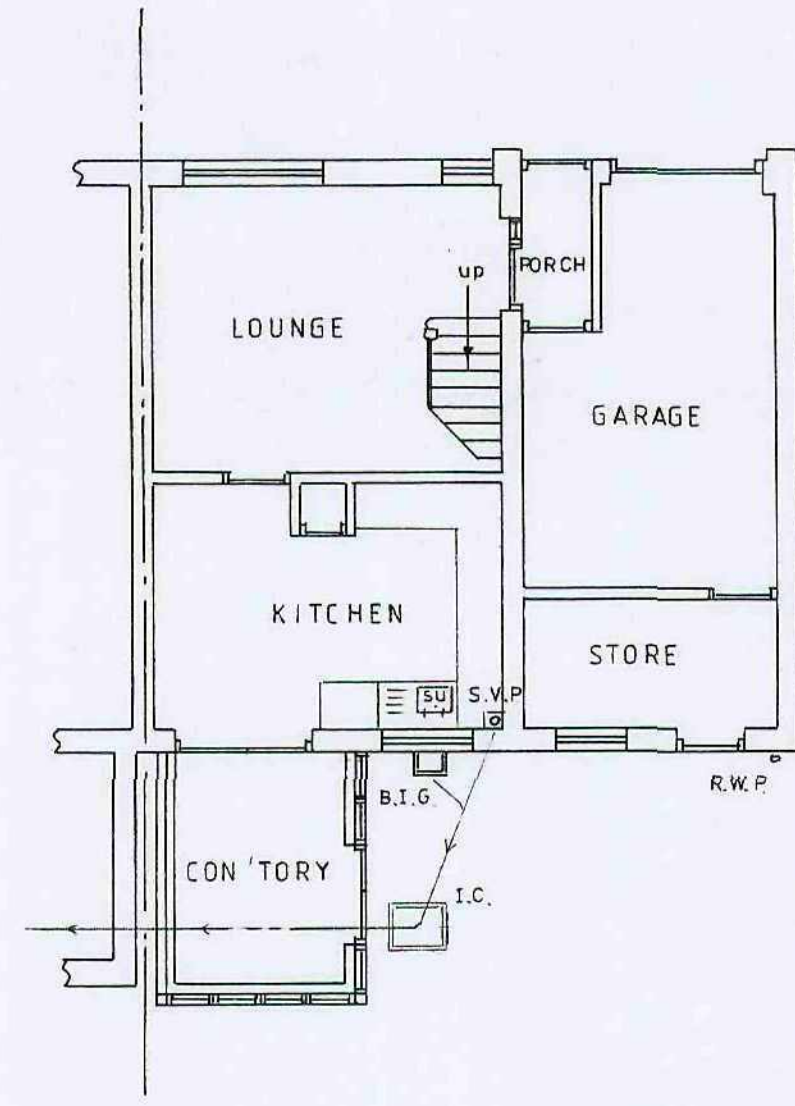
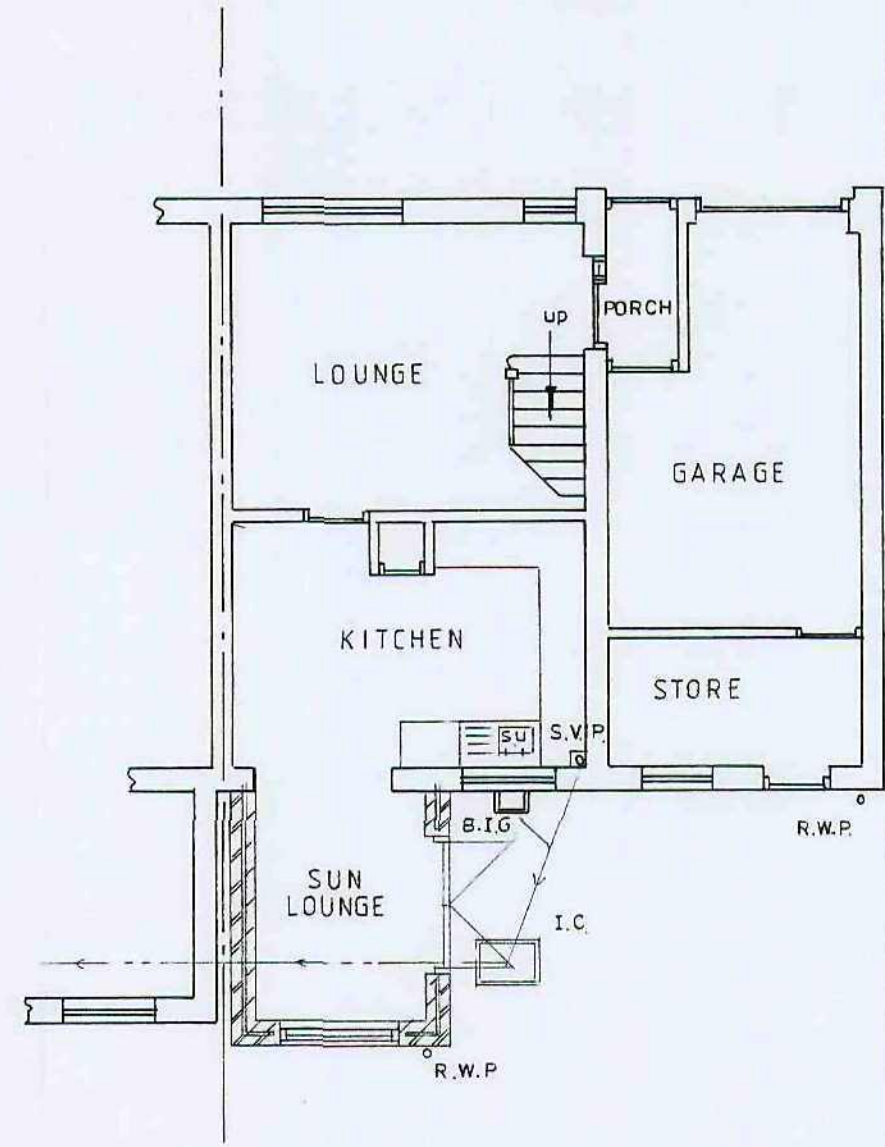
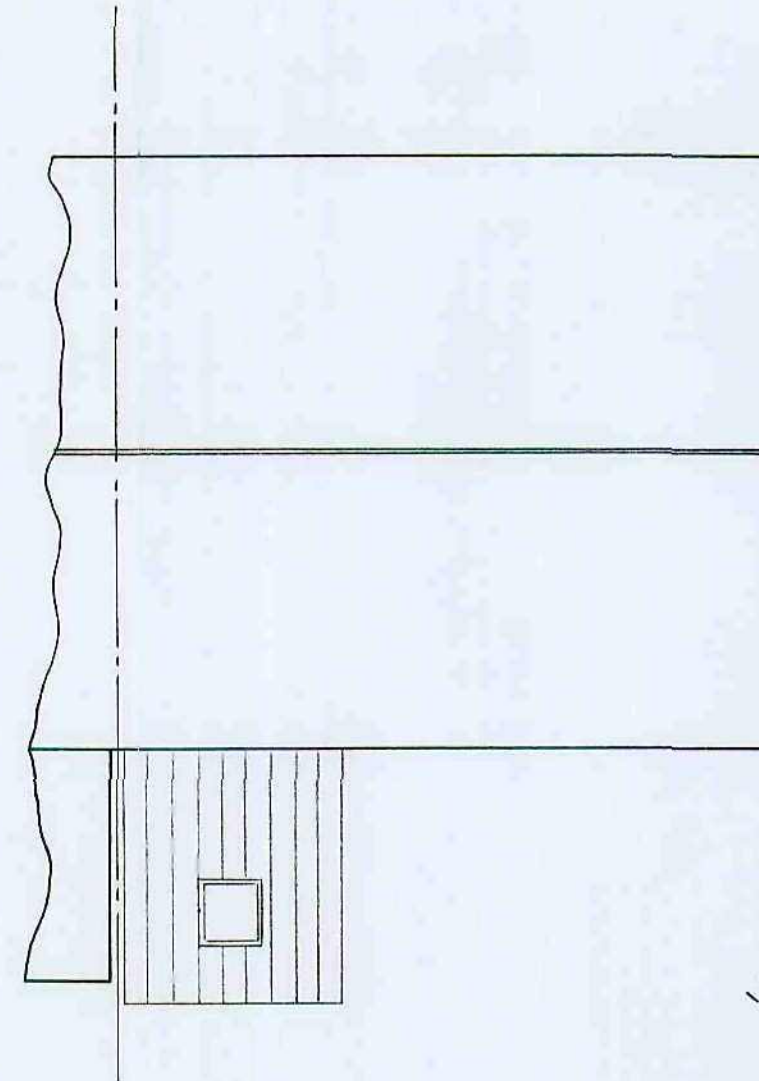




EXISTING G.F. PLAN



PROPOSED G.F. PLAN



ROOF PLAN

FLOOR: 19 t+g chipboard on 100x50 s.w. joists @ 400cts, on 110 honeycombed sleeper walls (inc d.p.c.) @ 1800cts max built off slab of raft, 200 fibreglass / 105 Celotex Extra-R XR3000 / 105 Kingspan Kooltherm K3 / 105 Kingspan Thermafloor TF70 / 140 Styrofoam insulation between joists. (NB: min 150 clearance between concrete & under side of insulation).

225x75 air grates & cavity liners @ 1800cts.

IF STRIP FOUNDATIONS: 100 over-site concrete thickened to 150 (x450) under sleeper walls, 1200g visqueen d.p.m., 25 sand, min 100 compacted hard core.

DRAINAGE: 100 p.v.c. s.w. drains, min fall 1in40, b&s in pea gravel, to soak away [FIRST OPTION], min 5.0m from buildings (soak away test to be carried out in presence of L.A. B.C.O. & if strata is unsuitable, an alternative method of drainage is to be adopted).

ALTERNATIVE: to ex' system, via new b.i.g. if required. Position & flow of ex' drains to be checked & confirmed on site by contractor.

ELECTRICAL WORKS: All electrical work to comply with Building Regulations Part P to satisfaction of L.A. B.C.O., inc electrical certification (to BS7671) issued by a member of the competent persons scheme (registered with a Part P Self-Certification Scheme) OR an electrical inspection to be carried out by L.A. officer & a further fee charged.

50% of new light fittings should only be capable of accepting high efficiency lighting.

OTHER WORKS: Remove ex' Kitchen French doors (re-use in extension) & make good.

Take down Conservatory & cart away.

PROPOSED SINGLE STOREY EXTENSION at No 1 ASHWOOD GROVE, GREAT HOUGHTON for Mr. G. THOMAS. Scale ~ 1:100

All measurements in mm (eg 150) unless stated.

ROOF: Marley Malvern; Marley Wessex; Forticrete Centurion 12.5 concrete tiles (colour to match ex'), on 25x38 s.w. battens on untearable roofing felt (lapped 150 horizontally & 300 vertically, pulled taught & dressed into gutter), apx 15° pitch.

NB: Forticrete Centurion 12.5, min 12.5° pitch.

150x50 rafters & ceiling joists/ties @ 400cts.

50x100 s.w. wall plate.

150x50 s.w. plate bolted to wall to receive rafters, ceiling joists etc, via m.s. joist hangers.

30x5 galvanised m.s. anchor straps @ 1800cts, at rafter & ceiling level; min 1.0m length down wall & to span min 3No joists inc 100x50 noggins.

25 s.w. fascia board with continuous 25 vent'n gap (with vermin proof strip) & proprietary eaves/rafter vent tray.

100 fibreglass insulation between ceiling joists & 170 laid across = 270 total thickness.

13 p.b. & skim ceiling.

100 p.v.c. gutter & 63 p.v.c. r.w.p.

150 Code 5 lead flashings.

Vent tiles @ 1200cts at high level.

ALTERNATIVE HORIZONTAL INSULATION: 100 Kingspan Thermapitch TP10 insulation board between ceiling joists with 50 Kingspan Thermapitch TP10 laid across = 150 total thickness.

SLOPING CEILING: Where rafters form ceiling:

VENTILATED: Provide 100 Kingspan K7 or 100 Celotex Tuff-R GA3000 insulation board between rafters (maintain 50 clear air space between felt & insulation); with 25 Kingspan K7 or 35 Celotex T-Break TB3000 insulation board across rafters; 500g polythene vapour control layer (alternative: formed by sealing board joints with self adhesive aluminium foil); 13 p.b. & skim.

UNVENTILATED: Provide 120 Kingspan K7 or 140 Celotex Extra-R XR3000 insulation board between rafters; no insulation board required across rafters; 500g polythene vapour control layer [alternative: formed by sealing joints with self adhesive aluminium tape]; 13 p.b. & skim.

NB: MUST be used in conjunction with breathable roofing felt. eg Kingspan Nilvent.

Rafter/ceiling joist junction to be bolted through, inc toothed connectors (eg Bulldog clips or similar) & 30x5 galvanised m.s. anchor straps (Catnic vertical 'T' Type) min 1.0m down wall, to base of each alternate rafter - to counteract roof spread.

P+P proprietary rafter vent tray at rafter/ceiling joist junction; ridge vent tiles @ apx 1800cts; provide 25 continuous vent gap (or equivalent) to eaves & ensure void above horizontal ceiling; all to provide through ventilation.

NB: BEST OPTION use breathable roofing felt (eg Kingspan Nilvent) then no ventilation requirements.

EXTERNAL WALLS: Cavity walls: 105-115 facing bricks (to match existing); 100 cavity with full fill cavity batt insulation (Dritherm, Rockwool); 100 aerated concrete blocks (Plasmoor Stanlite/Ag-lite/Fibrolite; Thermalite Shield; Celcon Standard), with 13 lightweight Carlite plaster & skim or 10 p.b. & skim on dabs. Cavity can be reduced to 75 if either Thermalite 'Turbo' or Celcon 'Solar' blocks are used.

ALTERNATIVE: 75 cavity with 50 partial fill Kingspan Kooltherm K8 or Kingspan TW50 or Celotex Tuff-R CW3000 cavity board insulation - maintain 25 clear cavity; NB cavity MUST be clear of ALL obstructions.

Polyfoam cavity closers around openings.

New brickwork to be bonded to existing.

Stainless steel tie irons @ 750cts horizontal, 450cts vertical, 225cts vertical at reveals.

Vertical twist type ties for cavity batts.

Double drip type ties & retaining clip for cavity boards.

Cavities to be continuous, conc filled to 150 below d.p.c. & open at eaves to allow wall insulation to link with roof insulation (to avoid thermal bridge).

d.p.c. to walls (min 150 above G.L.), openings & reveals.

Catnic/I.G./Keystone lintels over new openings, fitted to manufacturers instructions & Span/Load Tables.

All lintels, jambs & cills to be fully insulated.

Contractor to inform L.A. B.C.O. of intended lintels prior to installation.

LINTELS: Contractor to use the following lintels dependant on cavity width & inner leaf thickness [max opening]:

CATNIC: CG90/100 [3600]; CN14A [2400]; CN14C [4500] CG70/100 [3600]; CN3A [2400]; CN4C [4500]

KEYSTONE: P/K-90 [2700]; S/K-90 [4500] P/K-70 [2700]; S/K-70 [4500]

I.G.: L1/S80 [4500] L1/S70 [4500]

WINDOWS: to be double glazed with soft low-E coating & achieve U-value of 1.80 W/m²K (Pilkington K or equivalent) & draught stripped; 1/20 of floor area to open & be fitted with trickle ventilation min area 5000mm² equivalent area or 'Espagnolet' double catch locking mechanism.

Safety glazing (BS6206 1981) to French doors & to windows less than 800 above F.P.L. or within 300 of any door ... #

'Velux' roof lights fitted to manufacturers instructions, inc all flashings etc.

FOUNDATIONS: New raft foundations to be same design & specification as existing raft, if known.

ALTERNATIVE DESIGN: 150 concrete raft with 250x600 edge beam, reinforced with A252 mesh top & btm of slab, A393 mesh btm of edge beam; 1200g visqueen d.p.m.; 25 sand; min 150 rolled limestone.

New raft fixed to ex' raft via 22 diameter steel dowels 300 long @ 450cts, set in Epoxy resin.

ALTERNATIVE FOUNDATIONS: 600x225 concrete strip, depth determined on site by L.A. B.C.O.

Any drains under building to be protected to satisfaction of L.A. B.C.O. & lintelled over when passing under walls.

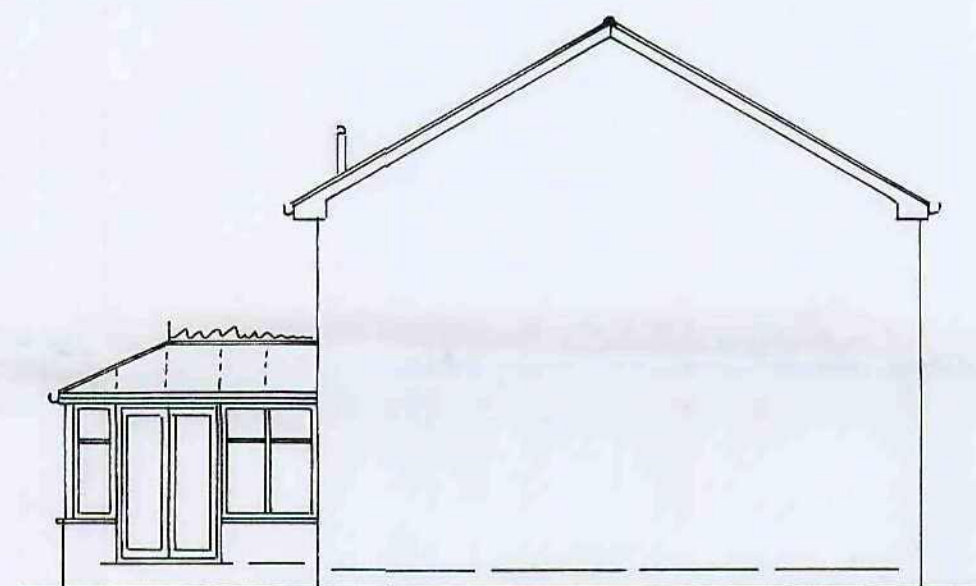
NO PART OF EXTENSION (INCLUDING FOUNDATIONS, FASCIAS, SOFFITS, GUTTERING, RAIN WATER PIPES, WASTE PIPES ETC) TO PROJECT BEYOND BOUNDARY



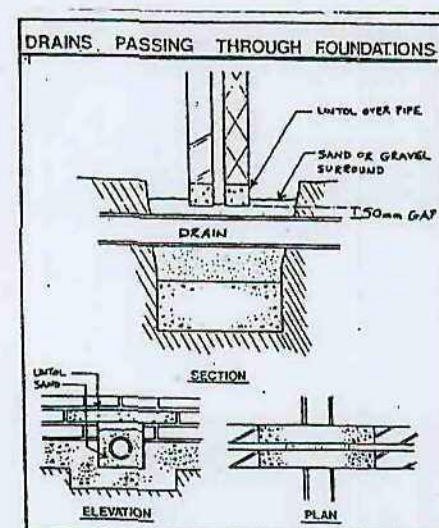
LOCATION PLAN 1:1250



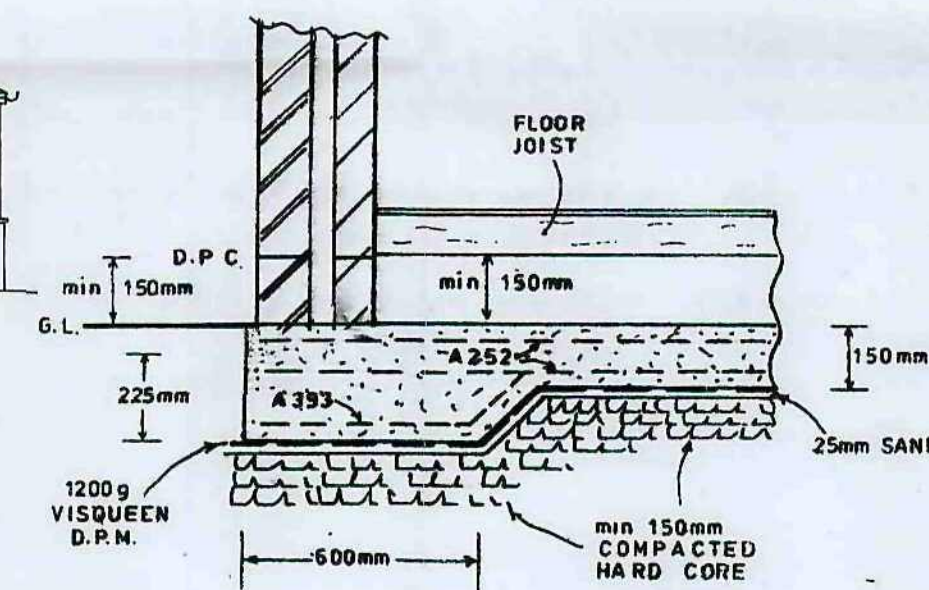
EXISTING REAR



EXISTING SIDE



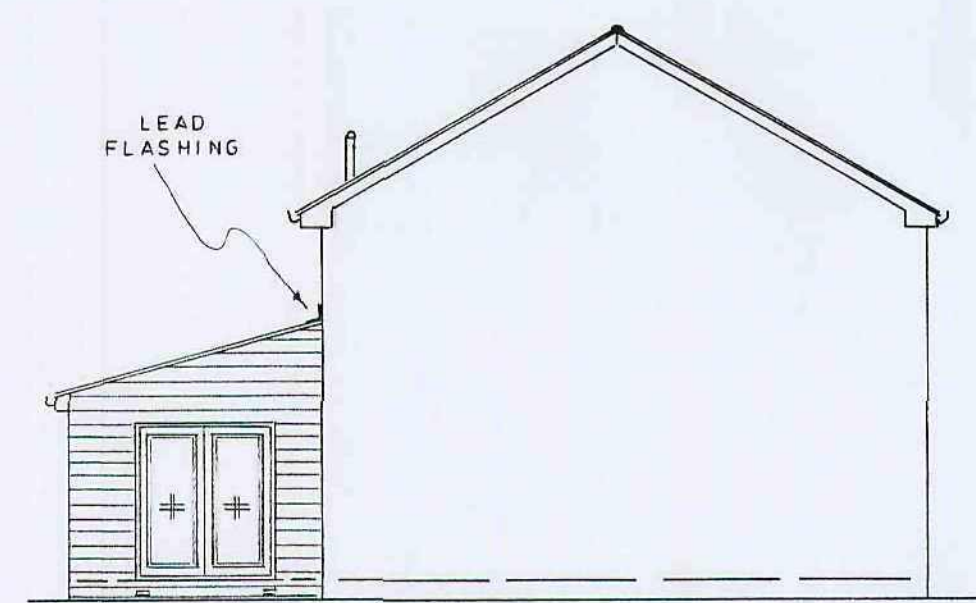
EXISTING SIDE



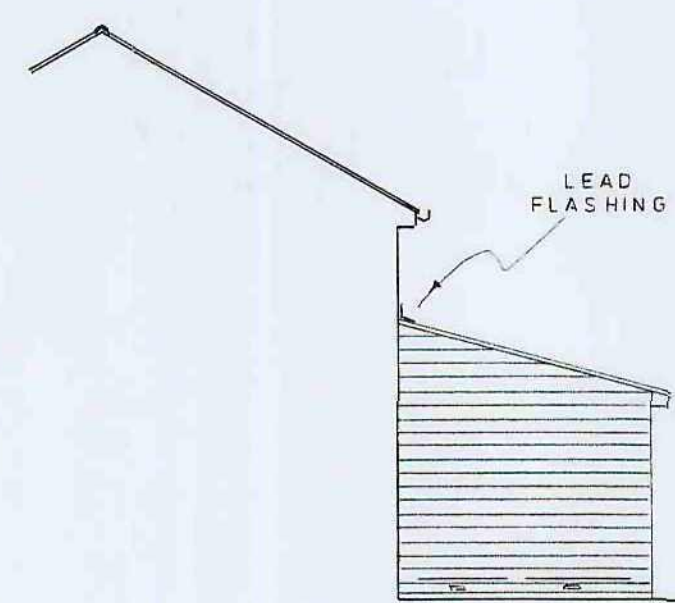
RAFT FOUNDATION DETAIL 1:20



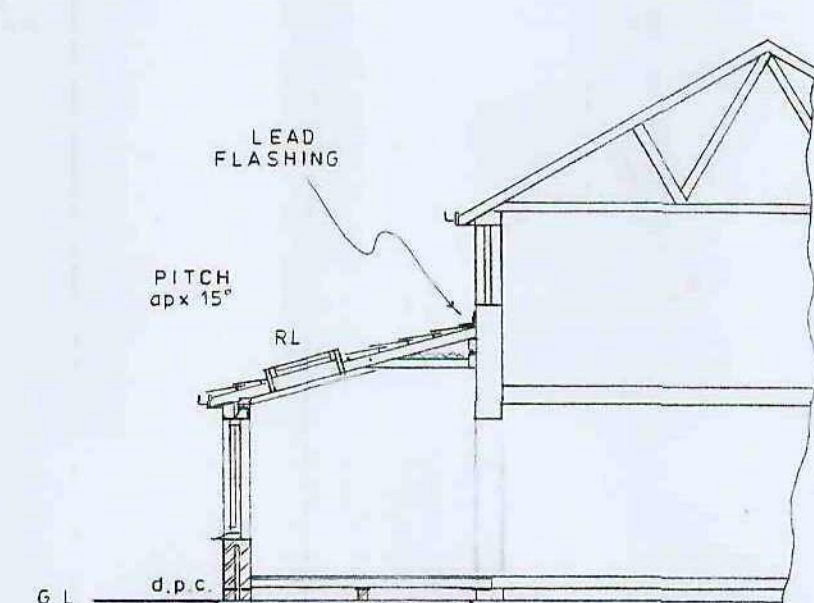
PROPOSED REAR



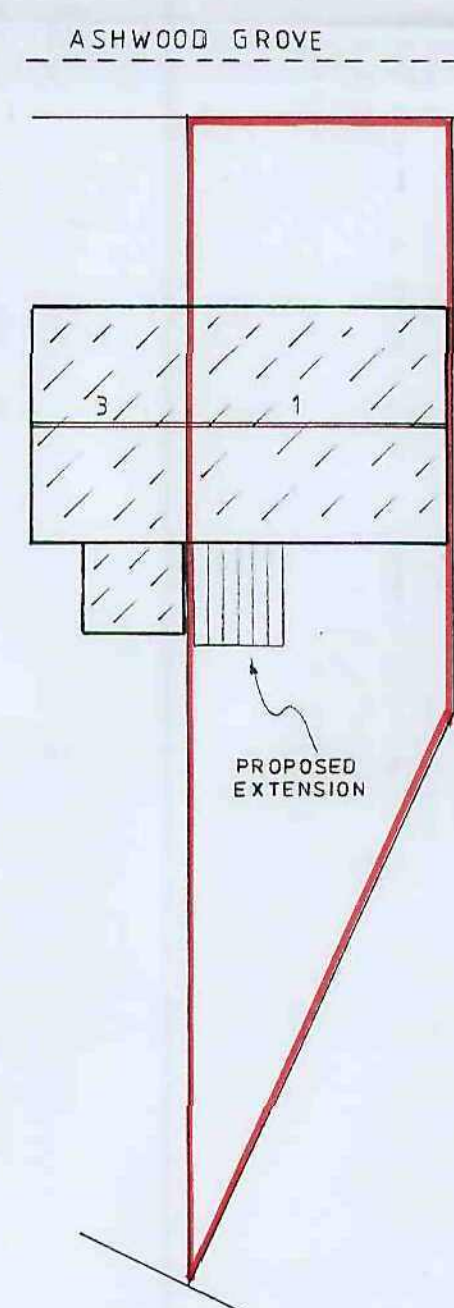
PROPOSED SIDE



PROPOSED SIDE



SECTION



SITE PLAN 1:250

