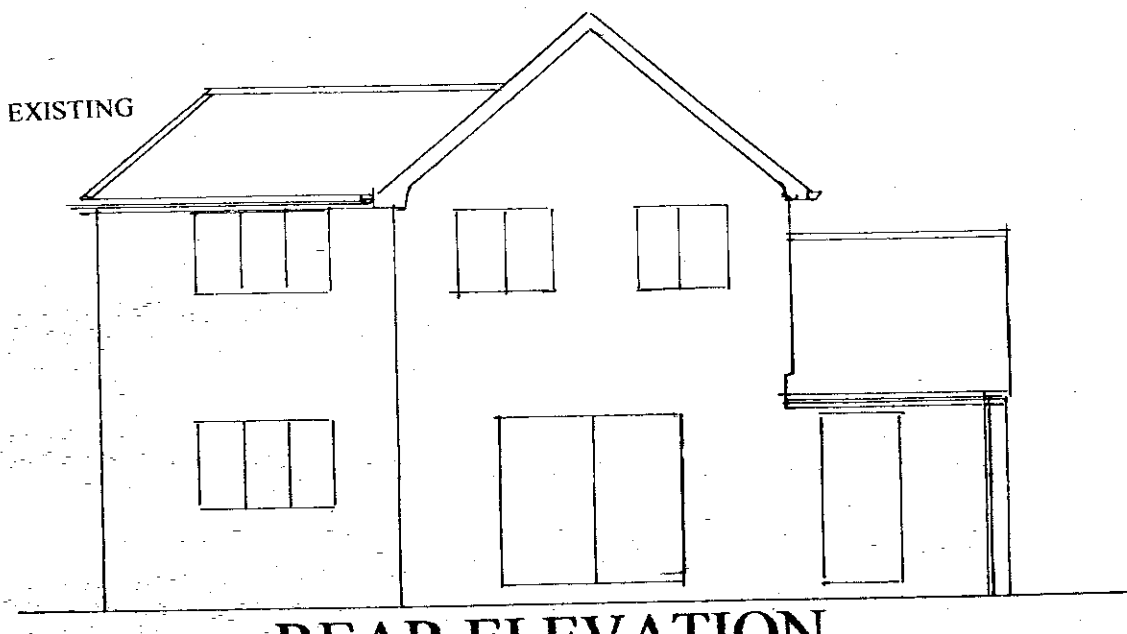
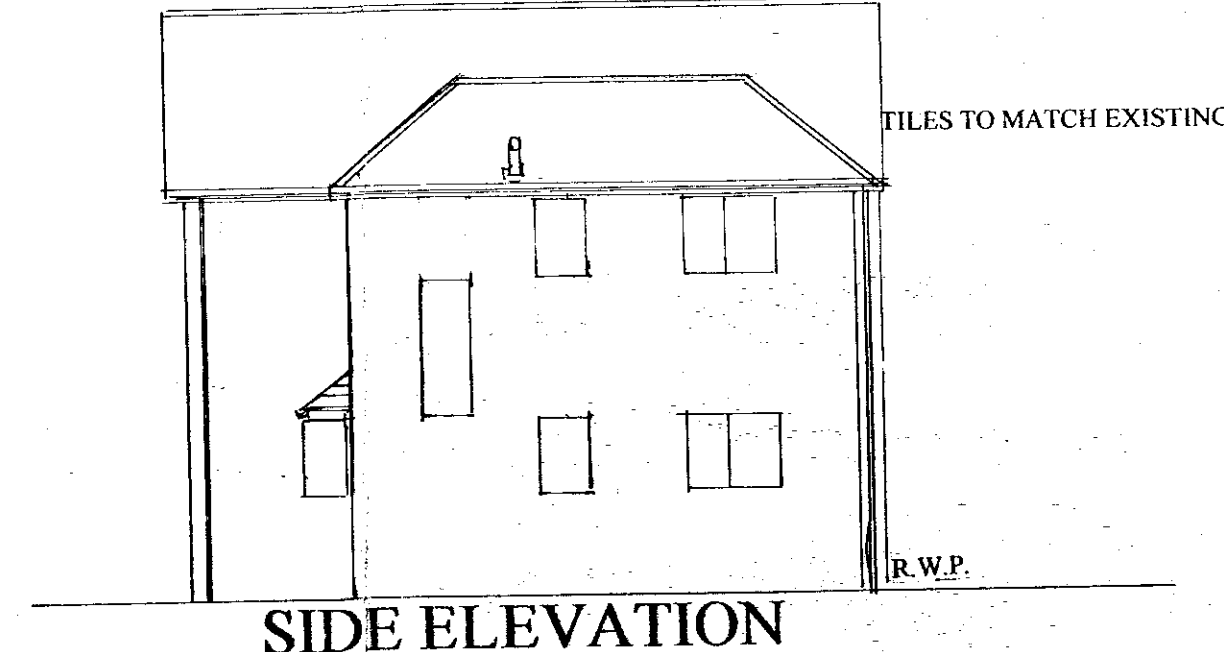


FRONT ELEVATION



REAR ELEVATION



SIDE ELEVATION

ALL EAVES OVERHANG DETAILS TO MATCH EXISTING

**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/ BS 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 - sill height 900mm above F.F.L.  
 New internal lighting to comply with table 40 of the Domestic Building Services Compliance Guide 2010 (75% of new light fittings)  
 Kitchen to have a cooker hood extract fan to clear min. 30 litres per second. Internal cloakroom/wc to have an extract fan ducted to external air to clear min. 6litres/second and fitted with a 15 minute overrun and linked to the light switch. Bathroom/Showers rooms to have mechanical extract fan to clear 15 litres / second. Utility / Laundry Rooms to have an extract fan with a rate of 30 litres/ second. All in accordance with Reg. 14, F1  
 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 fibreglass for sound attenuation.

**LINTELS**  
 Galvanised steel lintels to BS 5977-2:1983 and BS/EN 845-2:2003  
 Catic 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.

**ELECTRICAL**  
 All Electrical work required to meet the requirements of Part P (Electrical Safety) and BS7671 :2008 and IEE Regulations (17th 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.

**ROOF**

Files to match existing on 38 x 25mm tanalised battens on Tyvec Housewrap (moisture permeable) 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 fibreglass between joists with 120mm over 12mm foil-backed plasterboard and skim to ceiling. All work to comply with BS 5534:2003 Code of practice with slating and tiling.

**FLAT ROOF**  
 12.5mm of stone chippings bedded in bitumen compound, 3 layers of bitumen felt, top layer to be high performance felt hot laid and built up in accordance with BS 6229:2003. 150 mm x 50mm C24 grade s.w. joists @ 400mm ccs. U-value of roof to be less than 0.18w/m2 k in accordance with part L. 25mm thick tanalised s.w. fascia 110mm H.R. u.p.v.c. gutter 75mm rvp.

**CROWN FLAT POOF:-**  
 Code 6 Rolled (Milled) Lead sheet to BS EN 12588: 1999 on a geotextile non woven underlay. All fixings, wood core roll drips, welts and laps to be constructed in accordance with BS 6915: 2000 and the Lead Development Association guidelines to allow for thermal movements. 150mm lead flashings at junction with walls and upstands.

**WALLS**

Facing bricks to match existing on 100mm block 85mm cavity filled with drytherm insulation batts. 100mm Celcon or thermalite block U value better than 0.11w/mk inner skin with 12mm plaster. U value to wall to be less than 0.28w/m2k. in accordance with part L.B 2006. Thermobate cavity closers to openings. Cavity to remain open for 225mm below lowest dpc.  
 Stainless steel wall ties to BS/EN 845-1 and BS 5268-1 staggered 900mm horizontally and 450mm vertically doubled at openings. Tenth 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.  
 Dry line existing 100mm brick wall with 75mm Celotex GA 3000 with taped joints against brickwork and 25mm x 50mm tanalised battens @ 600mm ccs. fixed through insulation with 32mm gyproc thermal board fixed to battens. Skim with plaster.

**FOUNDATIONS AND SLAB**

450mm wide 1 : 2 : 4 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. and to BS/EN206-1:2000. Foundation concrete mix materials to BS 8500-1 and 2 : 2006.  
 1: 3 cement/sand screed on 3 coats of synthaprufe dpm continuous with dpc on 150mm concrete slab on 80mm high density Celotex GA3000Z floor insulation on 1200g polythene membrane 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

**FIRE PROTECTION**

Main operated interlinked smoke detectors to be provided to hall and landings in accordance with Regulation 14, B1 and conforming to BS. 5440 Part 1.

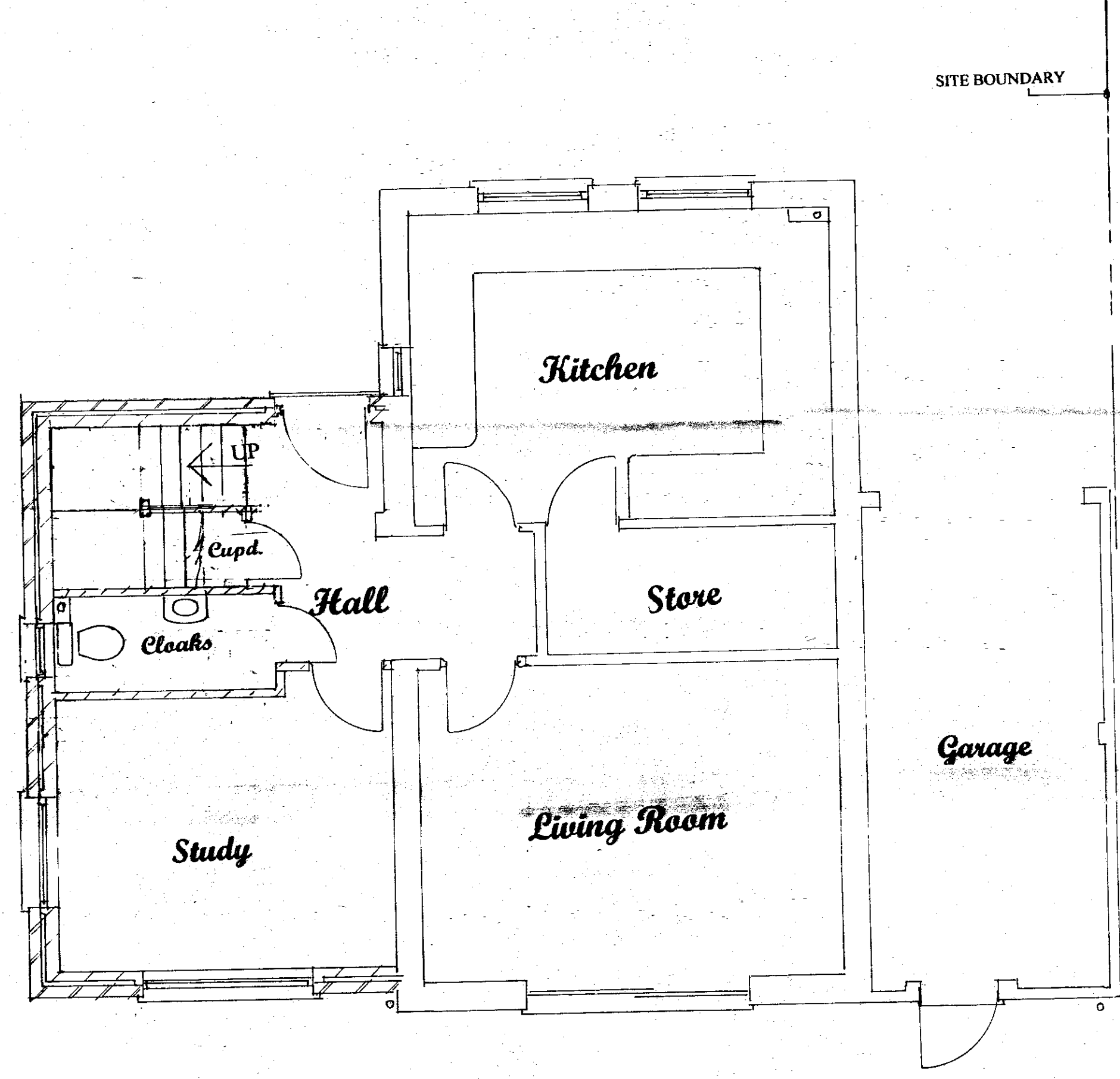
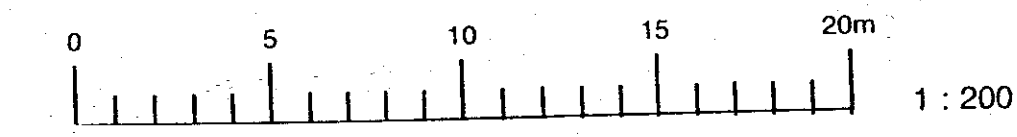
**HEATING, FIREPLACES AND FLUES**

Any new/extended heating system to comply fully with the Domestic Building Services Compliance Guide 2010.  
 Group rating A Gas fired balanced boiler flue terminals to be sited min. 300mm from any opening and fitted with durable wired guard. A notice plate is to be provided adjacent to the consumer unit stating the location of the fireplace, the flue category, appliances that can be accommodated, the size and manufacturer of the flue and the installation date. Appliances tested in accordance with approved document J and the results made available to the L.A. Building Control.

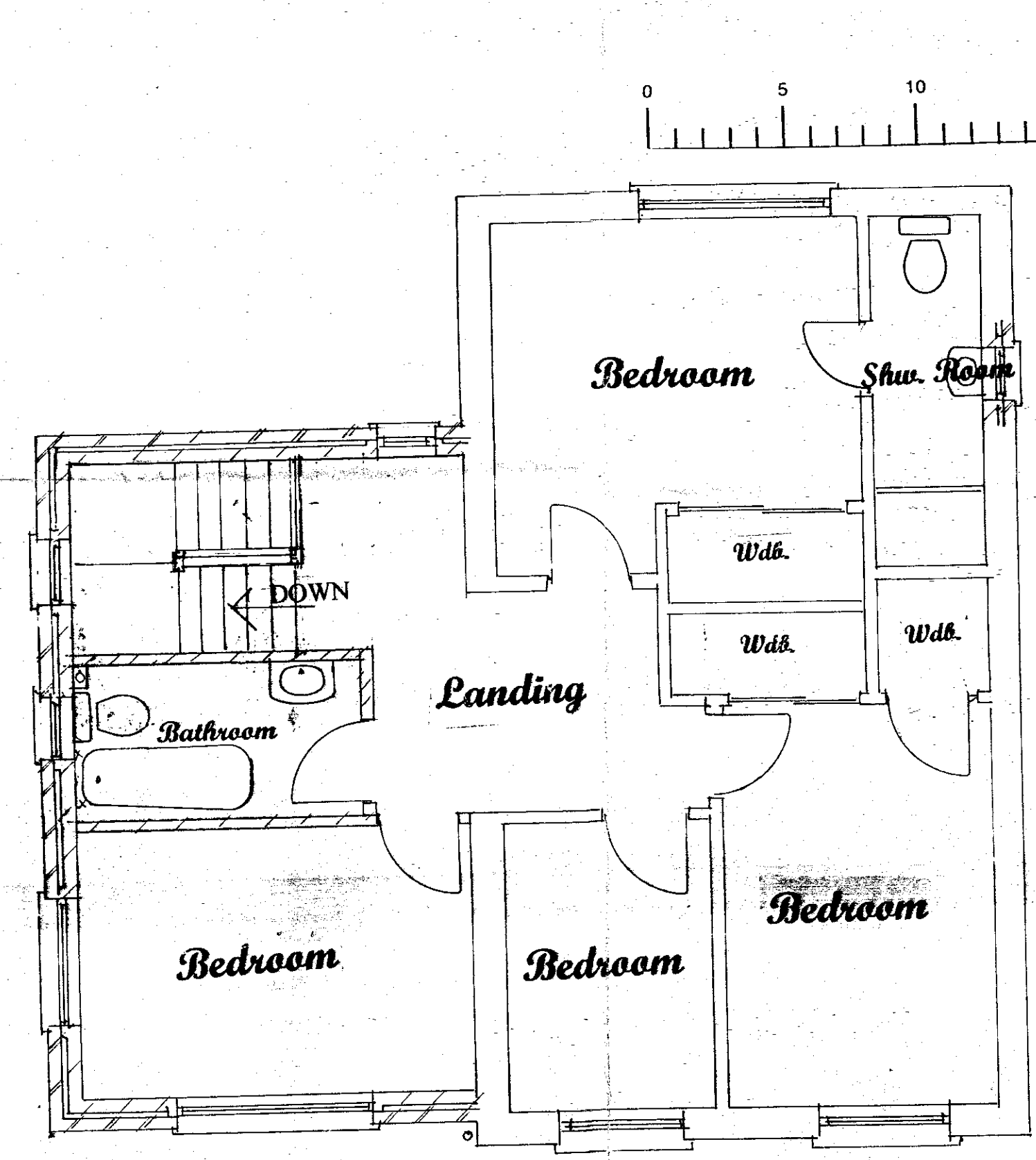
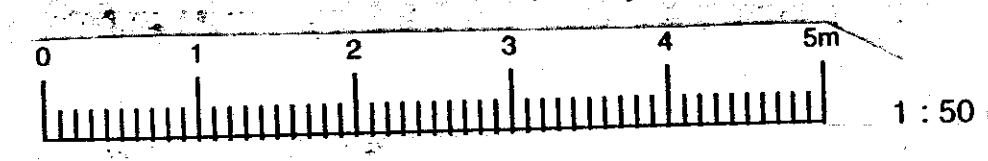
**STAIRS**

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.

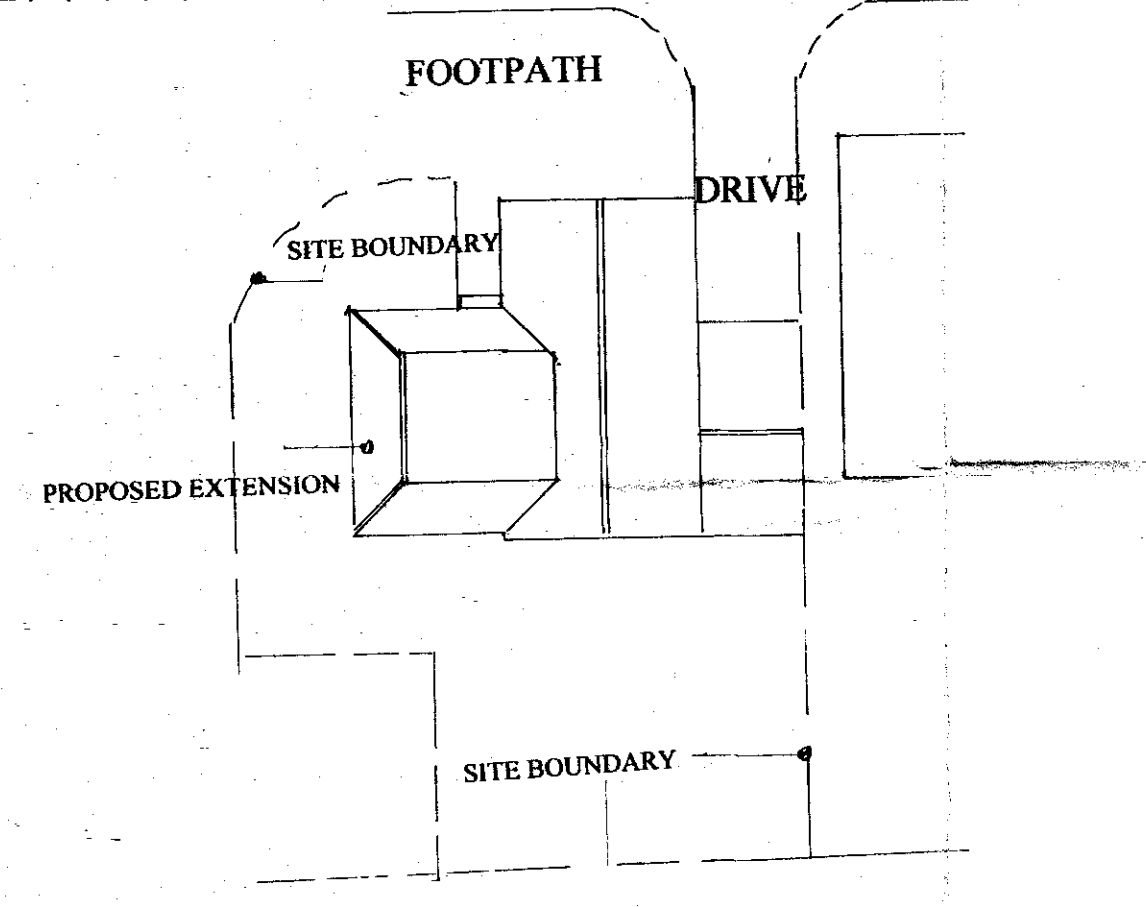
SITE BOUNDARY



GROUND FLOOR PLAN



FIRST FLOOR PLAN



PROPOSED ROOF & LAYOUT PLAN

**GENERAL**

All work to be carried out in accordance with the Building Regulations 2010 and as amended and current BS 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.

2 MULBERRY MEAD HATFIELD HERTS AL10 9EN
PROPOSED TWO STOREY SIDE EXTENSION
SCALE 1:50 1:100 1:500
DATE : DECEMBER 2013
DRAWING NO. 04
DRAWING SIZE A1
CLIENT DR I. WAHEED
NEIL ANDERSON PLANNING & BUILDING DESIGN SERVICES 1A WOODLAND WAY OAKLANDS WELWYN HERTFORDSHIRE AL6 0RZ TEL. 01438 717854

PLANNING  
DEPARTMENT  
16 JAN 2014