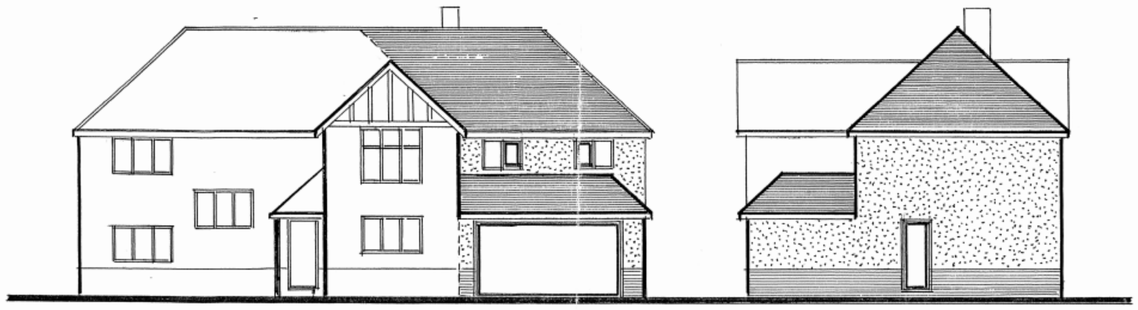
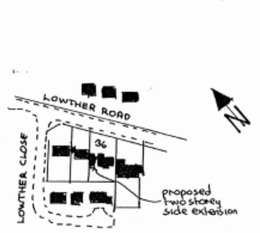


northeast elevation

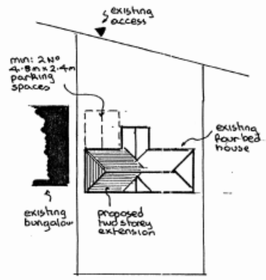
northwest elevation



southwest elevation



location plan 1:2500



block plan 1:500

notes:-

Roof:- Tiling to match existing on felt and battens on 175mm x 50mm rafters pitched to match existing and set at 400mm centres with 225mm x 50mm ceiling joists at 400mm centres with 200mm fibreglass insulation between joists and ceiling of 9mm foil backed plasterboard and skimcoat plaster to receive selected decorations. At sloping ceiling positions two layers of 59mm celotex double 'R' rigid slab insulation to be placed between rafters to maintain min: 50mm air gap. 225mm x 50mm hip rafters to be used. Roof space to have permanent cross ventilation and this is to be achieved by combination of proprietary eaves vents equivalent to 25mm continuous gap and ridge vents equivalent to 5mm continuous gap. Feet of all rafters to be tied back.

First floor:- 18mm t&g flooring grade chipboard on 150mm x 50mm floor joists at 400mm centres with central row of herringbone strutting with double joists under partitions and family room ceiling of 12mm plasterboard and skimcoat plaster to receive selected decorations. Over garage 150mm fibreglass insulation to be placed between joists and ceiling of two layers of 9mm plasterboard laid cross bonded as fire break.

Garage roof:- Three layer felt (high performance) and chippings on 18mm exterior quality plywood on 125mm x 50mm roof joists set at 400mm centres to create min: 1 in 60 fall with 175mm x 50mm ceiling joists at 400mm centres but no ceiling. Triple joist under struts from north-west slope. Pitched section formed of tiling to match existing on felt and battens on 100mm x 50mm rafters pitched to match existing at 400mm centres.

Lateral restraint:- Where joists run parallel to an external wall, lateral restraint must be achieved by metal straps at 1200mm centres spanning three joists. In addition mild steel anchors min: 30mm x 5mm cross sectional area are to be provided at 1000mm centres to anchor down all wall plates.

Ground floor:- Garage floor 100mm concrete slab on 150mm selected hardcore. Family room floor formed of selected floor finish on 65mm reinforced screed on building paper on 40mm Rockwool rigid slab insulation on 150mm suspended concrete floor slab, supported on all edges and reinforced by B503 fabric reinforcement with 8mm main bars at 100mm centres and 8mm distribution bars at 200mm centres with 40mm bottom cover set on blinded layer of 150mm selected hardcore.

Walls:- At lower level 112mm external skin of facing brick to match existing with 50mm cavity containing 50mm Rockwool insulation batts and 100mm internal skin of Celcon blockwork and 16mm plaster finish to receive selected decorations. At upper level external skin to be formed of 100mm celcon blockwork with finish of 20mm cement and sand waterproof rendering to match existing. Garage interior to be fair faced finish. To avoid risk of cold bridging reveals around new external door and window openings to be insulated.

Windows / doors:- All new windows / external doors to be double glazed and fitted with trickle vents in head equivalent to 8000mm² opening to master bedroom and family room and 4000mm² elsewhere. Any glass in windows below 800mm or doors below 1500mm, measured from floor level, to be in laminated safety glass. Windows adjoining french doors are to be treated as doors for this purpose. Master bedroom window must provide min: 0.33m² opening as alternative fire escape with no dimension less than 450mm and set maximum 1100mm above floor level.

Partitions:- New first floor partitions to be formed by 100mm x 50mm timber studding at 400mm centres with 100mm fibreglass insulation between studding and faced with 9mm plasterboard and skimcoat plaster to receive selected decorations.

Lintels:- I.G. lintels ltd type H/S galvanised steel insulated lintels.

D.p.c & flashings:- D.p.c to be lead cored felt and flashings in code 4 lead.

Electrics:- To clients individual requirements but must be installed in strict accordance with current I.E.E regulations and include mains controlled linked smoke detectors at ceiling level on landing and in hall.

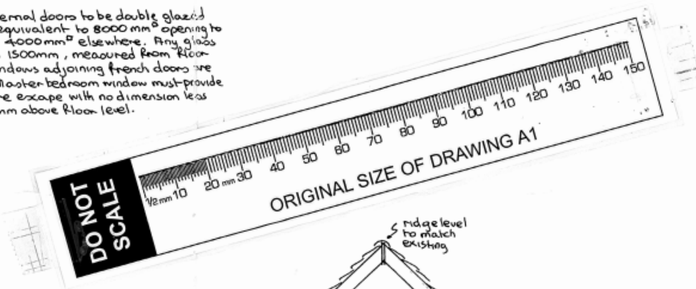
Ventilation:- En-suite to be fitted with extract fan discharging to open air at rate of 15 litres per second.

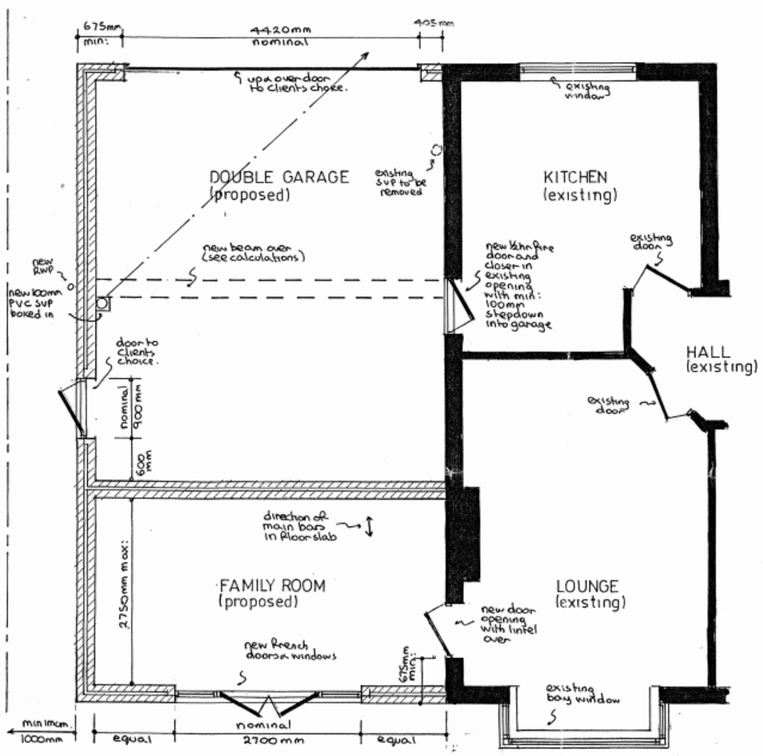
Rainwater:- 112mm gutters to discharge via new 62mm downpipe discharging via back inlet gullies and 100mm upvc underground drain pipe to new soakaway 1000mm diameter x 2000mm deep and situated min: 4500mm from any building.

Foul drainage:- En-suite equipment to discharge via deep seal traps and wastes to new 100mm pvc SVP terminating min: 900mm above highest opening windows. 100mm w.c. waste, 40mm bath and shower and 32mm basin waste. Before any work commences existing foul drain to be located in position and depth. Any new foul drainage to be carried out in 100mm upvc underground drainpipes bedded on pea shingle, set to min: 1 in 40 fall and provided with concrete lintels where pipes pass under walls.

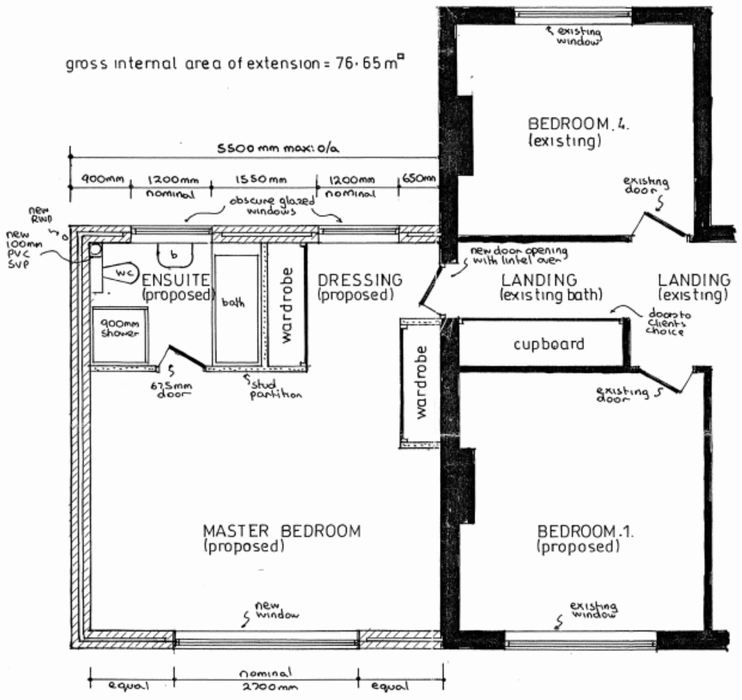
Existing structure:- Where any parts of existing structure is to be subjected to any additional loading, trial holes are to be provided for inspection and strengthened as necessary before work continues.

Beam:- (see calculations) Beam to be encased in two layers of masterboard as described for garage ceiling. Beam to be formed of 1No 254 x 146 x 37kg universal beam under inner skin with 254 x 102 x 22kg universal beam under outer skin, bolted together with 12mm bolts and spacers at 600mm centres with full bearing on 1200mm length of 152 x 89 x 16kg mild steel joist built in as padstone at SVP end and 2100mm length of 152 x 89 x 16kg mild steel joist over kitchen door on 550 x 100 x 150mm deep padstones each end.

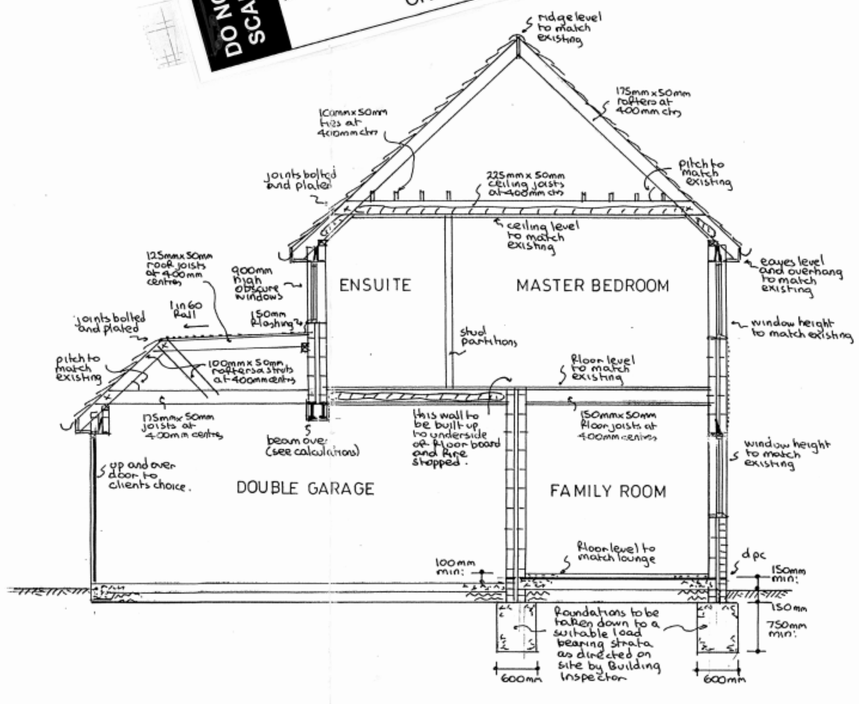




part ground floor plan



part first floor plan



typical section

PROPOSED EXTENSION at 36 LOWTHER ROAD, WOKINGHAM, BERKSHIRE for MR.I.HENDERSON & MISS.P.BUTLER.

Revisions:-

Drawing N°	AH/E/3159
Scales	1:50 & 100
Date	MAY 2001

NDESIGN BUILDING PLANS