Roof construction:

Install plain tiles to match existing installed to manufacturers recommendations on 25x38 fully treated battens on Proctor Roofshield or similar breathable sarking with eaves carrier on built up timber roof structure formed of:

Main roof:
47x100 rafters at 400mm max. cts.
47x122 ceiling joists at 400mm max. cts.
50x175 ridge beam
50x175 purlins (double purlins bolted together at intersection with ceiling joists, see section).
47x150 ceiling beams (2no.)
47x150 collar above upper purlins at centre span.
25x100 collars at ridge
50x100 wall plates
Roof pitch to be as existing (existing roof pitch approx. 45 degrees)

Pack out below rafters forming sloping ceiling to provide suitable depth for insulation and vent gap above. Ends of purlins and ceiling beams to be built into new and existing walls and to be combined with 30x5mm mild steel straps between walls and timbers.

New flat roof:
Constructed of mineral chippings min. 12mm thick bedded in bitumen to high performance built up roofing to min. BS 747 standard with min. 150mm upstands flashed into brickwork on 80mm thick Celotex Tempchek deck ref. TD3080 installed to manufacturers recommendations on firings to fall 1 in 60 on 47x100 joists at 400mm cts. supported on 47x100 timbers bolted to walls at max. 600mm cts. Install double joists above rear lobby door.

Eaves to new main roof to be constructed to be similar to existing but with increased projection due to set back. No roof void vents required.

Install 30x5mm mild steel straps at average 1800mm cts. between main roof structure and external walls. Straps to extend over 3 timbers where at right angles (gable) and to be supported by noggings.

Install code 4 lead stepped/straight flashings between new roof finish and existing chimney stack.

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

Ceilings:

Formed of 9.5mm thick plasterboard at first floor level all with either Artex or skim finish. Perimeter to be supported. Make good existing ceilings where disturbed.

Roof insulation:

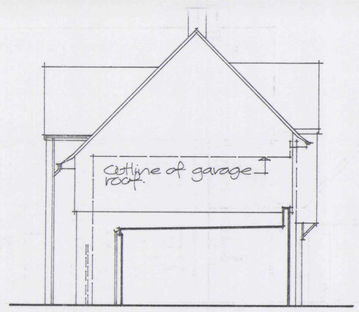
Install 100mm fibreglass quilt insulation between ceiling joists and 150mm thick quilt over joists to main roof and install 200mm thick fibreglass quilt to sloping section of ceiling with minimum 25mm vent gap above to underside of breather membrane.

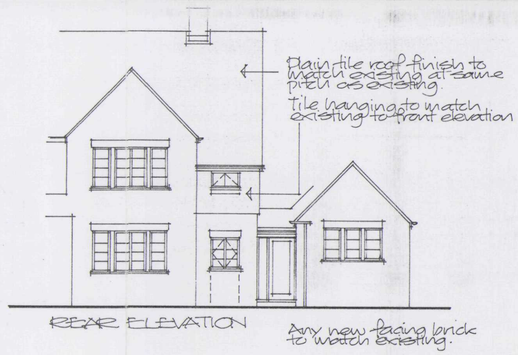
Gutters and downpipes:

Install 112mm dia. h.r.upvc gutters with downpipes to match existing, altered/relocated downpipes to rear to be connected to existing stormwater drains.

Suspended floors:

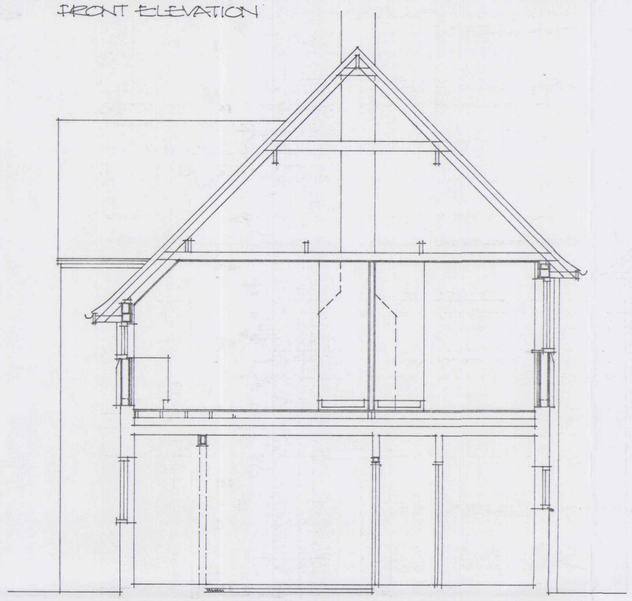
Formed of 18mm thick T&G moisture resistant flooring grade chipboard on 47x100 joists at 400mm cts. supported on joist hangers/timbers bolted to walls or built into walls.
Existing reinforced concrete flat roof structure retained where below new floor which provides sound insulation and lateral restraint. Install double joists below stud partition.

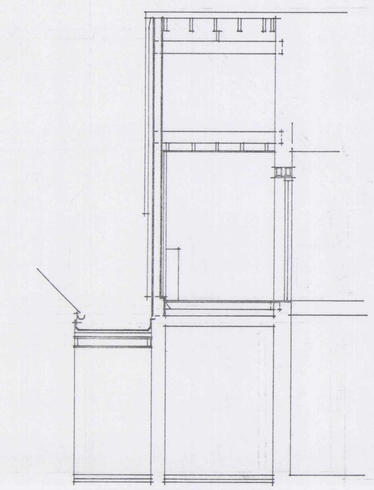




Do not scale off this drawing

All site dimensions to be checked before work commences.





External walls to first floor:

Constructed of tile hanging to match existing on 25x38 fully treated battens on breather membrane on 150mm thick Thermalite Turbo blockwork with internal finish of 60mm thick Gyproc ThermaLine super insulated dry lining with skim finish on 25x38 fully treated battens fixed to blockwork all to be installed to manufacturers recommendations.
Average "U" value = 0.35W/M2K.
New walls generally bonded to existing with Furfix wall extension profiles.
Extend where required existing 215mm thick solid brickwork up to u/s of new blockwork. Facing brickwork to match existing.
Install code 4 lead aprons over hanging tiles below windows.
Install brick joint reinforcement to new blockwork to full height of new gable.

Lintels:

Install IG type box 150 steel box lintels to 2 no. new external first floor window openings. Install IG type box 100 steel lintels over 2no. new door openings to en-suites and to recess formed in cavity wall in cylinder cup'd. Also install box lintel 100 lintels where wall removed in utility, above door to utility and above new opening between kitchen and living room. Check existing lintels affected for suitability.

Ground floor construction (lobby & utility):

Approx. 65mm thick lightly reinforced sand/cement screed on approx 75mm thick SD grade expanded polystyrene insulation on 1200 guage polythene DPM on existing concrete slab (check suitability of existing concrete slab to lobby).

Foundations:

Existing retained foundations have been checked to confirm suitability. Refer to structural engineers report.

Windows and doors:

New windows to be white UPVC glazed with sealed units with min. 16mm gaps and incorporating Low E coating to give min "U" value of 2.0 W/M2K. Any glass to doors and sidelights and any other glass within 800mm of floor to be safety glass to BS6206. All openings to be draught sealed. Install trickle vents to provide min. 4000mm2 background ventilation to en-suites and utility.
Window sizes shown on drawing to be confirmed on site.

Heating and hot water:

Install new gas fired wall mounted balanced flue boiler with min. efficiency of 78%(SEDBUK). Boiler flue outlet to be at least 300mm from opening into building (window) and from corner of building. Boiler to be fitted with timing controls and boiler control interlock. Boiler to be installed by Corgi registered installer who is to issue a commissioning certificate on completion. Thermostatic valves to be fitted to all new radiators. New heating and hot water pipes to be insulated with Armaflex or similar insulation of thickness to match pipe outside diameter. Instructions for use of heating system to be displayed adjacent to boiler.

Install log burner to living room on tiled non-combustible hearth projecting at least 300mm in front of unit. Log burner to be connected to existing chimney stack which is to be checked for suitability.

Drains above ground:

To comply with BS 5572 with 40mm dia. polypropylene wastes from kitchen sink (refitted kitchen), dishwasher, utility sink, washing machine and shower trays and 32mm dia. from wash basins with 50mm dia. combined wastes. Install 75mm deep seal traps to all fittings except shower trays, which are to have 50mm deep cleanable traps. Kitchen wastes to connect to existing external gully, wastes from re-planned bathroom to connect to existing soil stack but with reduced diameter vent stack (82mm) within duct. En-suite and utility wastes to connect to new 110mm dia. soil and vent stack within duct with rodding point at base, top of stack to terminate at least 900mm above window head level. Install air admittance valve on waste pipe adjacent to bedroom 2 en-suite wash basin.

Below ground drainage:

Formed of 110mm dia. UPVC drain bedded and surrounded in 100mm peagravel to fall at min. 1 in 60 to connect from new 110mm dia. soil and vent stack to existing inspection chamber and foul sewer. Drains passing through walls to be protected by prestressed concrete slab lintels with min. 50mm clearance around pipes with protection from vermin entry and gas sealed. Drains within 600mm of ground level to be protected by reinforced concrete slab laid above compressible layer above peagravel surround.

Mechanical ventilation:

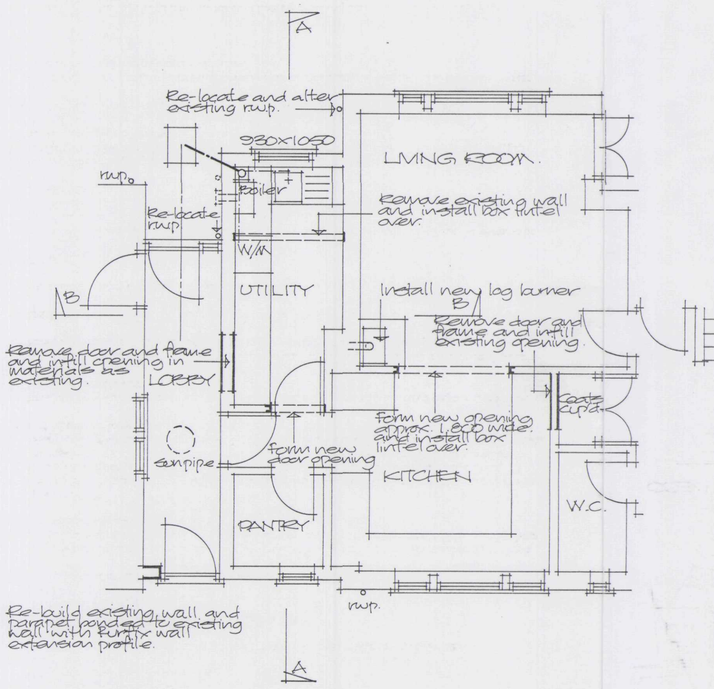
Install extract fan to kitchen mounted in cooker hood to extract at a rate of 30 litres per second. Install extract fan to en-suites to extract at a rate of 15 litres per second. Install extract fan to utility to extract at a rate of 30 litres per second.

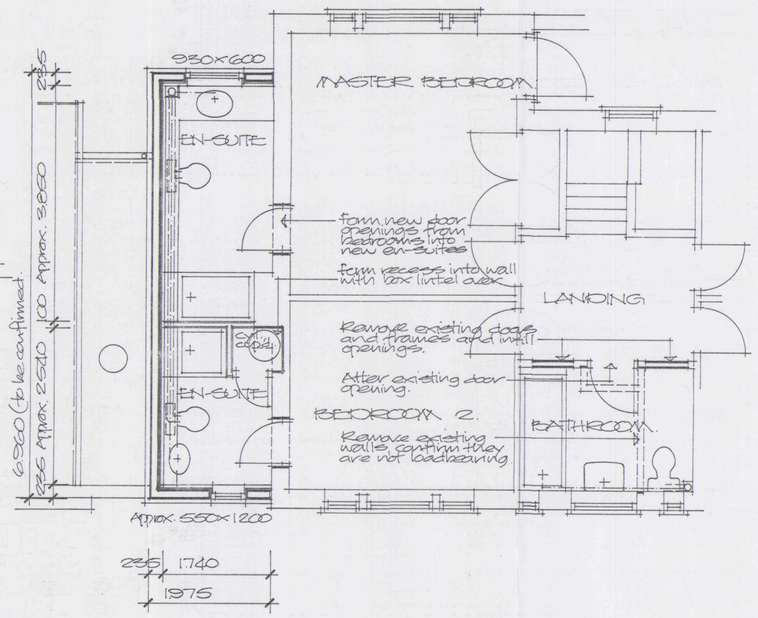
Stud partitions:

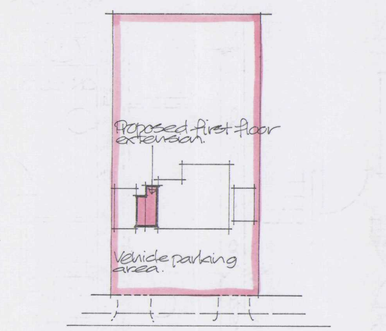
Formed of 50x75 studs at 400mm cts. with 50x75 sole and head plates and noggings at 1.200 max. cts. with fibreglass quilt packing between studs and 12.5mm plasterboard and skim cladding to both sides.

Lighting:

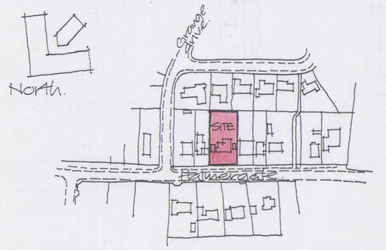
Install in at least 1 room, compact fluorescent or fittings with only low energy light fittings.







BLOCK PLAN Scale 1:500



LOCATION PLAN Scale 1:2500

DETERMINED PLAN

Project
PROPOSED EXTENSIONS TO EXISTING HOUSE 26 HALMERGATE SPALDING.

SHDC Planning & Development
- 6 MAY 2004
584/04
Plot

ALAN HORNSBY
ARCHITECTURAL SERVICES
'Little Acre'
Peak Hill, Cowbit,
Spalding, Lincs. PE12 6AW
Tel. Holbeach (01406) 380591

Client
MR & MRS M. PATTERSON

Scale 1:50/1:100
Date APR 04

Drg. no.
04/24/01.

Summit DS(UK) 0096