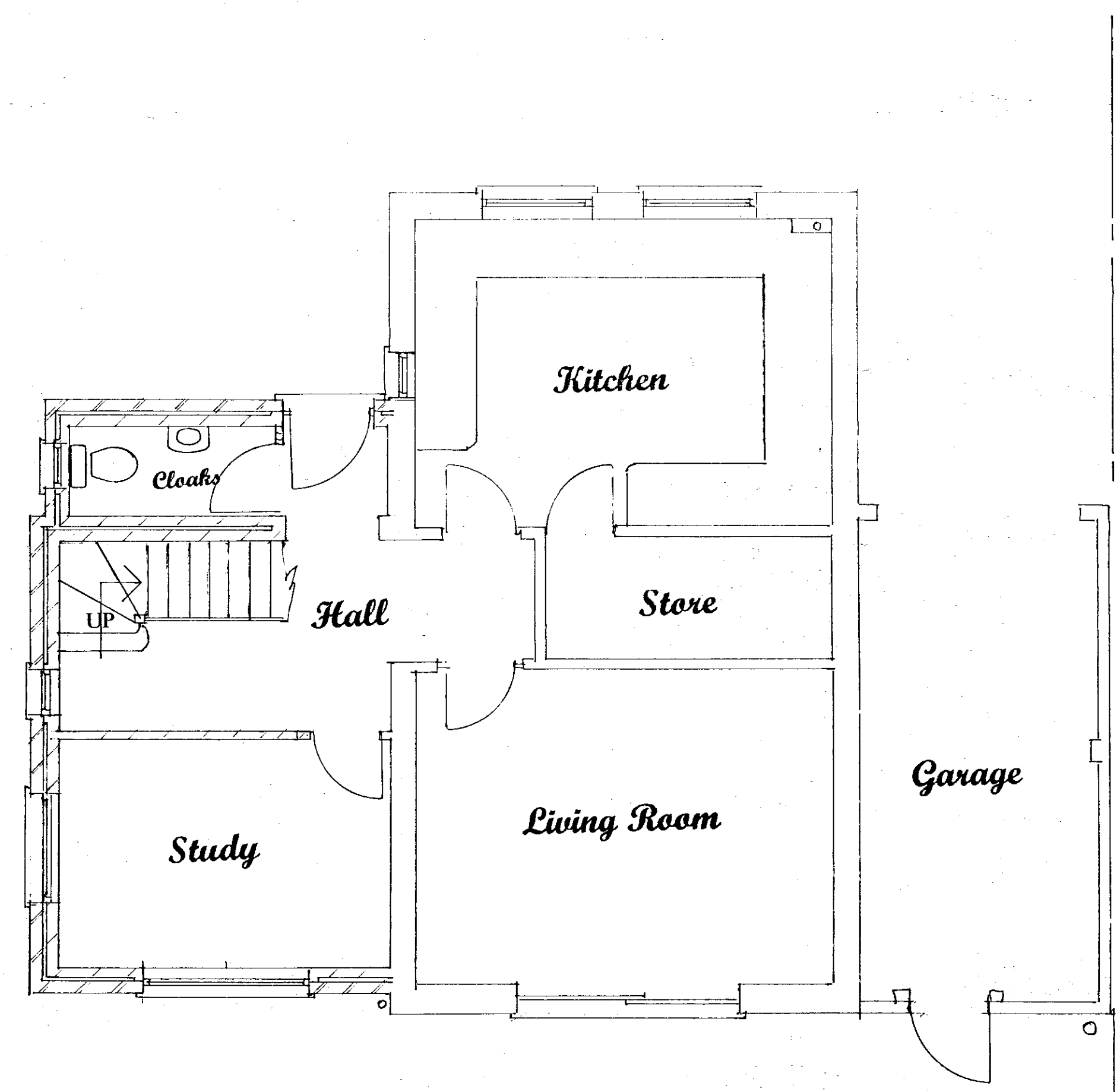
**ROOF**  
 Tiles to match existing on 38 x 25mm tanalised battens on tyvec felt on 150 x 50mm c16 grade sw rafters @ 400mm ccs. 175 x 50 hip rafters, 150 x 50 c16 grade sw ceiling joists @ 400mm ccs. 150mm fiberglass between joists with 120mm over 12mm foil-backed plasterboard and skim to ceiling.

**WALLS**  
 Facing bricks to match existing on 100mm block 85mm cavity filled with drytherm insulation batts. 100mm Durox Superbloc or thermalite turbo u value better than 0.11w/mk inner skin with 12mm plaster. U value to wall to be less than 0.28/m2k. in accordance with part L1B 2006. Thermobate cavity closers to openings. Cavity to remain open for 225mm below lowest dpc. Wall ties to B.S. 1243 staggered 900mm horizontally and 450mm vertically doubled at openings. Tooth in new walls and maintain cavities. Vertical dpc's to all reveals. Walls parallel to timber restrained by 30mm x 5mm galv. m.s. anchor straps with noggins @ max. 2000mm ccs. engaging 3 no. joists/rafters.

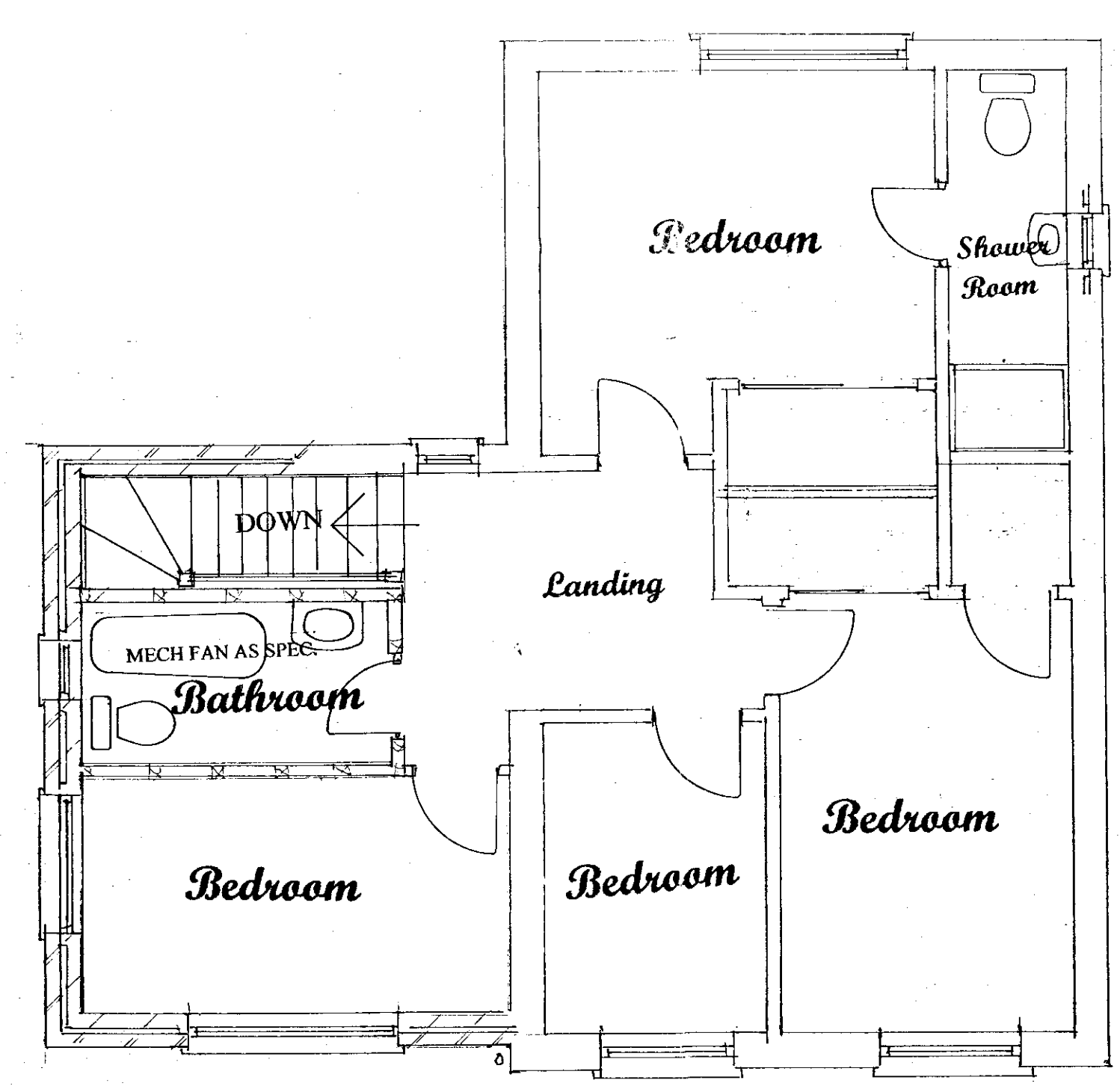
**FOUNDATIONS AND SLAB**  
 450mm wide 1 : 3 : 6 mass concrete foundations min. 1000mm below ground level and to 600mm min. below any tree root activity and to invert level of adjacent drains, foundations to comply with N.H.B.C. Practice Note 4.2. 1 : 3 cement/sand screed on 3 coats of synthaprufe dpm continuous with dpc with 80mm high density Celotex GA3000Z floor insulation on 1200g polythene membrane on 150mm concrete slab on 150mm well consolidated hardcore. U-value of slab to be less than 0.18W/m2K. There are no trees within 30m of extension likely to affect the foundations

**DRAINAGE BELOW GROUND**  
 All new drainage to be in accordance with BS:EN 752:2008. Drains to be 110mm dia. Upvc osma drains with min. 1:40 fall. Bedded and surrounded in 100mm of pea shingle. Provide R.C. concrete lintels over any drains passing through walls or foundations and provide 75mm concrete capping to any drains less than 600mm deep. New gullies to be back inlet type. Drains to be tested on laying and on completion of works to the satisfaction of building control. New inspection chambers to be 450mm dia.osma inspection chambers to a depth of 900mm and 750mm dia.for depths upto 1500mm deep. Soakaways where used to be a min. 5000mm from any building and be in accordance with BRE Digest 365.

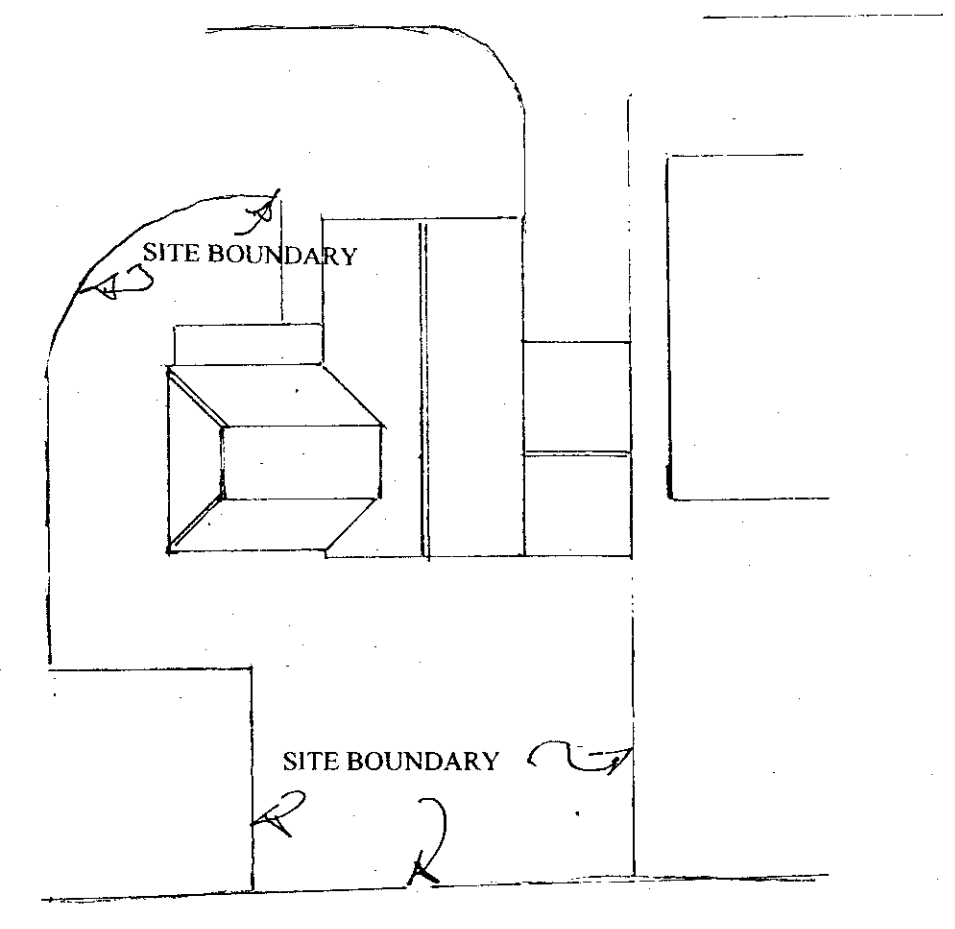
**DRAINAGE ABOVE GROUND**  
 110mm dia. Upvc soil and vent pipes to terminate min. 900mm above any windows and fitted with durable guard. 110mm dia. Upvc soil pipe to wc's 75mm deep seal traps 40mm dia. Upvc waste to sinks, baths, basins and showers. Wastes greater than 3000mm long to have min. 75mm dia. All in accordance with BS EN.752:2008



GROUND FLOOR PLAN



FIRST FLOOR PLAN



ROOF & LAYOUT PLAN 1:200

**FIRE PROTECTION**  
 Beams encased in two layers of 12.5mm gypsum plasterboard to break joint fixed with a timber cradle with a 7mm gypsum plaster skim. Mains operated interlinked smoke detectors to be provided to hall and landings in accordance with Regulation 14, B1 and conforming to BS. 5446 Part 1.

**WINDOWS AND VENTILATION & LIGHTING**  
 All new double glazed windows and doors to have min. 16mm argon filled air gap with low E glass providing a u-value less than 1.6 w/m2 k. All new glazing in critical areas to be in toughened glass to B.S. EN 1279/ ES 5713 compliant in accordance with part N. Windows to provide 5% openings to habitable rooms. 8000mm2 trickle vents to windows. All habitable rooms to be provided with an opening window giving an unobstructed aperture of 0.33m2 with a min. aperture of 750mm x 450mm - cill height 900mm above F.F.L. Bathroom/Shower rooms to have mechanical extract fan to clear 15 litres per second. Provide high efficacy lighting to new rooms Luminous efficacy of 40 lumens per circuit watt shall be provided in at least 50% of rooms All new double glazed windows and doors should be provided with draught seals to prevent unwanted air infiltration

**UPPER FLOORS**  
 20mm plywood decking on 195mm x 47 mm C24 grade s.w. joists @ 400mm ccs. 12.5mm plasterboard and skim to ceiling. Insulate between joists with 200mm fiberglass for sound attenuation.

**LINTELS**  
 Catnic Cg70/100 to openings up to 1800mm Cx70/100 to wider openings. Min. 150mm end bearings.

**INTERNAL STUD PARTITIONS**  
 100 x 50mm s.w. stud framing built off 100 x 75mm sole plates. Studwork spaced @ 450mm ccs horizontally and 900mm vertically and 100mm polyurethane insulation infill 15mm plasterboard with a density of 10 kg / m3 and skim both sides. First floor joists doubled up and bolted together under stud partitions.

**STAIRS**  
 200 mm rise and 220mm going. 25mm nosings. Total rise of mm. Min width 800mm. Min. 2000mm headroom vertically above pitch line. Handrail to be 900mm high above pitch line and on landings. Max gap to spindles 99mm. Prior to ordering staircase the contractor shall check the finished floor dimensions Double up floor joists where indicated to trim stairwell opening.

AMENDMENT  
 20 SEP 2013  
 NO: 620B/1654

2 MULBERRY MEAD  
 HATFIELD  
 HERTFORDSHIRE  
 PROPOSED TWO STOREY SIDE  
 EXTENSION  
 SCALE 1:50 1:100 1:200  
 DATE : JULY 2013  
 DRAWING NO.02 A  
 DRAWING SIZE A1  
 CLIENT  
 DR WAHEED  
 NEIL ANDERSON  
 PLANNING & BUILDING  
 DESIGN SERVICES  
 1A WOODLAND WAY  
 OAKLANDS  
 WELWYN  
 HERTFORDSHIRE AL6 0RZ  
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