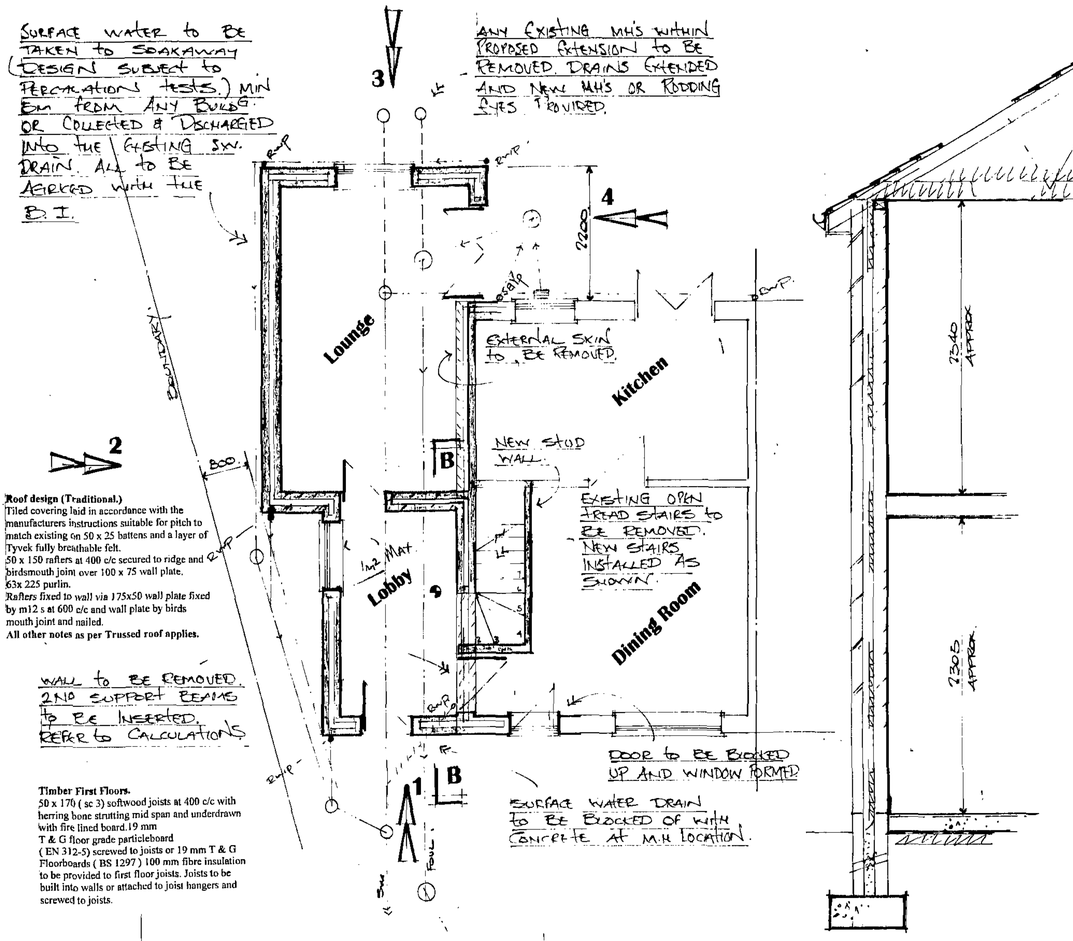
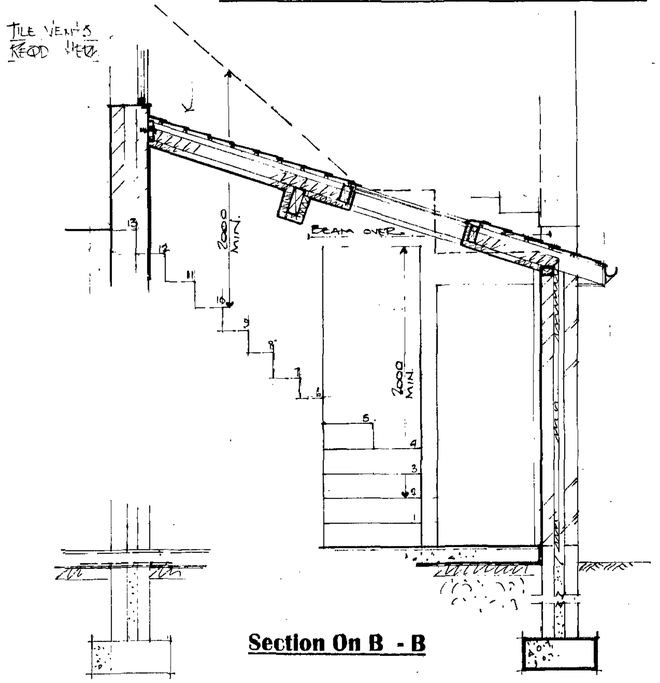


Roof design (Traditional.)
Tiled covering laid in accordance with the manufacturers instructions suitable for pitch to match existing on 50 x 25 battens and a layer of Tyvek fully breathable felt.
50 x 150 rafters at 400 c/c secured to ridge and birdsmouth joint over 100 x 75 wall plate.
63x 225 purlin.
Rafters fixed to wall via 175x50 wall plate fixed by m12 s at 600 c/c and wall plate by birds mouth joint and nailed.
All other notes as per Trussed roof applies.

Timber First Floors.
50 x 170 (sc 3) softwood joists at 400 c/c with herring bone strutting mid span and underdrawn with fire lined board.19 mm
T & G floor grade particleboard
(EN 312-5) screwed to joists or 19 mm T & G Floorboards (BS 1297) 100 mm fibre insulation to be provided to first floor joists. Joists to be built into walls or attached to joist hangers and screwed to joists.

Existing / Proposed Ground Floor Layout



Section On B - B

Section On A - A

Roof design.(Trusses.)
The roof shall be of timber construction all as per supplier's calculations. Calculations to be supplied to building control for approval a min of 28 days prior to commencement on site.
Trusses to be at 600 mm c/c
Fixing of roof timbers to walls by horizontal wall plate
Valleys or connection of roof to walls to have 5 lb lead flashing.
Tiles to match existing on timber tile battens of 50 mm x 25 mm c/c to suit tile type on sarkin felt. Tiles to be chosen to suit roof pitch.
Tile technical info to be given to the BI to determine the necessity for corrugated no joint underfelt depending on type of tile / roof slope.
All roofs shall ensure a continued air flow.
Soffits shall be fitted with vents or a 25 mm gap with bird mesh.
Ridge vents shall be fitted where necessary and as directed by the Building Inspector.
Roof to be suitably wind braced to appendix A of BS 5268 PT 3.
100 x 65 sw wall plates secured to brickwork with galv steel straps @ 1800 c/c
Roof ventilation. - Vents to be provided to eaves soffit, ridge and tile vents all as directed by the building inspector.

Lateral Restraint to floors / gable roof
Galvanised mild steel strap 38 x 5 @ 2m c/c to joists and rafters spanning 3 joists with solid noggins at 450 c/c down cavity.

U Values
The builder shall ensure that the following values are achieved.

Roof	0.20w/m2k
Walls	0.27w/m2k
g.f.	0.22{with P/a 09}
Windows / doors	1.8w/m2k

All roof and wall insulation to be continuous.

Roof Ventilation.
Ridge ventilation to be equivalent to a continuous gap strip of 5 mm.
Eaves to be equivalent to a continuous gap strip of 25mm.

Plumbing and Drainage.
Hepworth or similar 112mm UPVC gutters, brackets and fittings down pipe to be 75 mm dia.
Surface water / foul drainage
The existing drain locations are assumed. The builder to expose on site and agree any necessary amendments with the building Inspector.
All external drains to be 100mm Osma plastic pipe bed and surround in gravel to falls
Foul – 1:80
Surface water – *1:100*
All new surface water to be taken to a soakaway a min of 5m from any building. If this is not possible, discharge to be to existing sw drainage system.
All new drainage and protection details to existing shall be agreed with the Building inspector.

Doors / windows.
All to be UPVC double glazed (min 16 mm gap between panes) glazed with Pilkington K glass with soft low "E" coating .
Style and colour of all to match existing.
All windows to have 1/20 th floor area as open light.
Safety glass(stamped accordingly) to be provided to *all critical areas.- Door and panels 1.5 m from* ffl. Or windows within 800 mm from ffl.
Trickle vents to be provided to all new windows 8000 mm2 min. .

DPC's
To be provided to
External walls 150 mm above fgl.
All door and window jamb / heads
Under lintols
Tray dpc's required to exist walls at new wall abutments.

Roof Insulation.
Above ceiling joists/ roof voids.-A min of 300 mm rockwool to be provided within the roof space. 150 between joists and 150 mm over joists at 90 degree.

To rafters on roof slopes. – 90 mm kingspan k7 between rafters + underdrawn 32 kingspan k18 under rafters

Min 50 mm min air flow required between insulation and roof covering.

Walls
Internal skin
100 mm Thermolite shield or similar blockwork
Cavity
For 100 mm air gap filled with 50 gap + 50 kingspan k8.
Cavity to extend full height up into roof space.
Cavity fill of weak mix conc to be no higher than 225 mm below highest dpc
Cavity to be sealed at eaves with insulated cavity closer incorporating a vert dpc.
All cavity wall returns to be 655 mm minimum.
Insulated cavity closers to be provided to all reveals.

External skin
Quoins to front elevations to be provided to match existing
Brickwork 100 mm to match existing
Stainless vertical twist wall ties to be provided at 750 horiz c/c and 450 mm vert c/c , every block depth to reveals.
Connection of new to existing walls to be achieved by block bonding or proprietary fixing systems.

A lead flashing cavity tray to be provided between existing dwelling and the extension.

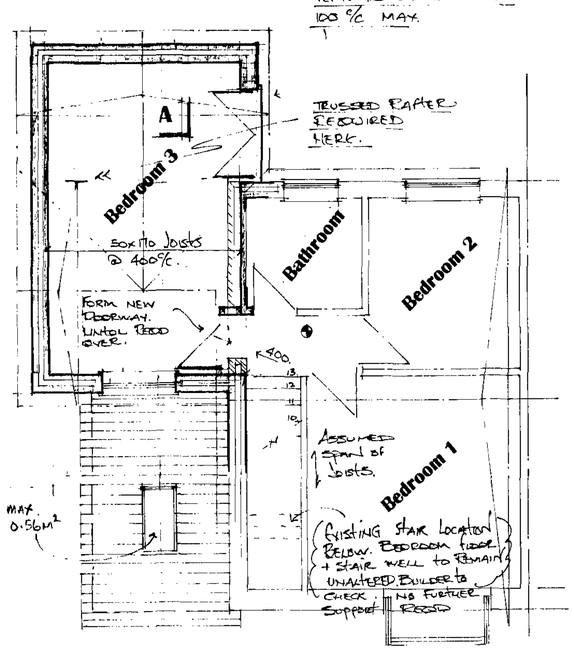
Weep holes to be provided where applicable.
Internal walls
To be from timber studding 75 mm x 50 mm with 12 mm plaster board and skim. Studs @ 450 c/c horiz and noggins at 900 vert c/c
Ceilings to be finished with 12 mm plasterboard / skim
Facia / soffit boards
From 25 mm x 250 mm or similar to match existing , timber or pvc to match existing, provide air vents as described.

Concrete Ground Floor slabs.
To be 150 mm concrete with 1 No layer of A142 mesh reinforcement in top face. on 1200 gauge visqueen on sand blinding on 150 mm well compacted hardcore Provide 75 mm kingspan kooltherm k3 insulation under kitchen extension, returning vertically around perimeter of slab.

Radon Barrier
Where Radon Barrier is required {Building inspector to be consulted}visqueen to be 2000 g with all joints taped and all penetrations thro to be sealed. This to continue thro the external leaf with tray dpc. On suspended timber floor visqueen to be placed under oversite conc.

For category 1 land fill sites use gas membrane such as Monarflex or similar

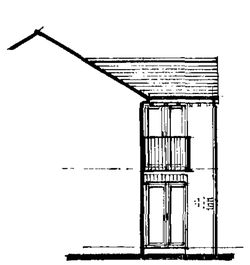
General
Re site any utility services where applicable around the extension. Re site any meter boxes outside line of walls.
Any structural steel supports to have full half hour fire protection encasement comprising 2 layers of 12.5 mm plasterboard / skim.



Existing / Proposed First Floor Layout

Construction (Design and Management) Regulations 1994
Applicable to all projects except work to a persons own house other than that carried out by the developer.
The client shall be advised that all projects lasting for more than 30 days or include more than 4 people engaged on the construction on site at any one time shall be subject to the above regulation.
The client shall take all reasonable steps to ensure that the appointed contractors have the competence and adequate resources sufficient to manage the construction work and comply with the above regulations.
If the project is subject to the above regulation the client shall appoint a planning supervisor and ensure that notice is served on the health and safety executive at tender acceptance stage using form 10.

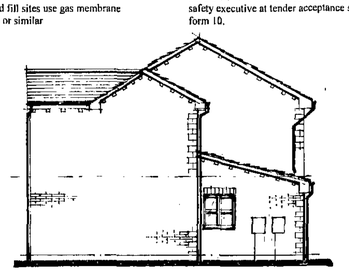
Lintols
All door/ openings / window lintols to be "Catnic" . Size and type as agreed with the Building Inspector.
End bearing for all lintols to be 150 mm.



Proposed Elevation On 4



Proposed Elevation On 3



Proposed Elevation on 2



Proposed Elevation On 1

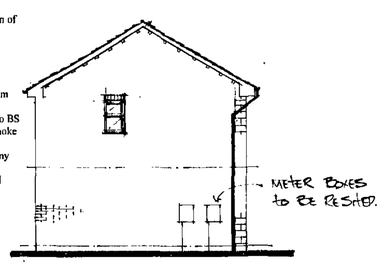


Existing Elevation On 3

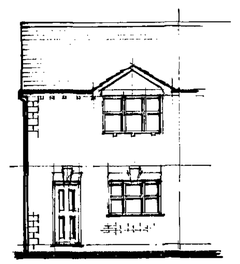
Electrical Installations.
All installations to be subject to certification under the "competent persons scheme" .
A certificate shall be supplied on completion of all electrical works
Lighting – 1 in 4 to be low energy.

Means of escape.
All new first floor windows to have a clear opening of 750 mm x 450 mm and 1100 from floor height.
1 No self contained operated smoke alarm to BS 5446 Part 1to be installed on each storey smoke detectors as indicated on the drawing.
All detectors to be a min of 300 mm from any wall.
Interconnected & wired to a separated fused circuit. Battery back up required.

Heating.
All habitable rooms to have a suitably sizes radiator extended from the existing system.
Existing boiler capacity to be checked for adequacy.
All installed by a gas safe installer.
All hot water pipes shall be insulated with foam equivalent to the outside dia of the pipe.
Radiators to have thermostatic valves.



Existing Elevation On 2



Existing Elevation On 1

NOTES:
All dimensions must be checked on site and not scaled from this drawing.

Scope of Works

General.
Construction of a two storey side extension creating Lounge, Reception Lobby and additional bedroom.

Notes.
General
These plans and details have been prepared for the purpose of providing information to the local authority to assist them in determining approval or rejection of planning / building regulations.
These notes and details indicated on these drawing drawings are to be checked and verified by the contractor at the time of pricing and prior to commencement, the builder shall satisfy himself that all details and dimensions are correct.
Any discrepancies shall be identified at the time of tendering and the client notified in writing of such changes required.
All dimensions to be taken to the nearest brick size.
His price shall be deemed to include for:
Any additional calculations as required by building control and as a result any additional building works that may be required..
Satisfying all current relevant codes of practices and British Standards shown or omitted from these drawings.
When appropriate it is the owners responsibility to serve notice on the adjoining / adjacent *neighbours for the proposed works under the* Party Wall act 1996 . The explanatory booklet can be obtained free of charge from ODPM free literature PO Box 236 West Yorkshire LS23 7NB. Tel 0870 122 6236

Foundations
All concrete to be grade C35
Foundations to be 600mm x 225 mm deep.
Placed 1000 mm below fgl. Or as directed by the Building inspector.
Where foundations cross existing drainage services the foundations to be taken down below the I.L. of the pipe. A concrete lintol to be placed over to bridge the pipe.
Provide rocker pipes either side of the wall and a 50mm space between masonry and pipe with flexible seal.
Any eccentric foundations to be 750 x 450 thk reinforced with 2 layers B783 mesh 50mm cover to all faces.

E		
D		
C		
B		
A		
	Date	Revisions

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25 Salcombe Close
Mapplewell
Barnsley
S75 6FG

Client
Mr Mark Berry

Job Title
2 Storey Side Extension

Barnsley Metropolitan Borough Council
15 OCT 2009
Corporate Mail Room

Drawing Title
General Arrangement / Elevations.

Scale **1 : 50 1 : 100 1 : 25**

Date **9.10.09** | Drawn by

Drg. No. **MB / 01** | Rev.

594 x 841mm A1