Roof construction:

New section of pitched roof constructed of interlocking concrete tiles, to match existing and installed to manufacturers instructions on 25x38 treated battens on sarking felt on built up roof constructed of:

- 50x100 rafters at 450mm cts.
- 38x125 ceiling joists at 450mm cts.
- 150x225 purlins
- 63x200 ceiling beams
- 25x100 collars to ridge
- 32x150 ridge
- 50x100 wall plates

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

Retain small area of existing pitched roof over front of garage with tops of rafters built into new wall and existing ceilings retained to garage, W.C, utility and kitchen.
Existing ceiling joists to be suspended from new floor joists at max. 1.200 cts.

Eaves construction to new roof to match existing and to incorporate roof void ventilation strips to provide min. 10,000mm² vent per metre. Maintain min. 25mm vent gap above insulation.

300x5mm mild steel straps to be installed between new roof structure and perimeter walls at average 1.800 cts. Straps to be installed at ceiling level and at ridge with straps extending over 3 no. timbers at gable with solid noggings under.

Code 4 lead flashings with cavity tray dpc, at junction of existing garage roof and new cavity wall.

New UPVC gutters and downpipes to match existing and to be connected to existing. Provide 1 no. new downpipe where shown connected to adjacent downpipe drainage with new 110mm dia. UPVC drain bedded on 100mm pea gravel to fall approx. 1 in 60.

Roof insulation:

Install 2 layers of 100mm thick fibreglass quilt insulation with 1 layer between and 1 layer over ceiling joists. Also install 100mm thick fibreglass quilt insulation above garage ceiling below new floor.

Ceilings:

New first floor ceilings to be 9.5mm thick plasterboard with perimeter edges supported and artex finish.

If existing ceiling to garage not 12.5mm fire line board or other suitable material to provide equivalent fire protection the existing ceiling is to have an additional layer 12.5mm thick plasterboard applied with all edges supported and artex finish.

It is assumed that the existing ceilings to the remainder are 12.5mm plasterboard (to be checked). The existing insulation above these ceilings is to be retained.

Suspended floor:

To be constructed of 18mm thick flooring grade chipboard (T and G) on 38x147 joists at 400mm cts.
Install 1 row of solid or herringbone strutting at centre of span.
Install triple joists spiked together below stud partition.
Install 300x5mm mild steel straps between floor joists and perimeter walls at average 1.800 cts. with straps extending over min. 2 joists where at right angles with solid noggings under.

Foundations / existing lintels:

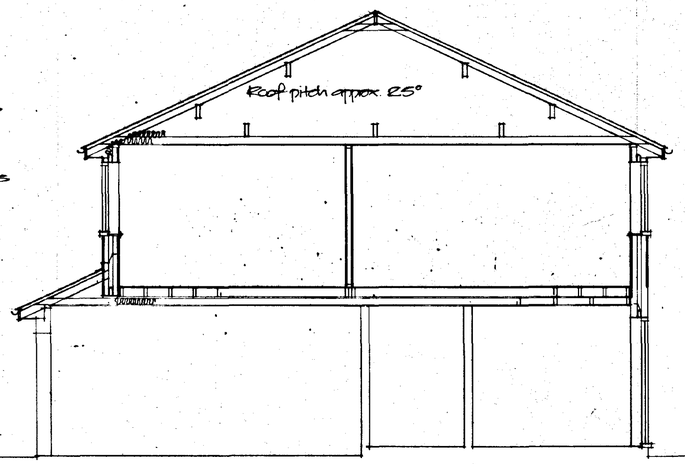
If and where required the existing foundations and lintels are to be exposed to confirm suitability.

Windows:

Install new standard timber window frames. Frames to be double glazed with no glass within 800mm of floor.
Opening lights to be draught sealed.
Trickle vents to be installed to provide at least 8000mm² background ventilation in new bedrooms.
Windows to provide at least 1/20th of floor area as ventilation.
Existing window frame to new en-suite to be re-glazed with obscure glass (double glazed).

Heating:

Existing central heating to be extended into proposed with thermostatic valves fitted to new radiators. Hot water pipes to be insulated with Armaflex or similar of thickness to match pipe outside diameter.



SECTION A-A

Cavity walls:

Constructed of 105mm facing brick/pc, 65mm cavity and 100mm thermalite standard blocks with internal finish of 13mm plaster. Walls to be insulated with 65mm thick mineral wool / fibreglass cavity batts installed to manufacturers instructions.
Average U value = 0.40 w/m²k.
Damp proof insulated d.p.c. to reveals with flexible tapping d.p.c. by min. 12mm.
Wall ties to be installed at 900mm cts. horizontally, 450mm cts. vertically and at 225mm cts. within 225mm of reveals.
Tops of cavities to be sealed with superior or similar.

Facing brickwork to be fully bonded to existing and blockwork to be bonded to existing with Furfix wall extension profiles.

Lintels:

Install 1 No. type L1/3 steel lintels to new window openings and type L1/10 lintel to support new cavity wall over garage doorway. All lintels to be installed to manufacturers recommendations.
Install 1 No. internal 100 steel lintels to door openings to bathroom.

Stud partitions:

To be constructed of 50x75 studs at 400mm cts. with 50x75 sole and head plates and noggings at 1.200 cts.
Cladding to both sides of stud to be 9.5mm plasterboard and skim.
Install mineral wool packing between studs.

Mechanical ventilation:

Install extract fan to new en-suite to provide min. 15 litres per second extract.

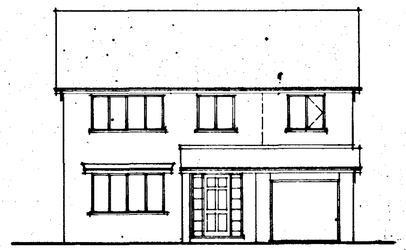
Above ground drainage:

40mm dia. polypropylene waste from shower and 32mm dia. from wash basin with 50mm dia. combined waste.
Waste together with WC connected to 110mm dia. UPVC stub stack fitted with air admittance valve installed above flood level within ventilated duct.
Install air admittance valve to waste below wash basin installed to manufacturers recommendations.
Install 75mm deep seal trap to wash basin and 50mm deep seal cleanable trap to shower.
Install rodding point to soil stack at low level ground floor.

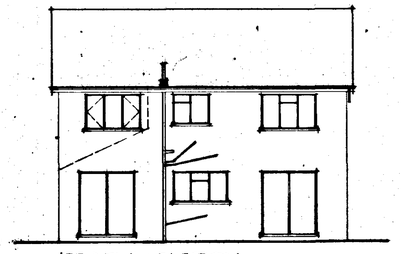
Below ground drainage:

New soil stack to be connected to 110mm UPVC drains bedded and surrounded in 100mm pea gravel to fall approx. 1 in 60 and to be connected to existing inspection chamber.
Install new approx. 675mm dia. polypropylene preformed inspection chamber with cover installed to manufacturers instructions.

New drains to be protected by reinstated paving.
Drain passing through wall to be protected by R.C. slab lintel with min. 50mm clearance all round pipe and protection from vermin entry.



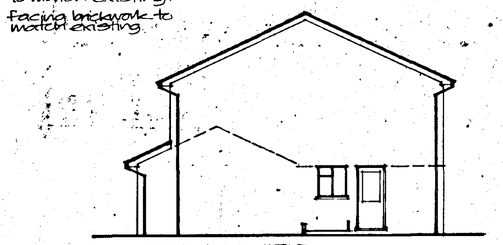
FRONT ELEVATION



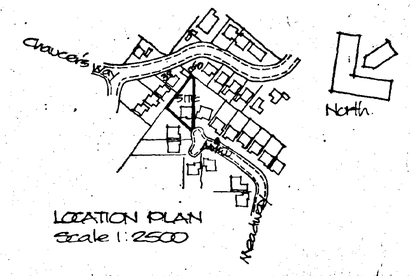
REAR ELEVATION

Interlocking concrete tiles to match existing.

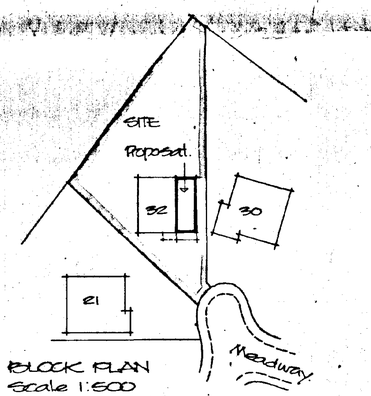
Facing brickwork to match existing.



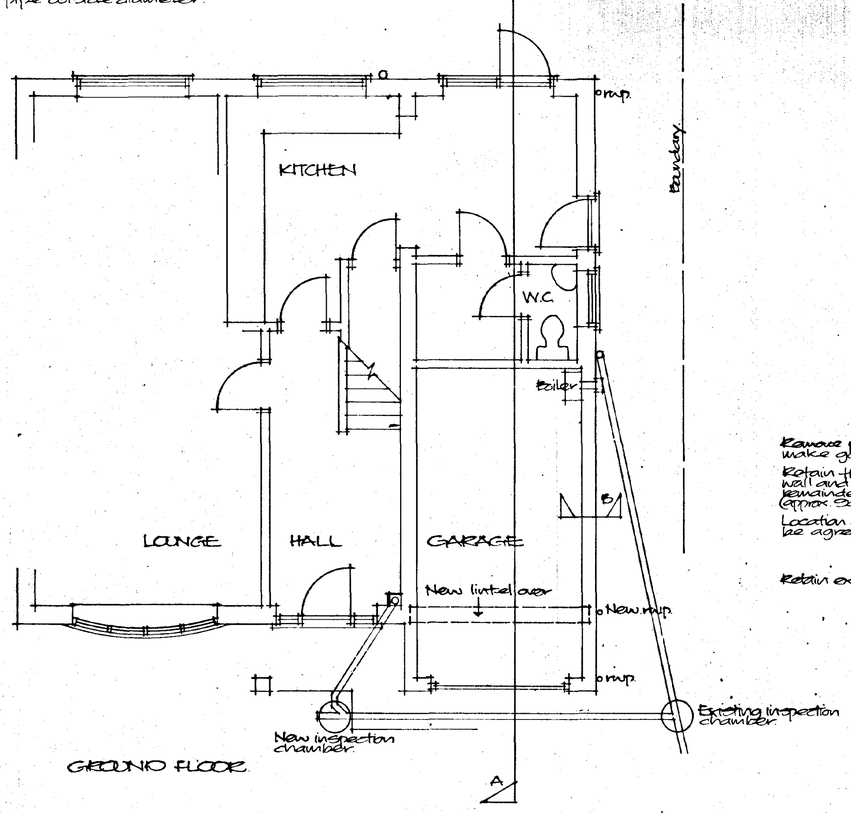
SIDE ELEVATION



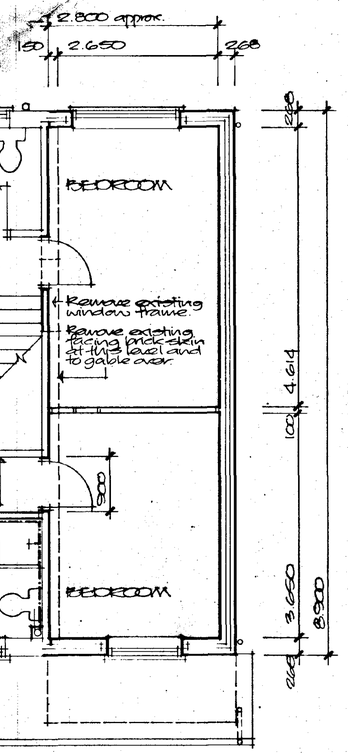
LOCATION PLAN
Scale 1:2500



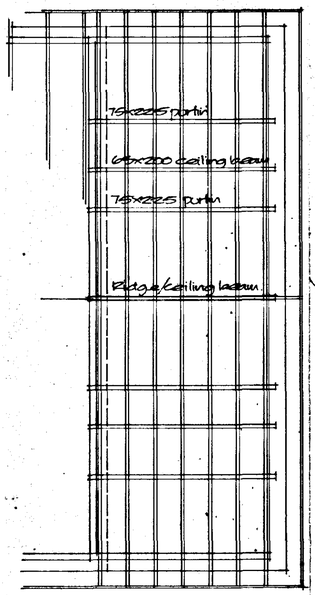
BLOCK PLAN
Scale 1:500



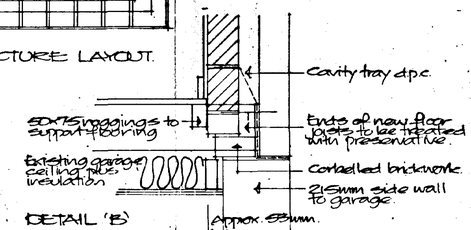
GROUND FLOOR



FIRST FLOOR.



ROOF STRUCTURE LAYOUT.



DETAIL 'B'

DETERMINED PLAN

SOUTH HOLLAND DC
HOUSING & PLANNING
29 JAN 1999
Ref: 0078/99

BROADGATE BUILDERS LTD
The Race Ground
Spalding
Lincolnshire
PE11 3AP
Telephone : 01775 725616
Fax : 01775 725097

Project
PROPOSED EXTENSION TO HOUSE
32 MEADWAY, SPALDING.

Client
MR & MRS J. GORDON

Scale 1:50 / 1:100
Date January 99