Roof construction:

Interlocking concrete tiles to match existing installed to manufacturers recommendations on 25x50 fully treated battens on sarking felt on gangnail roof trusses and reducing trusses at max 600mm ctrs.

Roof pitch to match existing (approx 22½°)
Roof trusses to comply with BS 5268 parts 2 and 3 and truss manufacturer to supply design certificate before installation.
Longitudinal 25x100 ties to be installed at ridge and ceiling level and 25x100 diagonal wind braces installed to gable.

38x175 bargeboards installed below ends of reducing trusses.
Install preformed fibreglass valley gutters.
50x100 wall plates.

Eaves and verge construction to be similar to existing and to incorporate roof void vent strip in eaves to provide min 10,000mm² per metre vent to roof void. Maintain vent gap above insulation at eaves.

All structural timber to be grade SC3 marked dry or kiln dry.

Install 112mm dia. hr. UPVC guttering with 68mm downpipes or extended downpipe to match existing. Downpipes (new) to be connected to 110mm dia. UPVC drains bedded on 100mm pea gravel to fall to soakpits with 1 metre cubes at least 5.000 from building.

Lateral restraint:

Install 2 no 5mm mild steel straps at average 1.800 ctrs between roof structure and external walls and between suspended floor and external walls. Straps to be installed at ceiling level and at slope of roof. Straps to gable front elevation to extend over 3 no. timbers/trusses supported by noggings.

Roof insulation:

Install 100mm thick fibreglass quilt insulation between ceiling joists and 150mm thick quilt over joists.

Suspended floor:

18mm thick moisture resistant T and G flooring grade chipboard on 63x195 joists at 400mm supported on central wall and built into external walls.
Install solid strutting at mid span over garage.
Install 200mm thick fibreglass quilt insulation between joists over garage.
Install double joists bolted together at 600mm ctrs below partition.

Ceilings:

Install 12.5mm thick plasterboard throughout with 'Artex' finish.
Plasterboard over garage to be 12.5mm thick Gyproc Fireline board.
Perimeter of all plasterboard ceilings to be supported and all joints at first floor level.

Cavity wall:

New walls constructed of 102mm facing brick, 75mm cavity and 100mm thermalite standard blocks with either dense plaster or 12.5mm plasterboard and skim on dabs as internal finish.
Install 75mm thick Rockwool insulation batts to cavity.
Average U value = 0.35W/m²K
Install concrete insulated d.p.c. to reveals with frames lapping by min 15mm.
Install cavity wall ties at 900mm ctrs horizontally, 450mm ctrs vertically and 225mm ctrs within 225mm of reveals.
Install d.p.c. at least 150mm above ground.
Install concrete fill to base of cavity to within 225mm of d.p.c. level.
Concrete blockwork used below d.p.c. level to be class A.

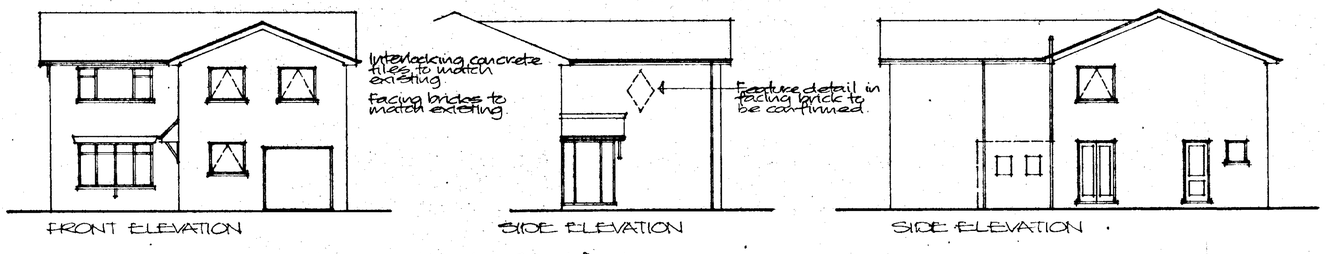
Internal cavity wall to be constructed as above but with 2 skins of 100mm blockwork.

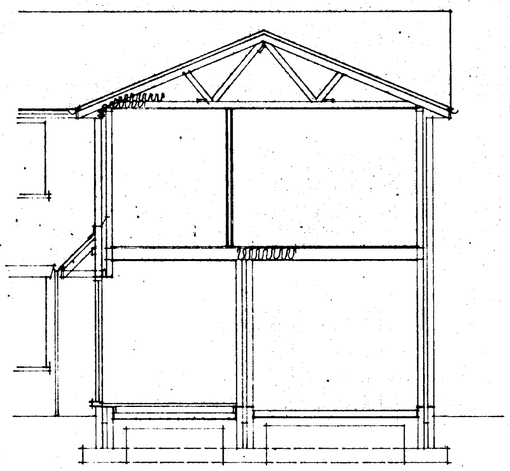
New walls bonded to existing with Furfix wall extension profiles.

Retain section of wall if possible where meter boxes located.

Foundations:

225x700 grade 20 no. concrete strip foundations (225x450 to internal wall). Extend existing foundation under section of retained wall (to be agreed on site). Foundations to be min 750mm deep (1.000 in shrinkable soil). Depth to be agreed on site with L.A. building inspector.





Ground floor:

Lobby and utility floors constructed of 50mm sand/cement screed on 100mm grade 20 no. concrete slab with 25mm thick expanded polystyrene insulation to perimeter on 1200 gauge polythene d.p.m. lapped over wall d.p.c. on min. 150mm thick hardcore well consolidated and blinded.
Garage floor as above but with no screed or insulation and finish to concrete. Allow min. 100mm step up from garage floor into entrance hall.

Windows/external doors:

Re-use existing entrance door and screen and 2 no. UPVC window frames from existing bedroom and bring up to latest standards incl. glass and trickle vents.
New window frames to be white UPVC. All glazing to be sealed double glazed units with 14mm / 16mm gaps incorporating Low E glass. Glass to doors attached to lights and any glass within 800mm of floor to be safety glass to BS 6206.
All opening lights to be draught sealed.
Install trickle vents to provide 8,000mm² background ventilation to bedrooms and utility.
Windows to provide min 5% of floor area of each room as main ventilation.

Lintels:

Install 1 no. type LI/575 steel lintels to 2 no. master bedroom windows, type LI/450 to existing bedroom new windows, type LI/HD 1215 to front entrance and garage door, install type LI/1350 to door from garage to entrance and type LI/450 to utility door.
Install cavity tray d.p.c over front elevation windows.

Porch roof:

Constructed of tiles, battens and sarking as main roof on built up roof structure formed of 38x100 rafters and ceiling joists at 400mm ctrs with 38x100 timber bolted to wall to support top of rafters.
Install 2 no 25x150 fascia and plywood soffit and gable cladding. Install gutter and downpipe and code 4 lead flashing stepped and bedded with cavity tray d.p.c. to new wall.
Existing roof tiles to be continued.
Install timber support bracket.

Drains above ground:

40mm dia. polypropylene wastes from shaver, 32mm dia. wastes from wash basin and bidet and 50mm combined waste.
All fittings to have 75 seal traps except shaver which is to have 32mm deep cleansible trap.
All fittings to connect to new 110mm dia. UPVC soil and vent stack terminating at least 900mm above window head.
Install loading access at base of stack.

Drainage below ground:

New drains to be 110mm dia. UPVC drains laid clear and surrounded in 100mm pea gravel to fall at approx 1 in 40 to connect to inspection chamber on existing drain run.
2 no. new inspection chambers to be approx 450mm dia. polypropylene bottomed type. Any drain within 600mm of ground level to be protected by reinforced concrete slab above pea gravel on compressible layer.

Heating/hot water:

Extend existing heating and water services into proposal. Install thermostatic valves to new radiators. All hot water pipes to be insulated with Armaflex or similar of thickness to match pipe outside diameter.

Mechanical ventilation:

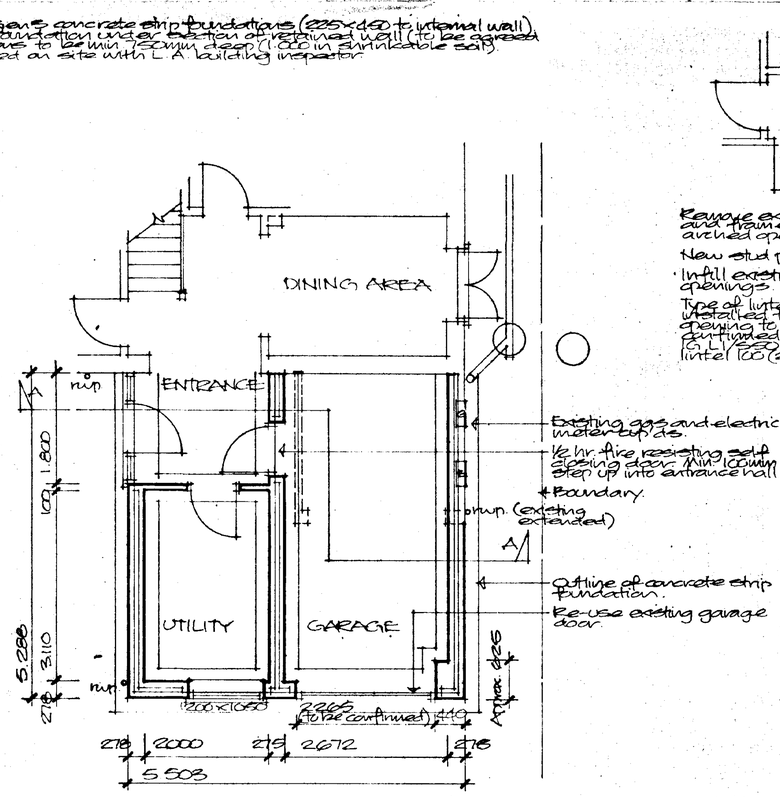
Install extract fan to en-suite to extract at a rate of 15 litres per second controlled by light switch with min 15minute overrun. No ventilation to utility as no water services installed i.e. washing machine, sink, dryer etc.

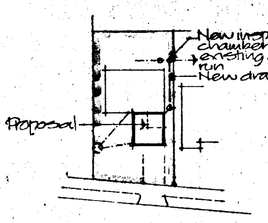
Stud partitions:

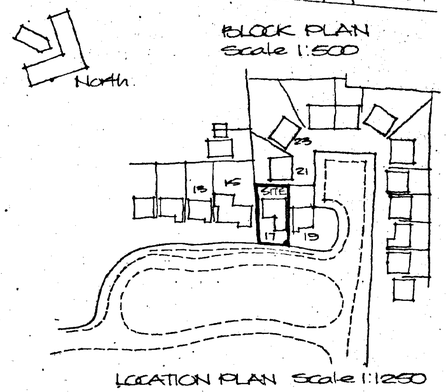
Constructed of 50x75 studs at 400mm ctrs with 50x75 head and sole plates and noggings at 1.200 ctrs clad both sides with 12.5mm thick plasterboard and skim and with fibreglass quilt packing between studs.

Lighting:

Install fluorescent tube/compact type light fittings to 2 no. min rooms i.e. garage and utility.







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Planning & Development
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Project
PROPOSED EXTENSION TO HOUSE AT 1 APPLEDORN GARDENS, SPALDING.

Client
MR & MRS J. ARMSTRONG

Scale 1:50/1:100 Date March 03