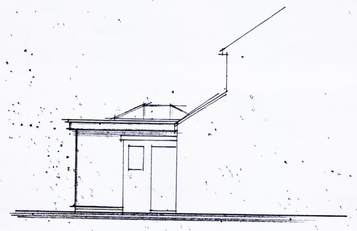


SOUTH



EAST



NORTH

FOUNDATIONS

Foundations to be ST4 grade concrete

For 300mm walls foundations to be 700 x 230mm

Foundations to be taken down to a firm load-bearing strata, a min. 1.0m if in shrinkable sub soil, in accordance with the requirements of the Local Authority Building Control Dept. and in accord with the NHBC guidelines for building near trees.
Site soil surveys are recommended in respect of foundations to establish specific site conditions before foundation work is undertaken.

FLOOR CONSTRUCTION

Ground

75mm screed
separating membrane
Ground floor insulation to achieve a U-value of 0.11W/m².K (150mm PIR insulation board, lambda = 0.022W/m.K).
100mm reinforced concrete
1200g polythene damp proof membrane lapped with dpc in external walls.
25mm sand blinding
100mm hardcore compacted in 150mm layers and not exceeding 600mm overall

Raise extg garage floor using 65mm screed over Celotex insulation, thickness to be max available on 1200 gauge polythene membrane

WALL CONSTRUCTION

Below Ground
To be 100mm Class A concrete blocks
Cavity to be filled to 225mm below lowest dpc level with lean mix concrete

Above Ground
To be 300mm cavity constructed as follows :-

External render finish
100mm block work on three course eng brick below dpc level
100mm Dritherm 32 Ultimate cavity insulation
100mm Plasmor Aglite insulation blocks , k = 0.31

All to be tied together using stainless steel wall ties positioned at distance not exceeding 750mm horizontally, 450mm vertically and staggered. To be at every block course vertically at all returns and reveals.

Internal finish to be 15mm sand cement render with skim finish to give a 'U' value of 0.28W/mK

Stud Partitions
to be constructed as follows :-

75 x 50mm head and sole plate
75 x 50mm studs at 400mm cts with min. 2 rows
75 x 50mm noggins equally spaced
75mm glassfibre insulation (min density of 10kg/m³) within framework
face both sides with 15mm plasterboard, tape joint and skim finish

Insulate extg garage solid wall with Celotex 4065 plasterboard coated insulation dot and dabbed to wall with skim finish to achieve a U value of 0.27W/m²C

DPC in Walls
To be a min. 150mm above finished ground level
An insulating vertical cavity closer and dpc, i.e. Thermabate is to be provided to all cavity closures.
A dpc cavity tray, stepped as applicable, is to be constructed within the wall immediately above an abutment.

LINTELS

Lintel to be IG L6/100, or similar and equivalent, to have a min. 200mm end bearing and be installed in strict accordance with manufacturer's instructions with a dpc cavity tray over where applicable.

Lintels over internal openings to be 2no 100 x 65mm pcc with min 150mm end bearing

Lintels to be protected with min. 15mm gypsum plaster skim finish to give a min. half hour fire protection.

SMOKE DETECTION

Self contained smoke alarms complying with BS5446 : Pt 1 : 1990 are to be installed where indicated **SD** on the drawing. An alarm must be positioned within 3.0m of bedroom doors.

The alarms are to be permanently wired to a separately fixed circuit at the distribution board operating at a low voltage via a mains transformer.

Where more than one smoke alarm is required the units are to be interconnected so that the detection of smoke by one unit operates the alarm signal in all units.

The wiring installation is to comply with the I.E.E. Regulations.

WINDOWS & DOORS

Windows and doors to be UPVC construction, double glazed using glass having a soft low E coating with an emissivity value of 0.05 with min. 16mm air gap to sealed units and weather stripped.
Windows and external glazed doors to achieve a U-value of 1.35W/m².K or less.
Solid external doors to achieve a U-value of 1.20W/m².K or less.

Double glazing manufacturers certificate to be provided to prove compliance of the glazing to that specified.

Glazing to windows less than 800mm and doors (include sidelights to doors) less than 1500mm above floor level is to be laminated or toughened glass in accord with BS6206 : 1981.

Ground floor and other easily accessible windows (including easily accessible rooflights) should be secure windows in accordance with Approved Document Q paragraphs 2.2 and 2.3, windows should be made to a design that has been shown by test to meet the security requirement of the British Standards publication PAS 24:2012

All easily accessible door sets that provide access into a dwelling or into a building containing a dwelling should be secure door sets to the following:
a. Manufactured to a design that has been shown by test to meet the security requirement of British Standard publication PAS 24:2012 or
b. Designed and manufactured in accordance with Approved Document Q Appendix B.

ELECTRICAL INSTALLATION

The electrical installation is to be carried out by an electrician registered with NICEIC, ECA or NAPIT. The electrician is to issue design, installation and test certificate under BS 7671 upon completion of the works.

All switches, sockets, tv points and telephone jackpoints are to be located at a height between 450 and 1200mm above finished floor level,

The lighting is to be installed in compliance with the Domestic Building Services Compliance Guide
The lighting shall have a luminous efficiency greater than 45 lamp lumens per circuit-watt and a total output greater than 400 lamp lumens

All fixed light fittings should be fitted with low energy lamps.

VENTILATION

All habitable rooms are to have windows containing hinged or pivoted opening vents (which open greater than 30°), the combined total of which is equal to not less than 1/20th of the floor area of the room

If the vents open at an angle of less than 30° then the combined total is to be not less that 1/10th of the floor area.

All bath and shower rooms are to be mechanically ventilated direct to the external air. The capacity of the extractor is to be 15 litres/sec.

All sanitary accommodation is to be mechanically ventilated direct to the external air, the extractor fan to have a min. Capacity of 6 litres/sec.

The doors to wet rooms/sanitary accommodation are to have gaps at the bottom of 10mm above floor finish or 20mm above the floor boards.

All mechanical extractor fans are to be tested and their flow rates confirmed as specified above. The test results are to be forwarded to the Local Authority Building Control dept within five working days after the last test.

BACKGROUND VENTILATION

Background ventilation is to be provided by trickle vents set within the construction of the windows. The area of the trickle vents to habitable rooms is to be a minimum of 8000mm²

HOT WATER/CENTRAL HEATING/WATER PROVISION & FLOW RATES

Thermostatic radiator valves are to be installed with a room thermostat provided to switch off the boiler when there is no demand for heating or hot water.

All pipes not contributing to useful heat requirements are to be insulated using an insulation material with a thermal conductivity not exceeding 0.45W/mk and a thickness equal to the external diameter of the pipe up to a max. of 40mm.

Wholesome water is to be provided to all wash basins and showers

Heated wholesome water is to be provided to wash basins and showers.

DRAINAGE

Surface
Excavate for and lay in where indicated 100mm diam. flexible jointed UPVC drains on 100mm pea gravel bed from 100mm diam. upturned bend at base of downpipe to surface water soakaway.

Form soakaway where indicated a min. 5.0m from the nearest building. Excavate 1200 x 1200 x 1200mm deep, backfill with brick rubble to 300mm below ground level, lay in sheet polythene and make up with vegetable soil

Form soakaways where indicated in strict accordance with the design and specifications given by structural engineer

Foul
Excavate for and lay in where indicated 100mm diam. flexible jointed upvc drains on 100mm pea gravel bed at a gradient of 1 : 70.

Where 100mm diam. drains pass through walls they are to be protected by the use of a lintel over. Both sides the wall to be masked with rigid sheet material with 50mm clearance of the pipe and the void filled with compressible material to prevent entry of gas.

Where flexible pipes are not under a road and have less than 600mm cover they are to have concrete paving slabs with a compressible filler laid as bridging above the pipes for protection and are to have a min. 75mm granular material between the top of the pipe and the underside of the compressible filler.

Install where indicated a 100mm diam. stub soil pipe jointed to 100mm diam. upturned bend at base. Finish at top with a removable rodding access.

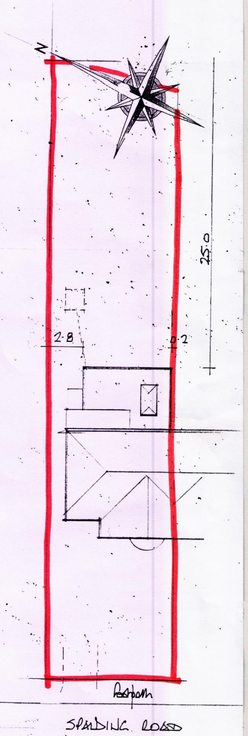
Install where indicated trapped & roddable gullies - waste pipes to discharge below grating level and above water level.

Install 40mm diam. pvc waste to showers, *(NOTE : shower trays to be constructed on a suitable plinth to maintain access to trap and waste)*, 32mm diam. pvc waste to hand basins all with 75mm deep traps.

All waste pipes to have rodding access at each change of direction and be readily accessible throughout their length.

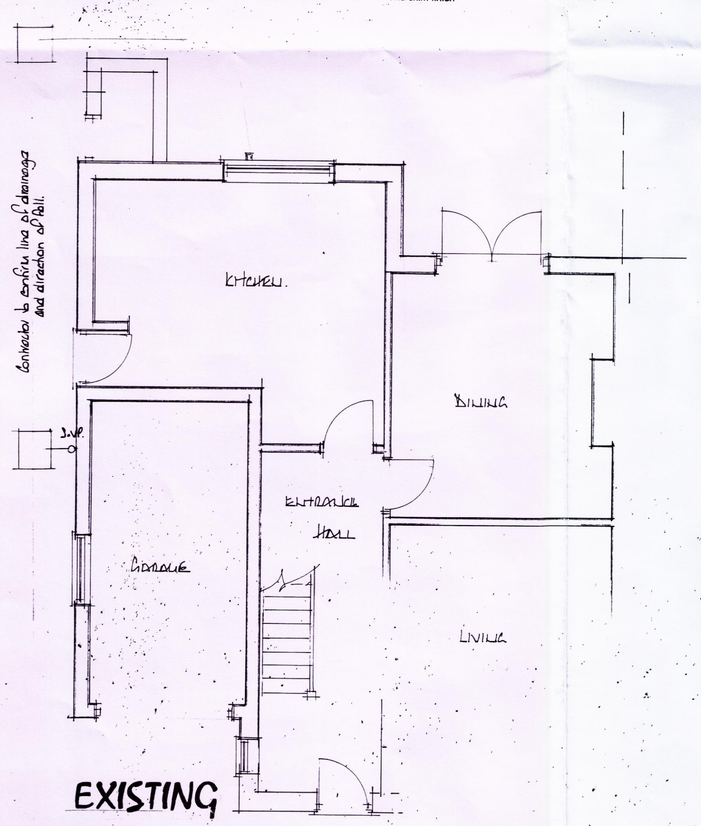
Above ground drainage to comply with BS5272 : 1978
Below ground drainage to comply with BS8301 : 1985

All drainage items are to be installed in strict accordance with the manufacturers instructions.



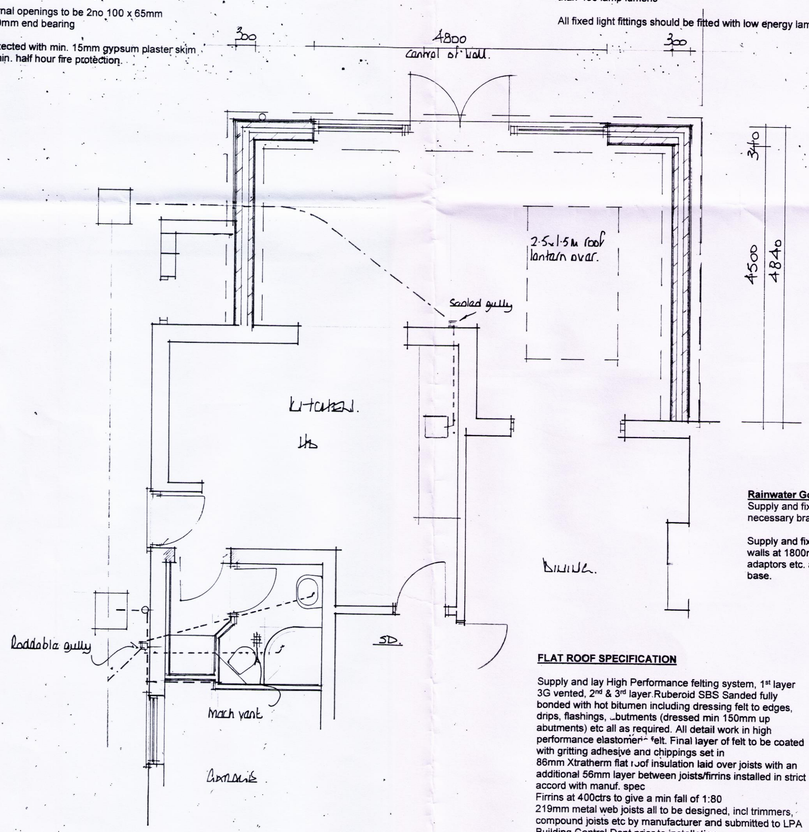
BLOCK PLAN

1:250

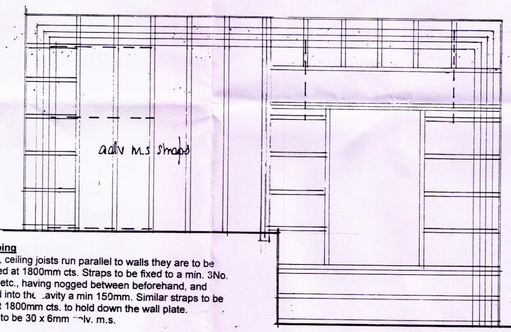


EXISTING

GROUND FLOOR PLAN



PROPOSED



Strapping
Where, ceiling joists run parallel to walls they are to be strapped at 1800mm cts. Straps to be fixed to a min. 3No. rafters etc., having nogged between beforehand, and hooked into the cavity a min 150mm. Similar straps to be used at 1800mm cts. to hold down the wall plate.
Straps to be 30 x 6mm galv. m.s.

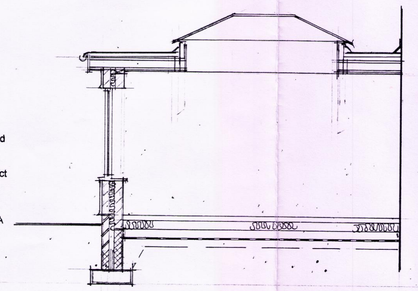
Rainwater Goods
Supply and fix 115mm pvc gutters to fascia with all necessary brackets, stop ends, outlets etc.

Supply and fix 64mm pvc downpipes securely clipped to walls at 1800mm cts with all necessary offsets, swannecks, adaptors etc. and taken into 100mm diam. upturned bend at base.

FLAT ROOF SPECIFICATION

Supply and lay High Performance felting system, 1st layer 3G vented, 2nd & 3rd layer Ruberoid SBS Sanded fully bonded with hot bitumen including dressing felt to edges, drips, flashings, abutments (dressed min 150mm up abutments) etc all as required. All detail work in high performance elastomeric felt. Final layer of felt to be coated with gritting adhesive and chippings set in
86mm Xtratherm flat roof insulation laid over joists with an additional 56mm layer between joists/firrins installed in strict accord with manuf. spec
Firrins at 400ctrs to give a min fall of 1:80
219mm metal web joists all to be designed, incl trimmers, compound joists etc by manufacturer and submitted to LPA Building Control Dept prior to installation.
15mm plasterboard, taped joist and skim finish.

Roofing felt to be dressed up adjoining pitched roof a min 450mm and up wall a min 150mm



EAST MIDLANDS DESIGN ASSOC.

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Client
Mr & Mrs Simpson

Project
Extension to dwelling at
142 Spalding Road
Pinchbeck
Spalding
PE11 3UE

Drawing
Plans and elevations as proposed

Scale
1 : 50 & 1 : 100

Date
October 2019

Drawn
AL

Dwg No.
1167/01

Rev