

SPECIFICATIONS

GENERAL

Ventilation: Provide equivalent to 5 continuous ventilation strip at ridge. Ensure provide 25 ventilation strip (or equivalent) to existing eaves. Provide trickle ventilator to give 8000mm² background ventilation to loft rooms. Provide 25 ventilation strip above Velux roof windows to ensure continuous flow over sloping ceiling areas.

Structural: Double rafters to trim all round Velux window apertures. NOTE: existing structure bearing additional load to be exposed and checked for adequacy.

Conservation of fuel and power: Glazing to have U value 2.0 W/m² K (double glazing with a "soft" low-E coating, 16 airgap or 12 argon-filled gap). Install min. one energy-efficient light fitting.

STAIRCASE

Rise = 198 Going = 220 No. equal risers = 14
Overall width = 750 Maximum pitch 42°

Floor/pitch line to top of handrail 900. Spindles at 100 centres. Max. 99 gap to open risers. Min 50 going to tapered treads.

CEILINGS & SCILLINGS

New ceiling joists with 100 Celotex insulation. Existing/new rafters to achieve 50 ventilation gap behind 50 Celotex insulation between rafters; 17 Celotex insulation across rafters with 12 foil-backed plasterboard + 5 plaster skim.

WALLS

75 x 50 studwork at 400 centres infilled with 70 Celotex insulation, and 12 foil-backed plasterboard + 5 plaster skim each side (internal walls) or one side (perimeter walls).

DORMER ROOF - FLAT

Bitumen bedded limestone chippings on three layers bitumen roofing felt to BS 747, on 18 exterior plywood decking on 50 x 50 cross battens at 400 centres, on firing piece (at 1:40) on 50 flat roof joists at centres, infilled with 100 Celotex insulation, and 12 foil-backed plasterboard + 5 plaster skim internally. Provide 25 ventilation gap around perimeter of flat roof. 112 half-round gutter to perimeter of roof, discharge onto existing roof via 68° downpipe.

DORMER ROOF - PITCHED

Concrete roof tiles on treated battens on 100 x 50 rafters at 400 centres, matched over 100 x 50 sole plate. Ceiling to be 100 x 50 at 400 centres. Internal specification as per 'Ceilings'. Provide 25 ventilation around perimeter of pitched roof and equivalent to 5 continuous ventilation strip at ridge. 112 half-round gutter to perimeter of roof, discharge onto existing roof via 68° downpipe.

DORMER WALLS

Vertical tile hanging on treated battens on breather paper on 12 ply bracing on 100 x 50 framing at 400 centres, infilled with 70 Celotex insulation, and 12 100 x 50 gypsum at 400 centres, with 5 plaster skim internally. 100 x 100 corner and reveal posts. Checks within 1000 of boundary to have 9 Supalux over ply to achieve half-hour fire resistance from both sides. Checks built off existing masonry to have GMS straps at 900 centres. Dormer fully weathered in Code 4 lead flashing.

NEW FLOOR

Main beams on load bearing walls supporting new and existing structure. Supporting wall under rafters to have sole plate bolted to top flange of RSJ via M10 bolts at 600 centres. Timber packing bolted through RSJ web via M12 bolts at 600 centres, carrying GMS joisthangers with tails taken over stud wall sole plate. New joists to be 50 minimum from chimney breasts. Existing ceiling joists strapped up to new floor beams where binders removed. Steelwork to have 50 x 50 framing at 600 centres and encased in 12 fireline board for half-hour fire protection. New flooring to be 18 tongued and grooved flooring grade chipboard.

FIRE RESISTANCE

Existing ceilings - PLASTERBOARDED.

New loft floor to be full half-hour fire-resistant. Lay 60 'Rockwool RW2' over chickenwire over existing ceiling joists, prior to laying new floor joists. Ensure first floor achieves modified half-hour fire resistance. Doors marked 'o' to be self-closing. Any glazing to be replaced with fire resisting glass (JANITE).

o Mains powered interlinked smoke alarms to BS 5446.

GABLE END S

100 x 50 studwork at 400 c/c built up off existing 100 x 50 sole plate on inner leaf, with 70 Celotex insulation + 12.5 Duplex plasterboard + 8 skim internally, 9 ply & breather paper externally. Build 102 brickwork outer leaf off existing brickwork, with bricks and bonding pattern to match existing. Stainless steel frame ties screwed to studs at 900 c/c horizontally and 450 c/c vertically. GMS straps at 1200 c/c across 3 new rafters with solid noggin's between, to brace gable end.

NEW PITCHED ROOF

CONCRETE TILES ON BATTENS ON FELT ON SARKING BOARD COMPRISING 6 PLY + 50 CELOTEX/ KINGSPAN, ON NEW RAFTERS PITCHED AT 50°, NOTCHED OVER EXISTING 100 X 50 WALL PLATE AND WELL NAIL TO EXISTING RAFTER FEET. 12.5 PLASTERBOARD + SKIM INTERNALLY. (WARM ROOF CONSTRUCTION - NO VENTILATION REQUIRED). ENSURE EAVES ARE NOT VENTILATED. REAR STUD WALL IN NEW ROOM 2 TO HAVE 70 CELOTEX WELLS + POLYURETHANE VAPOUR BARRIER TO SEAL ROOM EXISTING REAR ROOF AREA (UNALTERED).

F1	FLOOR BEAM	203x133 UB30
F2	"	152x152 UC23
F3	"	152x89 UB16
F4	"	276x58 x 600 CHANNELS
F5/6	"	203x102 UB23
F7	"	178x102 UB19
F8	"	127x70 UB13
V1/2	VALLEY RAFTERS	150x50 (JOINT F8/F6 + F8/F7)
	NEW RAFTERS	100x50 AT 400%
P1	PURLIN ACROSS STAIRWELL	2/150x50
	HALF-LANDING TRIMMERS	2/100x50
REF.	DESCRIPTION	BEAM SIZES

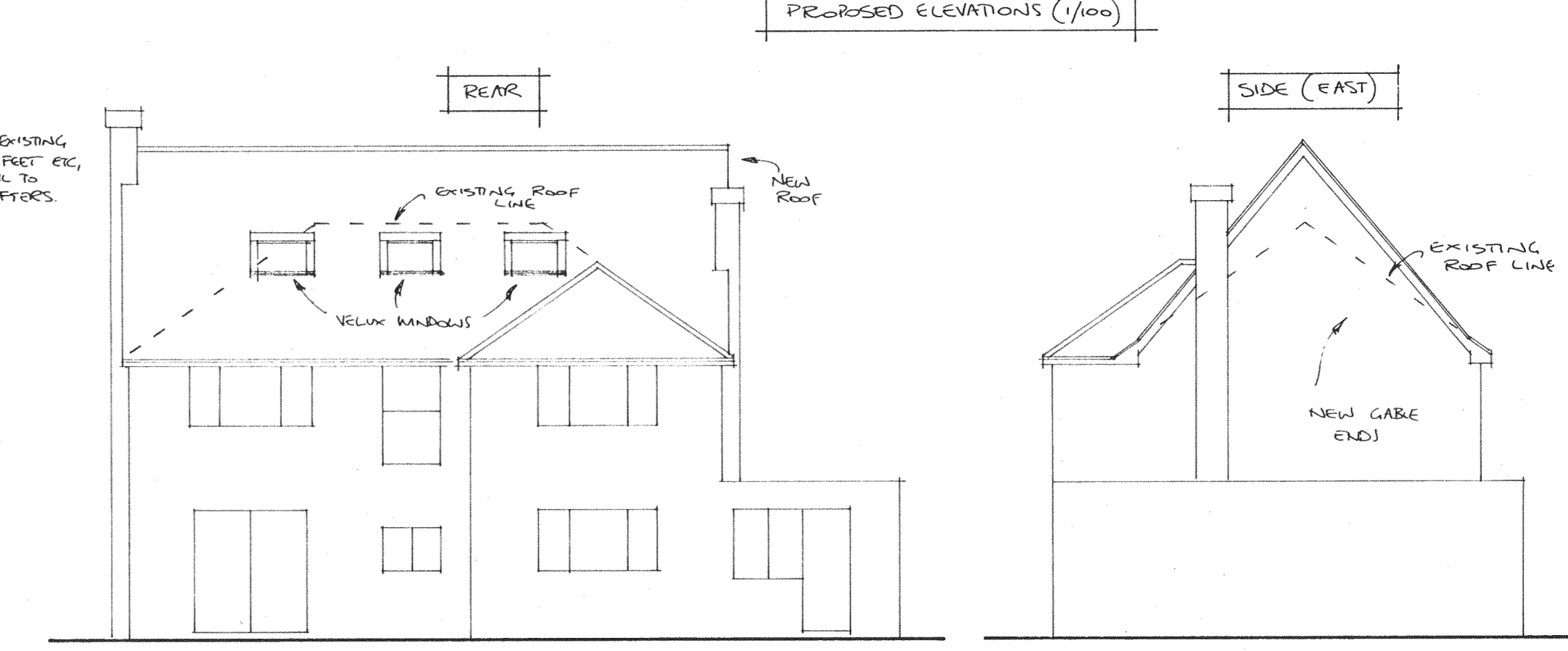
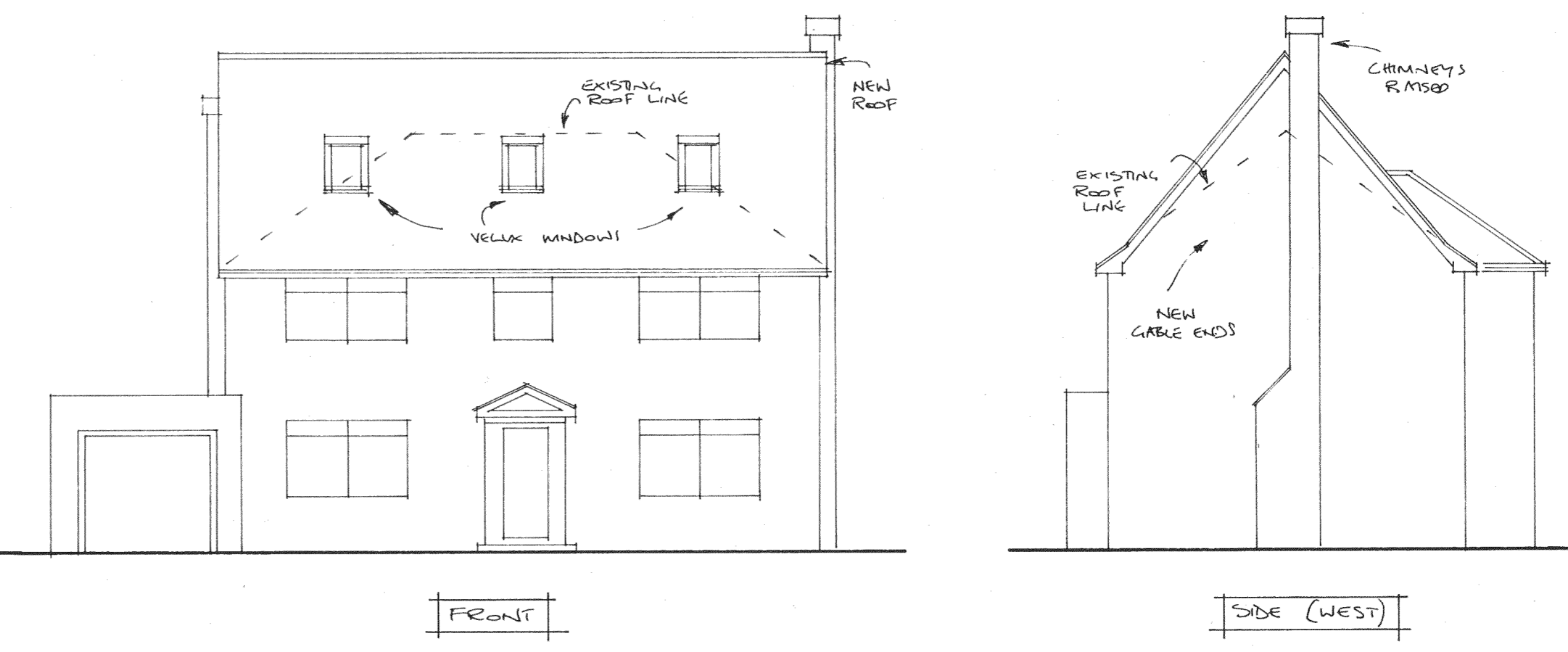
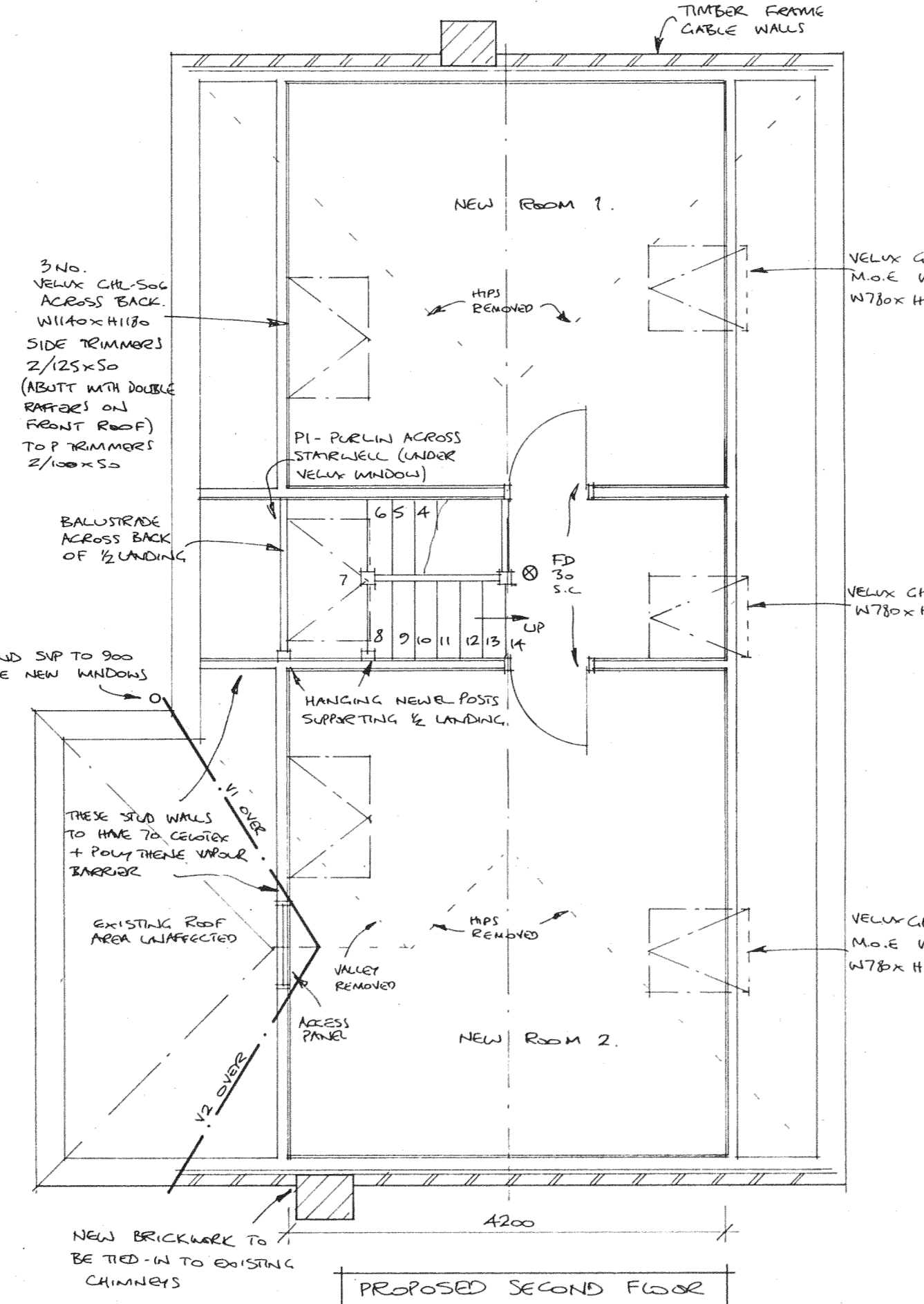
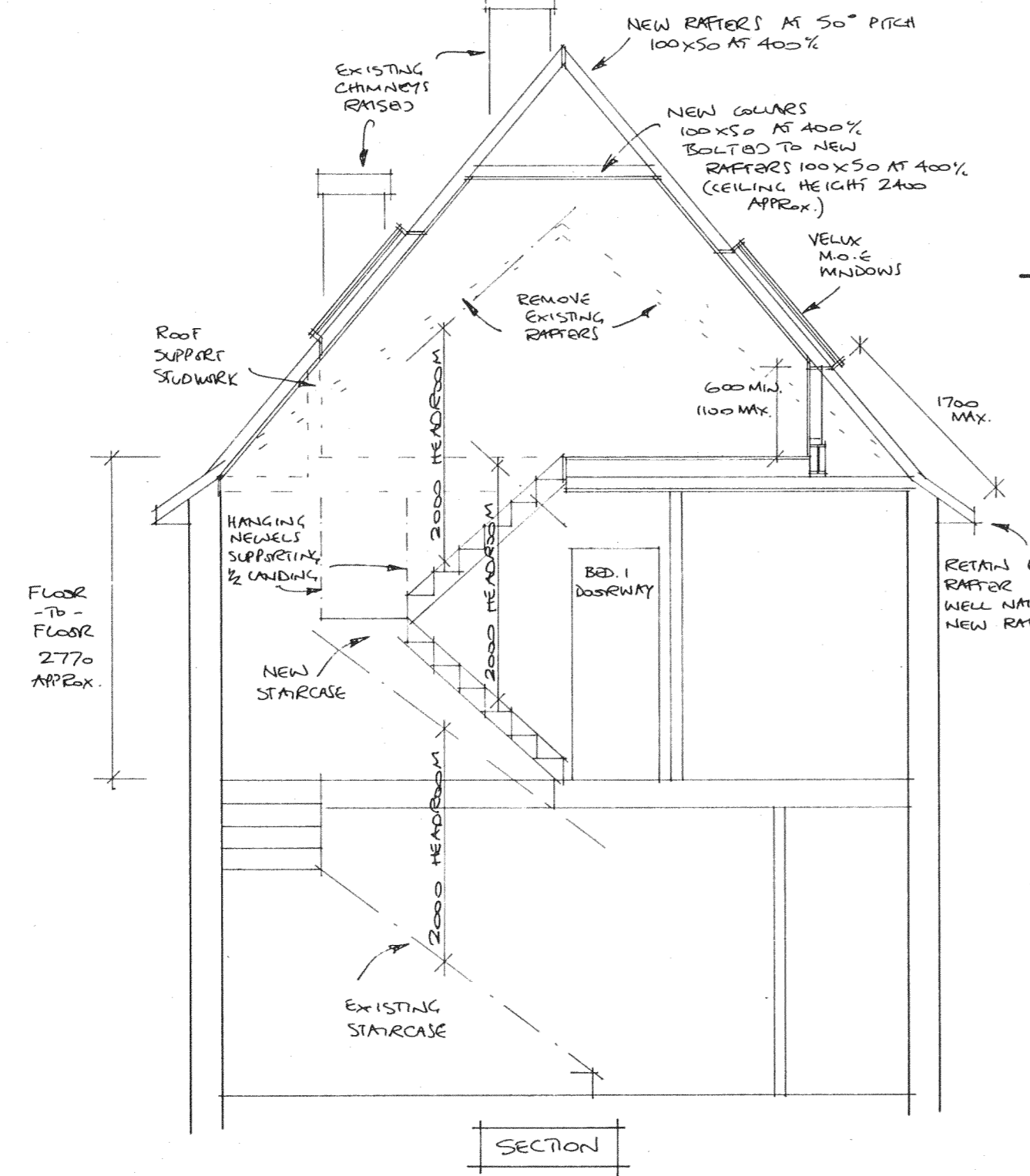
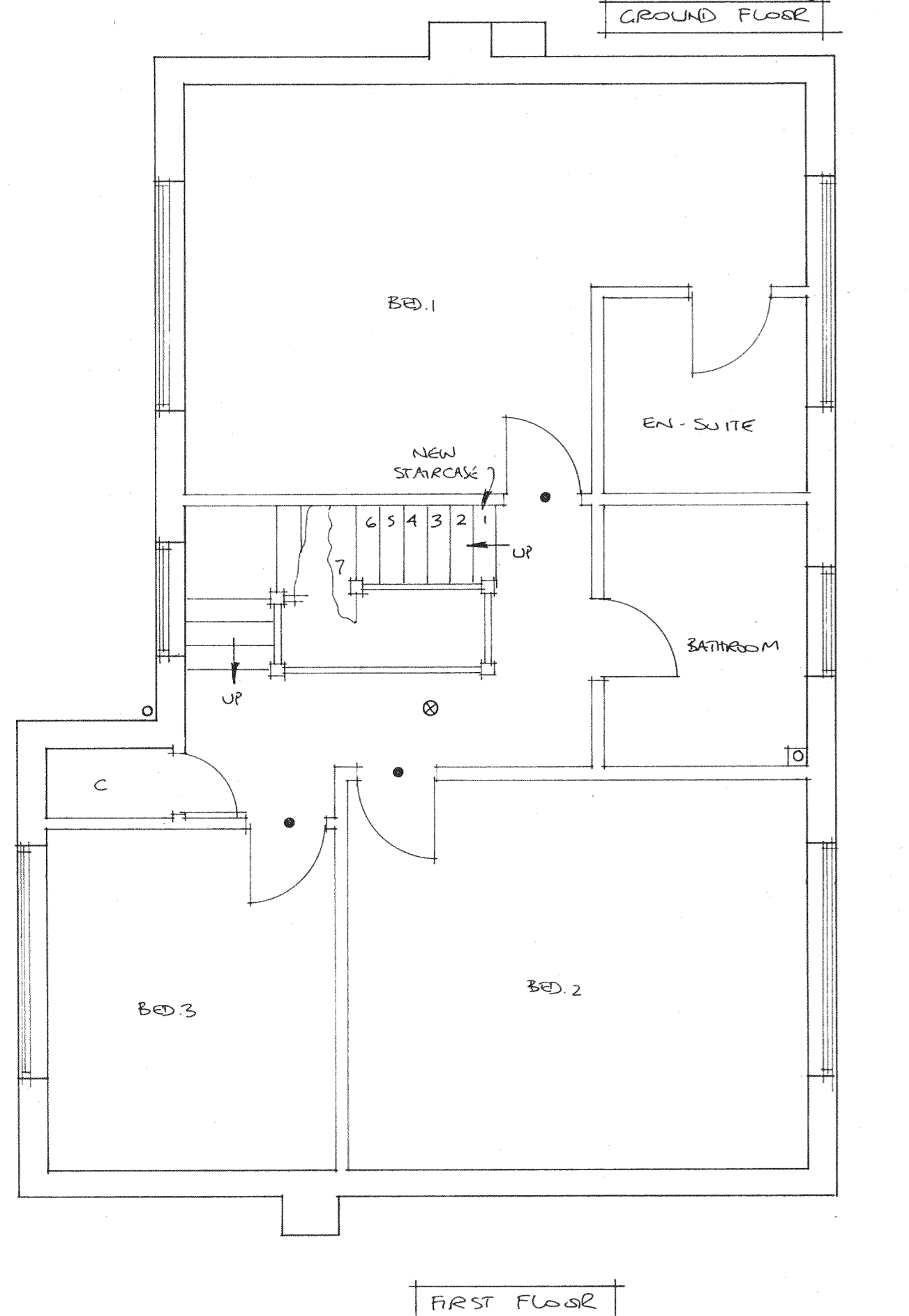
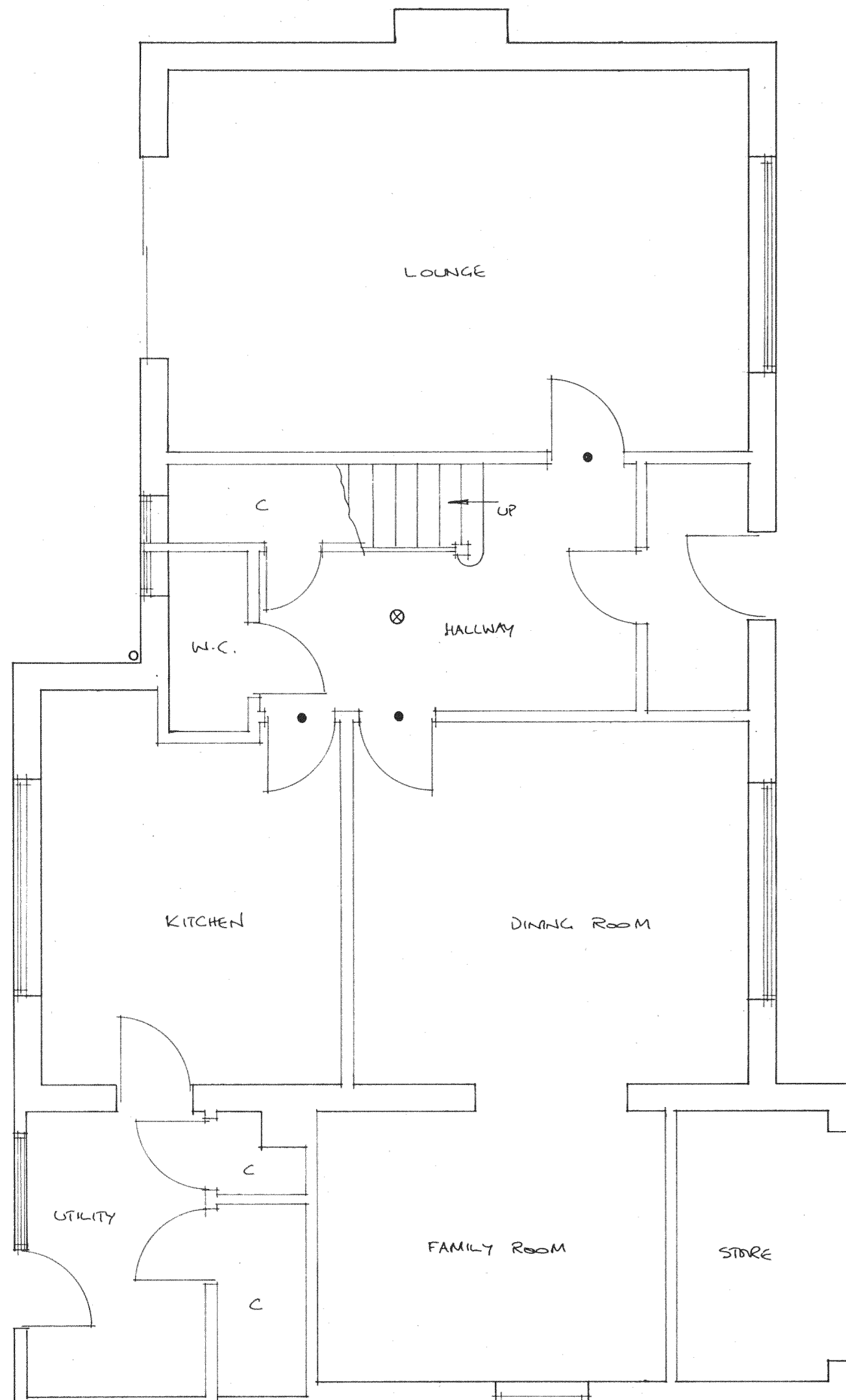
DIMENSIONS IN MILLIMETRES
JULIAN ADAMS BSc (HONS)
Loft Conversion Design

CONTRACTOR/AGENT
RAISE THE ROOF LOFTS

PROJECT

SCALE 1/50 DATE 21.5.03

DRG. No. KA/02 REVISIONS
A 18.6.5 BEAM SIZES ADDED.



PROPOSED ELEVATIONS (1/100)

