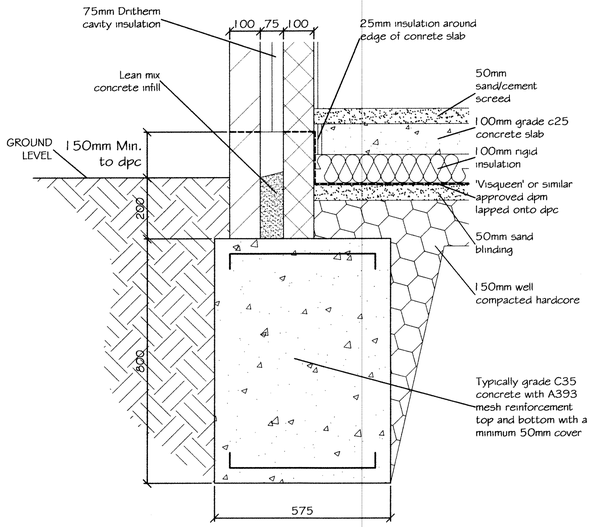
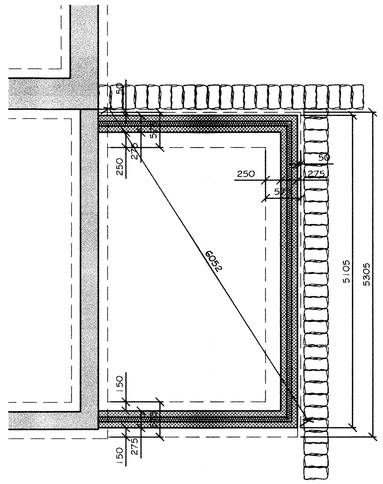


Foundation Detail (1:10)



Proposed Foundation Plan (1:50)

Foundations formed at the existing founding level and at least the invert of the existing drainage system. All to suit current site conditions and to the satisfaction of the Building Control Officer.

Any drain passing through a wall or foundation to have a clear opening of 50mm alround with lintel over. Fill surround with expanding foam to prevent vermin entry.

Concrete mix requirements shall be in accordance with the following :-
Slab - Mix Type R1
Foundations - Mix Type R3

Foundation sizes are based on an assumed bearing pressure of 100kN/m2. Foudation depth approx 1.0m below ground level to local authority approval.

NOTES :-

ROOF (Pitched 'U' value = 0.20 w/msq. Deg K):
Construct roof with matching interlocking tiles (to BS 5534 Pt. 1 amended 1981) clipped at verges and eaves laid on treated s/w battens 25 x 50, over untearable sarking felt (to BS 747: 1971) lapped a minimum of 150 and dressed into the gutter over a tilting fillet. Battens to be set out to give tile lap as recommended by the tile manufacturer to suit the exposure rating of the site. Roof covering to be supported off traditional roof constructed using 150 x 50 SC3 rafters at 450 c/c fixed to 175 x 32 ridge piece and to 100 x 50mm wallplate. Wallplate to be strapped down to walls using M305 batstraps. Roof hips are to be formed using 250x75mm hipped rafters. Contractor to carefully remove the existing covering where required to allow for the roof extension. Suitable temporary protection to be provided as required. Complete new roof with matching soffits and fascia boards as required. Soffits to be complete with ventilation gap at least equal to a 10mm continuous strip.

Roof insulation to be Rockwool mineral fibre 270mm thick. The quilt is to be laid between ceiling joists and the eaves ventilation is not to be obstructed. Lean to roof to be complete with breathable roofing felt and to be flashed to house wall with Code 4 lead flashing fixed with lead wedges, soakers and pointed as necessary. Install propntary brand cavity tray as shown.

WALLS (EXTERNAL):
Construct external walls using 100mm Thermalite Shield or equivalent blockwork with a 75mm cavity filled with 75mm insulation quilt (Rockwool or similar approved) 100mm thermalite turbo inner block. External face of blockwork to be rendered to match existing. Line all walls with 12.5mm plasterboard on dabs. Wall ties to be inserted for stability in accordance with BS 1243:1978 at max 900 horizontally and 450 vertical centres, staggered in alternate rows. Additional ties are to be provide around openings at 225 vertical centres and 150 max from opening. Ties to be stainless steel or non ferrous in areas of severe exposure. All cavities to be closed at eaves and verge with hyload pitch polymer. DPC to be inserted a minimum 150 above adjacent finished ground level. DPC to have a minimum 150 lap at joints with DPM in order to ensure a continuous watertight seal. Proprietary thermabate cavity closer to be used at all window and door openings. New walls to be tied into existing using catnic stronghold connectors or similar approved fixed strictly in accordance with the manufacturers instructions and recommendations.

SUSPENDED TIMBER FLOOR:
Ground floor to be constructed using 22mm T&G flooring grade chipboard with glued joints on 50x195 grade SC3 joists at 400c/c with cross struts at mid span, bearing 100mm into wall or onto M5 galvanised joist hangers. 100mm rigid insulation (Kingspan or similar approved) is to be situated between the joist to give a 'U' value of 0.25.

INTERMEDIATE FLOOR
First floor to be constructed using 195 x 50 grade SC3 floor joists at 400 c/c, with 100mm Rockwool Flexi insulation or similar approved laid between joists. Decking to be 22mm T&G grade 11/111 water resistant chipboard to all areas. 12.5mm plasterboard to be fixed to underside. Joists at right angles to be supported off joist hangers. Joists are to be supported at the existing wall as per detail 1.

DOORS & WINDOWS
All new opening to be supported over with Catnic CN43 insulated lintels over with 150mm end bearing each side.

New windows to be upvc frames with low 'E' (K glass) 24mm double glazed units with a 16mm air gap to achieve a 'U' value of 0.20W/m²K in accordance to BS7412, incorporating trickle ventilators of not less than 8000sq mm. Opening lights of habitable rooms are to be greater than 1/20th of the floor areas of the relevant rooms. New Patio doors, front & rear entrance doors to be safety glazed using kite marked toughened glass. Glazing to comply with Part N of Building Regs. All rooms on both ground & first floor are to have escape windows with clear opening of 0.33m sq. (450x740mm) and the bottom of the opening between 800mm & 1100mm above finsh floor level.

WALLS (INTERNAL)
Non structural partition walls to be formed using Bntsh Gypsum 70mm metal studs at max 600crs clad each side with nom. 12.5mm plasterboard.
Partitions between bathroom/WCs and Habitable rooms to also incorporate a 70mm min mineral wool acoustic quilt.
Masonry walls to be finished with 13mm nom. lightweight plaster and finish. Plasterboard partitions to have joints fully taped and skimmed.

STRIP FOUNDATION
New strip foundation are to be set at the same invert as the existing and are to consist of 800 x 575mm c35 concrete. Contractor to ensure that the invert of the drains is not lower than founding level. In any event the drains that pass beneath the extension shall be encased in 150mm grade C35 concrete surround. Where drain passes through the wall to have a clear 50mm opening all round and the wall supported with a lintel over. Fill surround with expanding foam.

DRAINAGE:
The location of the existing drainage system is to be confirmed prior to commencement so as the new connections and inersections can be determined. All foundations are to be at least to the same level as the invert of the drain. The contractor is to agree proposal with building control officer. Contractor to provide and fix new sanitary fitments to ground floor en-suite bathroom with WC having 100mm dia waste, shower having a 44mm dia waste and WHB having a 32mm dia waste connecting to new S&VP by boss connector and 75mm dst where required. New S&VP to be provide and fixed into location and to be complete with balloon cage to top and rodding access to base. Vent new en-suite with mechanical extract fan capable of extracting at a rate of 15 litres per second operated off light switch incorporated overrun.

Existing rainwater good to be extended and modified to suit the proposed extension with matching 100mm half round gutters connecting to the new B.I.G. gullies via 75mm rainwater pipes

VENTILATION:
A) Habitable rooms: Windows to have opening lights to minimum 5% (1/20th) of floor area with some part minimum 1.75m above floor level, plus background ventilation trough trickle ventilator, to provide not less than 4000mm sq. of free ventilation.
B) Ensuite Bathroom & Utility Room: Mechanical extract providing 3No. air changes/hour, with 15 litres/sec capacity, operated intermittently with 15min O/run, along with windows as in 'A' above.
Contractor to ensure that adequate ventilation is provided to the roof with a 25mm continuous vent gap at eaves and propnetary brand lead flashing ventilator providing at least equal to a 10mm vent gap along the length. Alternatively contractor to supply and fix ventilating tiles fixed at high point of roof supplying the same amount of ventilating opening.

ELECTRICAL WORKS
New bedrooms 3 is to be fitted with energy efficient light fittings to achieve 40 lumens per circuit watt, this can be done by installing a pendant CFL lampholder which takes either 4 pin CFL's type PL-C or TC-D.

All electrical work required to meet the requirements of Part P (electrical safety) will be designed, installed, inspected and tested by a person competent to do so. Prior to completion the Local Authority must be satisfied that either :-
* An electrical installation certificate issued under a Competent Person Scheme has been issued, or
* Appropriate certificates and forms defined in BS7671 (as amended) have been submitted that confirm that the work has been inspected and tested by a competent person. A competent person will have a sound knowledge and experience relevant to the nature of the work undertaken and to the technical standards set down in BS7671, be fully versed in the inspection and testing procedures contained in the regulations and employ adequate testing equipment.

SMOKE DETECTORS:
Mains operated self contained smoke detectors, interconnected to ensure that if one detector is activated, the other(s) will also be activated. Smoke detectors to conform to BS 5446 : Part1. Detectors to be permanently wired to a separately fused circuit in the consumer unit. Manufacturers instructions on operation and maintenance to be handed to client on completion. The smoke detectors will be located to the hall and landing.

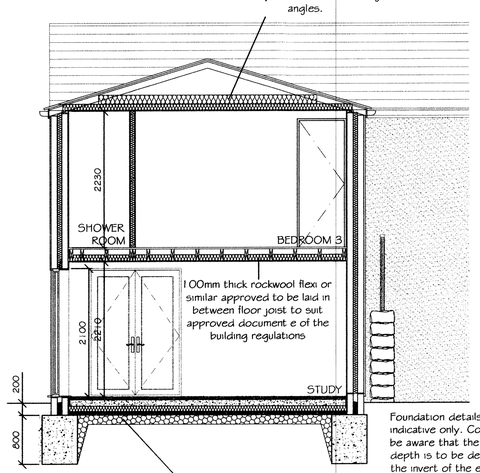
PLUMBING:
The existing boiler is to be checked for suitability and new radiators of correct size to be added to the system in all new rooms expect for the landing, additional radiators are to be fitted with thermostatic valves. All this work to be carried out by a corgi registered plumber to suit all the relevant regulations.

All new hot taps to bath and sinks should be positioned on the left side.

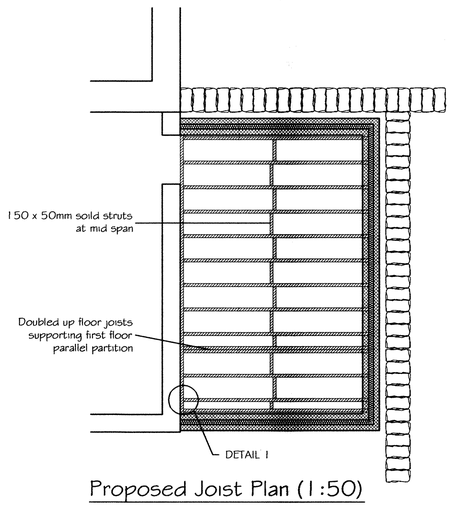
IMPORTANT:
All proprietary brand products to be used or fixed strictly in accordance with manufacturers instructions. Contractor to obtain such from builders merchant/suppliers prior to commencement of works. Contractor shall work to written dimensions only and shall not scale from plans. Quenes to be discussed with architect during contract. All new building work to comply with current building regulations and relevant British Standards with BBA certificates as appropriate water and electrical installations to comply with the relevant Authorites regualtions and codes of practice.

Strip Back existing roof tiles to expose existing roof structure ready for extension. Contractor to make suitable provision for temporary protection during construction to prevent damage due to inclement weather

All new timber to be secured to 100 x 50mm house wall plate secured to house wlls with M5 30 x 8 x 1200mm long straps at 1200 centres.



Section A-A



Proposed Joist Plan (1:50)

All joists to be 195 x 50mm grade SC3 joists fixed at 400 c/c.

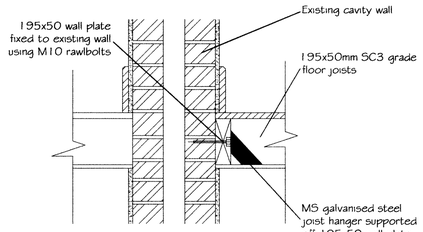
Joists to be doubled up to support first floor walls and be fixed together @ 1000mm maximum centres

Decking to be 22mm T&G chipboard water resistant throughout with 12.5mm thick skimmed plasterboard ceiling below joists.

Contractor to ensure that the new floor aligns with the existing to ensure a smooth transition is formed.

Joists to sit into house new wall and to attached to the existing house wall as per detail 1.

Lateral restraint provided to floor joists running parallel to external wall to be of 30x5mm M5 straps, carried over min. 3no. joists (with 50x100mm noggins under) at 2000mm centres, first strap to be located no more than 600mm from internal wall.



Detail 1 (1:10)

Rev	Date	Description	Drawn
B	12.08.11	Revised to suit clients comments	RP

Client
Mr & Mrs McDonald
Manor Park Road
Glossop

Project
Proposed Two Storey Rear Extension

Drawing Title
Proposed Sections & Details

Drawn D.Lewis | Scale 1:50 & 1:100 | Date 26.08.11

Drawing No. MD01-02 | Revision. B | A1