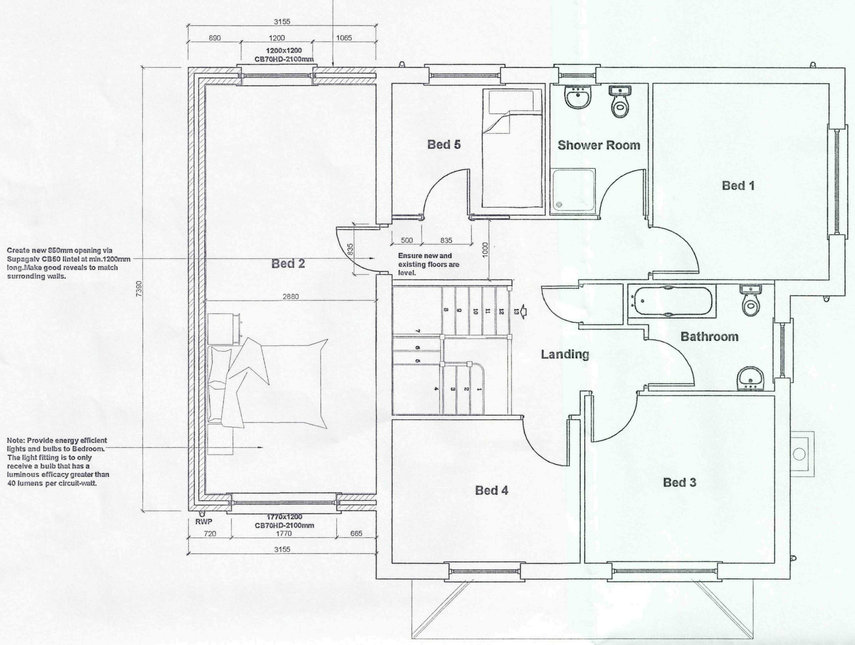
All external walls to be 285mm overall thickness comprising of:
-100mm Facing Brickwork to be advised
-85mm cavity filled with Crown Dritherm
-100mm Thermalite Shield insulating blockwork.
All as per B.C Spec'n



Proposed First Floor Plan
Scale 1:50

Pre Fabricated Trussed Rafters to be at max.600mm ctrs.Roof construction to be designed strictly in accordance with BS5268 Part 3 1985 and to specialist manufacturers design drawings.Calculations to ba submitted to the L.A building inspectors approval prior to any materials being placed on order.

Roof Membrane to be Tyvek® or similar approved Breathable Membrane in accordance with manufacturers instructions and Building Control Spec'n

The whole area of the ceiling to be insulated with two layers of Crown Wool Mineral Fibre insulation or equal approved of a total thickness 300mm to achieve a 'U' value of 0.16w/m²k as Spec'n notes

100mm x 50mm timber wallplates supporting roof trusses bedded on top of wall as specification

15mm plasterboard (10kg/m²) Ceilings to BS1230 and Building Control Spec'n

1200

2400

Bed 2

12.5mm thick gyproc wallboard on 10mm plaster dabs with 3mm skim finish.Apply a continuous ribbon of adhesive to fix dry lining at all perimeters,openings,service penetrations and behind skirtings.

22mm thick moisture resistant Type C4 chipboard (15kg/m2) as spec'n

All external walls to be 285mm overall thickness comprising of:
-100mm Facing Brickwork to be advised
-85mm cavity filled with Crown Dritherm
-100mm Thermalite Shield insulating blockwork.
All as per B.C Spec'n

125

75

150mm deep joists as spec'n

Provide 100mm mineral fibre insulation within all new floor zones

Dotted line shows top of existing ceiling joists which are to remain in-situ. New floor joists laid at right angles to existing ceiling joists. Due to the level of the existing first floor joists the existing ceiling joists may clash so notch ceiling joists acordingly.

2400

Utility

Playroom

DPC

Ground Level

Exicting foundations & lintels to be exposed and must be to the satisfaction of the LA Building Control Officer.

Proposed Section
Scale 1:25

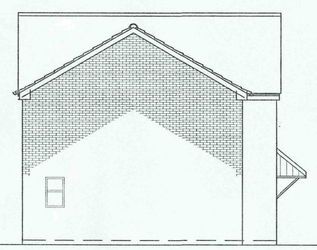
SHDC
Planning & Development
17 FEB 2010
Ref: 0134-10

Window opening vents to allow means of escape in an emergency situation.Opening vent to be min.450 wide in each direction with an area of 0.33m² fitted with egress hinges.

uPVC guttering and downpipes to clients approval and Spec'n



Proposed Front Elevation
Scale 1:100



Proposed Side Elevation
Scale 1:100

Window opening vents to allow means of escape in an emergency situation.Opening vent to be min.450 wide in each direction with an area of 0.33m² fitted with egress hinges.



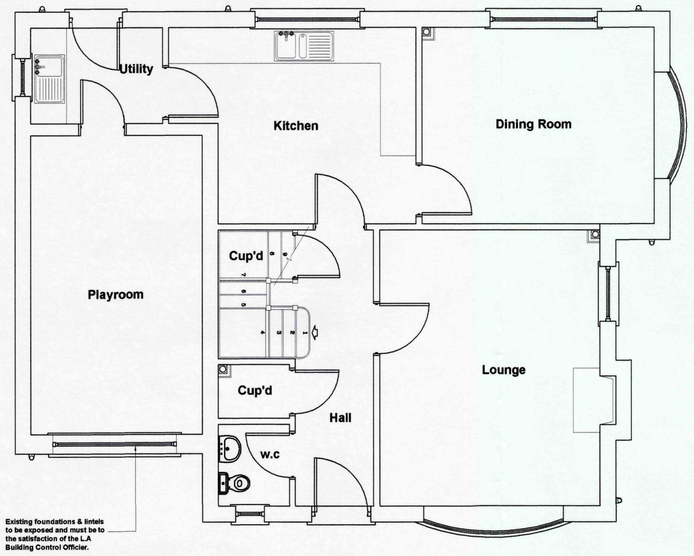
Proposed Rear Elevation
Scale 1:100

Client :
Mrs C Corney
31 Wedgewood Drive
Spalding
PE11 3FJ

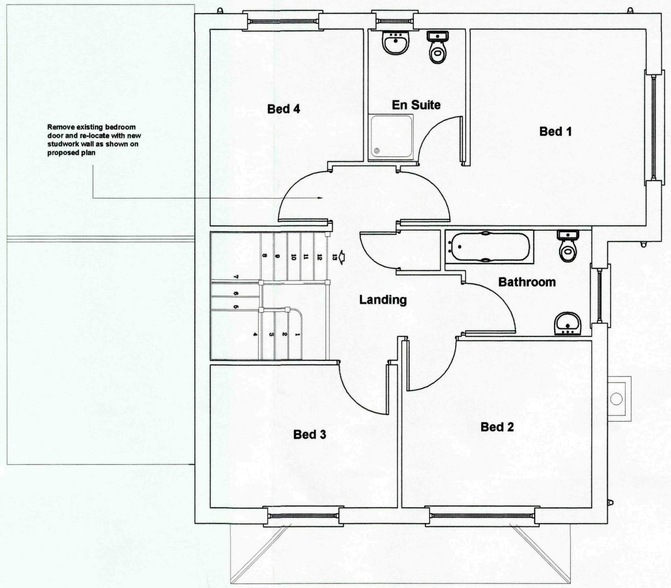
Site :
Proposed First Floor Extension above existing Garage

Drawing No: D2

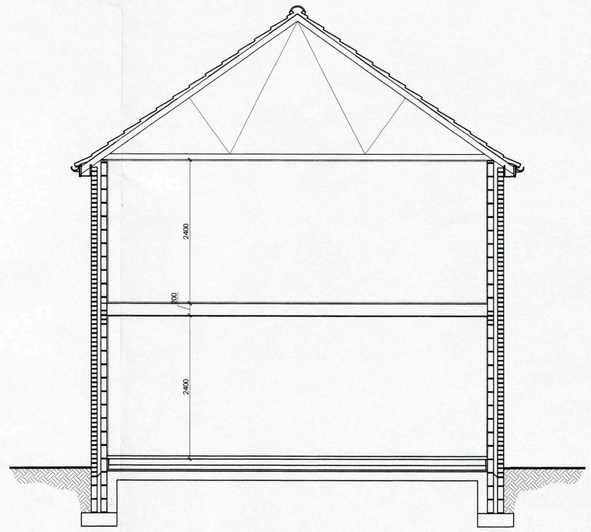
P.P 1
B/Regs



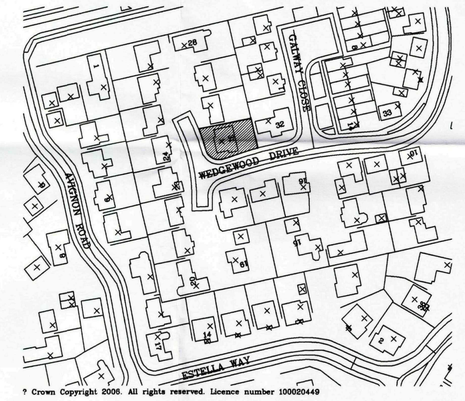
Existing Ground Floor Plan
Scale 1:50



Existing First Floor Plan
Scale 1:50



Existing Section
Scale 1:50



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Planning & Development
17 FEB 2010
Ref: 0134-10

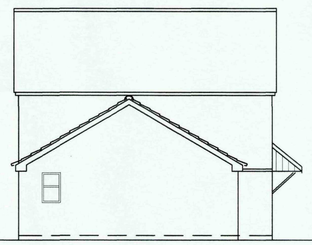
Site Location Plan
Scale 1:1250



Site Block Plan
Scale 1:250



Existing Front Elevation
Scale 1:100



Existing Side Elevation
Scale 1:100



Existing Rear Elevation
Scale 1:100

Client :
Mr C Corney
31 Wedgewood Drive
Spalding
PE11 3FJ

Site :
Proposed First Floor Extension above existing Garage

Drawing No: D1

First and last joists to all areas to be clear of wall by 25-50mm to aid floor fixing and services installation.

30x5 m/s anchor straps (S) @ 2m ctrs with solid strutting beneath.Notch straps into minimum 3no. joists to allow level floor boards.

All cut ends of joists to be sealed with suitable preservative prior to fixing in position.

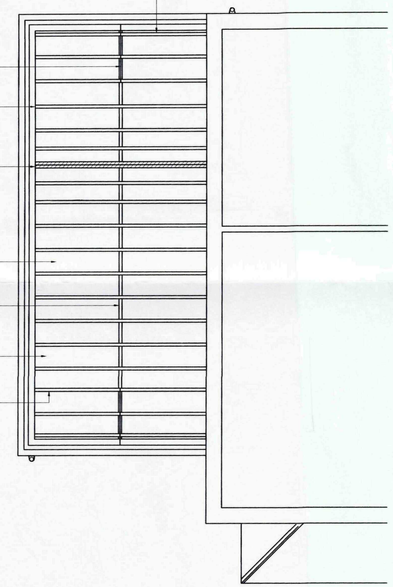
Double up floor joists where joists are directly beneath studwork wall as specification

Provide 100mm mineral fibre insulation within floor zone

Provide solid blocking all as per Building Control Specification

Lay 22mm Weyroc Tongue and Grooved flooring grade wood particle boarding as Building Control Specification

150x50 joists @ max.400mm ctr with solid strutting at positions shown all as per Building Control Specification



First Floor Joist Plan

Scale 1:50

NOTE:MANUFACTURER'S DETAILS & CALCULATIONS TO BE FORWARDED TO L.A's BUILDING CONTROL OFFICER FOR APPROVAL AT LEAST 7 DAYS PRIOR TO FIXING ON SITE

Solid pack void between last rafter and blockwork with mineral fibre insulation and solid timber packs.

Solid pack void between last rafter and blockwork with mineral fibre insulation and solid timber packs.

Pre Fabricated Trussed Rafters to be at max.600mm ctrs.Roof construction to be designed strictly in accordance with BS5268 Part 3 1985 and to specialist manufacturers design drawings.Calculations to be submitted to the L.A building inspectors approval prior to any materials being placed on order.

Note:Provide 50x50 timber noggings for partition head fixing and pendant light fixings. Position of light fixings to be agreed on site with client.

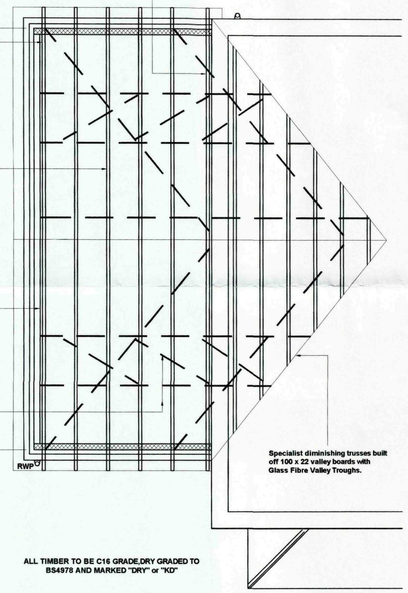
30x5 m/s straps (S) over 2no. trusses at max 2m ctrs to gable ends and ceiling level. At least 1no.gable strap to be within 600mm of ridge.Provide solid noggings under each strap.

All 25X100 diagonal and longitudinal wind bracing, and ceiling tie bracing to be free from all major defects and any weak points and fixed all in accordance with manufacturers details.Lap joints (if required) to be taken over 2no.trusses all in accordance with BS5268 Part 3 - 1985.Bracing to be fixed with 2no. 3.35 x 65mm galvanised round wire nails at each cross over and to firmly butt against walls.

7040 Span over wallplates

RWP

Specialist diminishing trusses built off 100 x 22 valley boards with Glass Fibre Valley Troughs.



ALL TIMBER TO BE C16 GRADE,DRY GRADED TO BS4978 AND MARKED "DRY" or "KD"

Roof Plan

Scale 1:50

SHDC
Planning & Development
17 FEB 2010
Ref: 0134-10

Client :
Mr C Corney
31 Wedgewood Drive
Spalding
PE11 3FJ

Site :
BUILDING CONTROL SPECIFICATION

Drawing No: D3

FOUNDATIONS
Existing building area to be stripped of all vegetable matter and rubbish to a min.depth of 150mm before excavation commences.Concrete mix for foundations to be GEN3 in accordance with BS5328:1981.Foundations to external wall to be min.700mm wide x 225mm deep.Excavate down to solid firm strata i.e 750mm deep (min.1000mm if soil is of a shrinkable nature).Exact depth to suit conditions on site and to the strict approval of the L.A Building Inspector.Any irregularities in subsoil during excavation to be brought to the immediate attention of the Building Inspector & advice to be sought from a Chartered Structural Engineer.Precautions against root damage to be agreed on site with the Inspector and in accordance with NHBC Standards Chapter 4.2 " Building Near Trees"

WALLS BELOW D.P.C
3no Courses of Class B brickwork below D.P.C on outer face and 1no.course of 7N/mm2 on inner skin of cavity face.Elsewhere to be either 7N/mm2 concrete blockwork or full width trench blocks.Both to be within 225mm of DPC level.Cavity to be filled to within 225mm min. of below DPC with lean concrete mix.

GROUND FLOOR - TRADITIONAL CONSTRUCTION
65mm mortar screed with a light gauge reinforcing chicken wire on 500 gauge polythene separating layer on a 75mm Celotex Double R GA3000Z rigid insulation board or similar approved, provide 30mm thick perimeter insulation between screed and floor insulation upto d.p.c level on 100mm thick GEN3 concrete sub-floor on a 1200 gauge DPM lapped onto DPC within walls on min.150mm clean and well compacted hardcore.Depth of hardcore must not exceed 600mm and must be compacted in 150mm thick layers.All service entries to be sealed with pressure sensitive tape. Floor to achieve a min 'U' Value of 0.25w/m²K.
Floor insulation Installation guidelines (under screed).
1. Install a Damp Proof Membrane (DPM) below the slab OR apply a liquid waterproofing material to the top surface of the slab.
2. The DPM must provide continuity with DPCs installed within the surrounding walls.
3. Level the surface of the slab; it should be smooth and free of projections.
4. Use a thin sand blinding on a rough tamped slab to ensure that boards are continuously supported. Cut strips of board as upstands to fit around floor perimeters to eliminate heat bridging at screed edges.
5. Upstand depth should equal the sum of the slab insulation and screed thickness.*
6. The upstand thickness should not exceed the combined thickness of wall plaster and skirtings.
7. Lay boards directly onto the prepared slab, cutting infill boards as required. Joints must be tightly butted. The use of a polythene vapour control layer over the insulation is recommended by the BRE to minimise the risk of condensation forming at the insulation/slab interface.
8. Apply a sand/cement screed over the GA3000Z boards to a minimum thickness of 65 mm. Use scaffold boards or other protection to prevent wheelbarrows and other traffic damaging boards.
9. Allow screed to dry thoroughly before an impermeable surface, such as a vinyl floor finish, is applied.
10. These recommendations are suitable for normal domestic floor loadings. If higher loadings are required it may be necessary to increase screed thickness and provide reinforcement within the screed
Installation guidelines (under slab).
Insulation under the slab must have: Level and well blinded hardcore. DPM (Damp Proof Membrane) placed under insulation. Insulated upstand = thickness of slab + screed. DPM continuous with the DPCs. Vapour control layer (e.g. 1000 g polythene) laid directly over insulation.

GROUND FLOOR - BEAM & BLOCK FLOOR
Provide and Install Prestressed 150mm concrete floor beams bearing on inner skin of cavity wall on dpc as per manufacturers details. Contractor to provide details and calculations of manufacturers floor design to Building Control prior to placing materials on order. Lay 100mm infill blocks of 7N/mm² average crushing strength and edge slip blocks as required. Lay on top of infill blocks a minimum 1200 gauge proof DPM with min. 150mm lapped joints sealed with an approved tape. Joint tape to be applied strictly in accordance with manufacturers instructions. DPM to be carried across cavity wall to join with DPC's.Provide cavity tray above DPM with weep holes at max 450mm ctrs.Separate cavity tray & dpm by mortar bed.Provide telescopic vents and air bricks at max. 1800mm ctrs to ventilate void underneath floor beams.Provide a thin sand blinding on top of dpm to ensure 75mm Celotex GA3000 insulation boards or similar approved are fully supported.Provide stripes of insulation turned up around floor perimeter to eliminate thermal bridging at floor edges.Upstand depth should be equal to floor insulation and screed finish. The upstand thickness should not exceed the combined plaster wall and skirting thickness.Provide 500 gauge vapour control layer over insulation and finish with 65mm sand / cement screed reinforced with chicken wire. Use scaffold boards when laying screed to avoid damage from all traffic.

DAMP PROOF COURSE (D.P.C)
Horizontal heavy duty polythene DPC "Hyload" or similar approved to all walls in accordance with BS 6515 and set min.150mm above all external ground levels.DPC in walls must be linked / lapped with DPM in ground floor.Provide performed cavity wall trays above windows & doors with weep vents at a max.of 2m centres with a min.of 2no.per opening.Provide D.P.C's and Cavity Trays to meter boxes.

EXTERNAL WALLS
All external walls to be 285mm overall thickness comprising of:
-100mm Facing Brickwork to match as closely as possible the existing
-85mm cavity filled with Crown Dritherm (or equal approved) built in as work progresses.Insulation batts should be kept clean and free from mortar droppings, all joints should be closely butted. Any cutting and fitting should be neatly done and not distort the layers of glass wool which comprise the material. All DPC's should be installed to ensure that penetrating water is directed only to the outer leaf.
-100mm Thermalite Shield insulating blockwork.
Continue wall insulation at least 150mm below top of perimeter floor insulation and support off wall ties. External wall to achieve a min 'U' value of 0.30w/m²K.

CAVITIES
Close all cavity walls at jambs with Thermabate or similar approved insulated cavity closers fitted strictly in accordance with manufacturers instructions. Roof insulation to be continuous with wall cavity insulation.Install Insulated Cavity Closers by Thermabate or equal approved, 25mm thick x 75mm wide (to equal cavity width) at jambs and cills of all openings in masonry cavity walls. Secure with the proprietary clips provided at maximum 500mm centres. Ensure that closers fit tightly to each other and to the lintel. The closer at the jamb must completely lap the closer at the cill.

WALL TIES
Stainless steel cavity wall ties to BS1243:1978.To be built into cavity wall as works proceeds and spaced at 750mm centres horizontally,450mm centres vertically and 300mm staggered around all openings.Ensure wall ties are level or at least sloping to the outside leaf.Bed ties a minimum of 50mm into each leaf and ensure wall ties are completely free from mortar droppings.

LINTELS
All lintels to cavity wall to be factory insulated Birtley Supergalv range unless noted otherwise or equalled approved.All lintels must have a min.150mm endbearing and installed in accordance with manufacturer's instructions.Do not allow masonry to overhang lintel by more than 25mm. Note: lintels are not to have a continuous baseplate.

WINDOWS & DOORS
All windows to be uPVC to clients requirements based on styles shown on elevations.Fit with 5000mm² trickle ventilators to Kitchen, Utility,Bathroom & En-Suite windows and 8000mm² elsewhere all in accordance with manufacturer's recommendations.Patio doors to be fitted with 10000mm² ventilators.Opening vents which open to 30° or more to give 1/20 th of floor area rapid ventilation and less than 30° to give 1/10th of floor area for rapid ventilation.All glazing within 800mm of floor level and within 300mm of a door to a height of 1500mm of ground level to have toughened glass in accordance with Section N of the Building Regulations and BS6206 class B.All double glazed units to windows to be installed in accordance with BS 6262 and to have a 16mm Air gap with a soft Low 'E' coating on glass inner pane to achieve a min 'U' value of 1.8w/m²K and 2.2w/m²K to all doors.Note all windows to have a perimeter weatherseal both internally and externally and to be fully draught sealed.Provide frosted glass to all Bathroom, W.C's and En-suite windows.Ensure windows & doors are fitted within masonry reveal to overlap cavity closer by min. 40mm to avoid cold bridging.All window opening vents to allow means of escape in an emergency situation.Opening vent to be min.450 wide in each direction with an area of 0.33m² fitted with egress hinges.

TIMBER WALLPLATES
All timber wallplates supporting roof trusses to be 100mm x 50mm bedded on top of wall.Timber to be SC3 grade and use a min. length of 3m and half-lap plates at joints and corners..Provide anchor straps as described in notes elsewhere.

ROOF COVERING
Concrete Interlocking Double Pantile fixed in accordance with manufacturers instructions and in accordance with BS 5534:Parts 1 and 2.Set out to give true lines and regular appearance, fitting neatly at all edges, junctions and features.Fix roof covering to make the building sound and weathertight at the earliest opportunity.Repair any defects as quickly as practicable to minimise damage and nuisance & keep gutters and pipes free of debris and clean out at completion.Provide 50x25 preservative treated timber battens.Tiling battens should be not less than 1.2m long and continuous over at least 3 trusses.They should be fixed to every rafter member which they cross, or on which they are joined, with nails in accordance with BS5534: Part 1. The ends of the battens should be sawn square and butt jointed centrally on a rafter member so that adequate bearing and nailing can be provided for each end of each batten.Butt joints in battens should be arranged so that not more than one batten in four is joined on any one rafter.Generally all tiles at perimeter of roof to be clipped and nailed. Use Code 4 Lead flashing to any abutments with min.75mm upstand.

ROOF VENTILATION
Install Tyvek® or similar approved Breathable Membrane in accordance with manufacturers instructions which are briefly described below & BBA certificate 99/3635 (fourth issue) breather membranes in non-ventilated pitched roofs of any plan, any shape or any size under all types of roof coverings including tight jointed and fully interlocking tiles and synthetic slates. Installing Tyvek® underlay in accordance with the above certificate will enable a roof to meet all the requirements of the Building Regulations. Tyvek® SUPRO should be installed with min. 150mm overlaps as a standard bituminous felt underlay and secured with stainless steel staples or large headed galvanised clout nails.
Eaves:
Provide low level roof space ventilation via Eaves Fascia ventilator. Install continuously to provide 10,000mm² ventilation. Install fascia ventilators, Gutter Brackets and Continuous rafter roll to ensure a continuous clear air path from roof space to outside air combined with 4mm large insect screen.To avoid water ponding behind the fascia of closed eaves and to prevent prolonged exposure of the membrane to ultra-violet radiation, use a Tyvek® Eaves Carrier. Stop the membrane short of the fascia and lap it onto the Eaves Carrier.Pack closed eaves with fibrous insulation to reduce thermal bridging.
Verge detail:
Lap the Tyvek® underlay 50mm onto the gable or flying rafter.
Ridge/ hip detail:
Extend the Tyvek® underlay 150mm from each slope and overlap it at the ridge/ hip line. Provide high level space ventilation by means of Glidevale Premier In Line Ventilated Dry Ridge system or similar approved to suit concrete interlocking tiles. Install continuously to provide 5,000mm² ventilation area all as per manufacturer's instructions.
Valley detail:
Extend the Tyvek® underlay from each slope by 150mm beyond the valley centre line and seal the lap using Tyvek® Butyl Tape to form a watertight seal.
Abutments:
Turn up the Tyvek® underlay beneath flashings not less than 50mm.
Penetrations:
Seal around all penetrations using Tyvek® Butyl Tape.

ROOF INSULATION - FLAT CEILINGS
The whole area of the ceiling to be insulated with two layers of Crown Wool Mineral Fibre insulation or equal approved of a total thickness 300mm to achieve a 'U' value of 0.16w/m²K. Width of first layer of insulation to be appropriate to the joist spacings and of a thickness equal to joist depth (100mm) . The insulation to be laid between the joists to finish over the wall plate on external walls and pushed up tight to roofing membrane. The second layer (200mm) of Crown Wool to be laid at right angles to the first layer.All joints between the rolls of insulation to be close butted.

ROOF INSULATION - SLOPED CEILINGS
Sloped roof insulation to be 50mm Celotex Insulation flush with the u/side of rafters lined with 500 gauge Visqueen Vapour Barrier with 25mm Thermal Boarding with 5mm skim finish.
Installation guidelines: Ventilated
Make sure there is enough rafter depth to accommodate not only the thickness of the GA3000Z insulation but also a 50 mm ventilated air space above the boards.Fix battens or nails (leaving 50% of their length exposed) to the inside face of the rafter so that the bottom of the battens/nail is 50mm below the slaters felt. These nails should be spaced at regular centres to offer sufficient resistance to stop the board obstructing the air space.Measure the space to be filled between the inside face of the rafters prior to cutting board.Cut tuff-R at a slight angle, making the board width slightly oversize on one surface, to achieve a 'friction fit'.Push the boards into the void between the rafters until tight up to the underside of the stop batten or nails, ensuring that lateral joints are closely butted.Joints between boards must be tightly butted.The length of fasteners required to secure the plasterboard lining should be considered.It is good building practice to vapour seal all insulation board joints. This may be achieved by the use of a self-adhesive aluminium foil tape.Clearly mark rafter-lines on the board face, using a spirit-based felt-tip marker.Nail or screw plaster board or other lining through the insulation to the rafter.

FIRST FLOOR CONSTRUCTION
*** x ** joists @ max.400mm ctrs. First and last joists to all areas to be clear of wall by 25-50mm to aid floor fixing and services installation.Where joists are supported off internal walls ensure overlapping joists are nailed together and ensure overhang does not exceed 100mm to limit cantilever movement unless fixed to joist running at right angles.All cut ends of joists to be sealed with suitable preservative prior to fixing in position.Solid strutting at positions shown. Ensure solid strutting where studwork walls above run at right angles to joist span. Joists to be supported at all junctions with approved joist hangers with 75mm min bearing on masonry and joist.joist to be cut accurately for a tight fit in hanger with max.6mm gap. Joist bottom to be notched to keep ceiling line level.All timber to be C16 grade,dry graded to BS4978 and marked "DRY" or "KD"

FIRST FLOOR STRUCTTING
Provide solid blocking between last joist & wall and underneath all restraint straps. Solid blocking should be at least 38 mm thick and extend at least three quarters of the joist depth. The blocking should be close fitting and be fixed either by skew nailing or by offsetting the blocks and end nailing through joists.Full depth blocking should be avoided, since it could project above or below the top or bottom of the joist at some point in its length. This will result in an uneven deck surface and, since the deck or ceiling will not then be in full contact with the joists, could cause nail popping and subsequent noise from movement on the nails. Blocking should be tight fitting, yet not oversized as this may cause distortion in the joists.

FIRST FLOOR COVERING
Lay 22mm Weyroc Tongue and Grooved flooring grade wood particle boarding or equal approved on top of first floor joists with staggered joints in a brick bond pattern. Allow a min.12mm gap around perimeter where boards abut a solid wall. Unsupported ends must be supported by noggins.Apply a generous bead of approved wood adhesive to the top of the joists prior to laying the boards. Boards should be fixed using anti rust annular ring shank nails min.55mm long, positioning nails 15mm in from each end of panel with a further nail equidistant between i.e 3 nails across the width of each panel.Screw fixings may be used for an even more comprehensive fit.

LATERAL RESTRAINT STRAPS
Tie roof structure to blockwork wall with 30X5 galvanised mild steel straps at max.1.8m ctrs where rafters and ceiling joists run parallel to blockwork walls.Also fit at max 1.8m ctrs to anchor wallplate to blockwork wall with min 3no. fixings per strap.Horizontal lateral restraint straps should be spaced not more than 2m centres and attached to at least 3 timber members through the use of noggings and packing. Attach to timber members with four steel screws or four 4 mm x 75 mm round nails for roofs and two into each joist for floors. The turn down end should be 100 mm at the centre of an uncut block or brick.Vertical restraint strapping should be at least 1m long. Where straps are fixed to masonry, hardened nails BSWG x 75 mm long or wood screws into plugs No 12 x 50 mm long should be used. The number of fixings should be in accordance with the design plans and the lowest fixing should be located within 150 mm of the bottom of the vertical strap.

RAINWATER DRAINAGE
uPVC guttering and downpipes to clients approval..Falls for guttering to be 1:600 and brackets fixed at max. 2m ctrs.Downpipes to be connected into underground drains via reducing adapter.Underground drains to be 110mm Ø Osma uPVC or similar approved with flexible joints laid on 100mm peagravel and min 150mm surronds laid to 1:100 falls to new soakaway.Soakaway specification detailed elsewhere.

FOUL DRAINAGE
Underground drains to be as rainwater drainage but with min.1:80 and max.1:40 falls.Fall of drains from gullies to be 1:40.All drains passing thro' walls to have concrete lintel over with 50mm space around filled with compressible material and opening masked with durable rigid sheet to prevent ingress of vermin or back fill.Drain runs must not be any lower than foundation depth unless min.of 1m from any building.Provide roddable access to all change in bends and junctions.Contractor to ensure no live drains run beneath proposed works.New I.C less than 650mm deep and only one branch connection to be 225mmØ and I.C between 600mm and 1000mm deep to be 450mmØ uPVC Osma or equal approved.I.C over 1000mm deep to be 1200x750 on 150mm C20P concrete base with 215mm Class B brick walls with Grade B medium duty cover.

ROOF / LOFT ACCESS
Provide insulated roof access trap door with a fully weathered sealed frame and a 38mm brass bolt or to clients requirements.

NOGGINGS
Fix min. 38x38mm timber noggings to all potential loose plasterboard ceiling edges and light fittings.Position of light fittings to be advised by client on site.

INTERNAL JOINERY .SKIRTING & ARCHITRAVES
All internal finished timber to be free from all defects and to clients approval prior to ordering any materials.

ELECTRICAL INSTALLATION
All electrical work required to meet the requirements of Part P must be designed, installed, inspected and tested by a person competent to do so. Prior to completion of the works the council Building Control Officers must be satisfied that either:
1. An electrical installation certificate issued under a competent persons scheme has been issued or
2. An appropriate electrical installation certificate has been issued for the work, and that it has been signed by a person competent to do so.The Engineer is to advise if any appliance or position of appliance does not conform to regulations. Contractor to seek advice from Client with regard to lighting requirements.

SMOKE ALARMS
To be self contained,interconnected and wired to a separately fused circuit with a battery back up.Smoke alarms to be fitted to u/side of plasterboard ceiling to the ground floor max 7m from the kitchen / lounge and to be max. 3m from any bedroom door. All alarms to be strictly in accordance with BS 5446 and to be wired that when one alarm is triggered all alarms are activated.

INTERNAL JOINERY .SKIRTING & ARCHITRAVES
All internal finished timber to be free from all defects and to clients approval prior to ordering any materials.

MASONRY WALL CONNECTORS
Provide Simpson Strong - Tie or similar approved wall connectors to connect new & existing brick / blockwork.Use all specified fasteners.Fasteners must be spaced evenly, unless otherwise specified, and installed into the existing bricks or block and not into mortar joints.Insert wall ties provided at maximum 300 mm centres, bedding the ties into the mortar joints.Detailed site work instructions are provided with each wall connector system and must be adhered to at all times.In exposed locations it may be necessary to incorporate additional protection, for example the insertion of a vertical dpc.

CEILINGS
All ceilings to be 15mm plasterboard (10kg/m²) to BS1230. Ceilings to be have Coving and skim finish to clients requirements.Plasterboard sheets to be fixed with joints staggered and must be layed perpendicular to all joist runs.Fix boards at a min.150mm centres.

INTERNAL STUDWORK PARTITIONS
Construct all new studwork walls from 89 x 38mm CLS softwood battens at max.600mm centres with noggings at max.1200mm centres.Fix room sides 12.7mm plasterboard,scrim tape all joints and skim finish.Pack with 75mm mineral fibre insulation.

HEATING SYSTEM
Provide a Low Pressure Hot water Central system via ***** Fired Boiler and cylinder complete with fan assisted flue and combustion air vent.Area of vent is to be in strict accordance with manufacturer's recommendations.Boilers to have a SEDBUK rating of 86% (Gas),82% (Oil Combi) & 85% (Oil). Electrical operated boiler control interlocks are to control the operating periods of the boiler which in turn is controlled by a room thermostat positioned in proposed living room.The boiler should only fire when the space heating or the Cyclinder termostat calls for heat.All radiators are to be fitted with thermostatic radiator valves.Panel radiators to maintain the following room temps (with an outside temp of -1°C):
Dining Room & Living Room: 21°C
Kitchen: 18°C
Hall and Landing: 18°C
Bedrooms: 18°C
Bathrooms: 22°C
W.C: 18°C
Utility: 16°C
The hot water cyclinder is to be insulated with a factory applied PU foam coating at least 35mm thk having a min. density of 35kg/m³. All space heating pipework located outside the building fabric insulation layers to be wrapped with insulation material having a thermal conductivity at 40°C not exceeding 0.035 W/m°K and a thickness equal to the outside diameter of pipe upto max. of 40mm.It should be noted that central heating and hot water pipework in unheated areas may need increased insulation thicknesses for the purpose of protection against frost, refer to BRE Report No. 262 2002 Edition.Contractor to provide an "Operating and Maintenance Instructions for Heating and Hot Water Systems" notice inside kitchen door which explains operating system and routine maintenance which is advisable for the conservation of fuel and power.Contractor to submit a cetificate to show that commissioning has been successfully carried out. The certificate should be made available to the Client and SHDC building inspectors. A suitable certificate should be one published as part of the Benchmark Code of Practise for Installation, Commissioning and Servicing of Central Heating Systems, a blank copy may be included within the boiler manufacturers installations instructions or from C.H Information Council on Tel no: 01926 423 284.

EXTENSION TO HEATING SYSTEM
Provided from existing but all radiators are to be fitted with thermostatic radiator valves. All space heating pipework located outside the building fabric insulation layers to be wrapped with insulation material having a thermal conductivity at 40°C not exceeding 0.035 W/m°K and a thickness equal to the outside diameter of pipe upto max. of 40mm.It should be noted that central heating and hot water pipework in unheated areas may need increased insulation thicknesses for the purpose of protection against frost, refer to BRE Report No. 262 2002 Edition.

SOAKAWAYS
All rainwater to discharge into soakaways and to be min.of 5m from any building & a min.of 1m³ filled with rubble to within 450mm of external ground level.Overlay rubble with polythene sheet and backfill with clean topsoil.Note the soakaway inlet pipe must discharge to the centre of the soakaway in all directions.The contractor should carry out percolation tests to determine the feasibility prior to constructing the soakaways. Detailed below is brief guidance on how to carry out the tests:
1. Excavate a trial pit to the same depth as the anticipated soakaway below the invert of the drain.
2. The trial pit should be 300mm - 1000mm wide and 1000 - 3000mm long.
3.It should have vertical sides trimmed square and, if necessary for stability filled with granular material.
4.When no granular material is used, it is advisable to place pegs into the trial pit at the 75% & 25% levels. This allows the water level readings to be taken accurately.
5.The trial pit should then be filled and allowed to drain three times to near empty, with readings taken for:
-The time taken for the water level to lower to the 75% level
-The time taken for the water level to lower to the 25% level
6.When granular material is used, a full height, perforated, vertical observation tube should be positioned in the pit so that the water levels can be monitored with a dip tape
7.The trial pit should be filled on three separate occasions to give a true reading on the ground conditions Available at this office is a Soil Infiltration check sheet to be completed on site and a copy issued to the L.A Building Control Officer upon completion.

WASTE SIZES FOR NEW PLUMBING
All new plumbing to have the following waste sizes:
W.C=100mm o Multikwik or similar approved
W.H.B=32mm o uPVC with 75mm Deep sealed trap
SINK=40mm o uPVC with 75mm Deep sealed trap
SHOWER=40mm o uPVC with 75mm Deep sealed trap
Provide access points to all changes in direction.Provide anti-siphon traps where pipe runs exceed 3m and W.H.B pipe run exceeds 1.8m.

NOTICE PLATES FOR HEARTHS & FLUES (Requirement J4)
Information essential to the correct application and use of these facilities should be permanently posted within the dwelling. A notice plate should be provided containing the following information:
-The location of the hearth, fireplace or the location of the beginning of the flue
-The category of the flue and generic types of appliances that can be safely accommodated
-The type and size of the flue and the manufacturers name and address details
-the installation date.
The notice plate should be robust and fitted next to the electricity consumer unit.

CHIMNEY CONSTRUCTION
A chimney height of 4.5m or over is normally sufficient for flue draught. The depth of the chinney foundations should be the same as any adjacent wall foundation. In order to provide stability, masonry chimneys should be bonded to, or supported by, adjoining walls of the building. The masonry should be suitable brick, medium weight blocks or stone and mortar jointed. The minimum wall thickness of a masonry chimney is 100mm or 200mmm to another compartment or dwelling - see ADJ diagram 2.4. Combustibles must be at least 200mm away from the inside face of the flue liner and 40mm from the outside face of the chimney.The chimney should be lined with suitable liners and purpose made bends. Joints should be kept to a minimum and sealed with fire cement. Liner joints should be installed with the tongue pointing downward into the socket to contain moisture and condensate in the flue. Any voids between liners and masonry should be filled in accordance with manufacturer's instructions.A flue liner bend is used to create an offset to align the flue with house walling or to reach a chimney pot position. The number of bends should be kept to a minimum for better draw efficiency and to enable sweeping access. They are also used to prevent vertical rain ingress, but this can also be achieved with a suitable cowl. Where more than two bends at 45 degrees are to be used in a flue, additional sweeping access is required by ADJ 1.48. Bends must not exceed an angle of 45 degree. A constructional hearth should be made of solid, non-combustible material such as concrete or masonry at least 125mm thick. No combustible material should be placed underneath a constructional hearth unless there is an air space of 50mm or more or the combustible material is at least 250mm below the top of the hearth. A finished/decorative hearth should be at least 12mm thick and made of non-combustible board/sheet material or tiles. For further information refer to ADJ sections 2.22 to 2.29 and 3.40 to 3.42.The fireplace recess should be constructed of solid non-combustible material. Internal solid walls and jambs should be at least 200mm thick and cavity walls should have at least 100mm thick leaves and 50mm cavity. Material in the cavity behind the fireplace should be non-combustible. For an open fire the fireplace recess should be at least 350mm deep. For burning solid fuel, ADJ suggests a minimum recess size of 500mm by 550mm using 200mm diameter liners and a flue cross sectional area of 15% of the face area of the fireplace.The height of an unrestrained chimney stack should not exceed 4.5 times the smallest plan dimension of the chimney stack. Please refer to ADJ section 2.10 and diagram 2.1 for recommended positions of the flue outlet above the roof. Details of clearances above easily ignitable roof coverings, such as thatched roofs, are set out in ADJ 2.12 diagram 2.2.A chimney needs to be made weather proof with mortar flaunching around the chimney pot on a brick or concrete capping with drip overhang. Mortar used for the chimney and flaunching should be resistant to rain and frost.. Lead flashings are needed at the junction with roof tiles and brickwork to prevent water penetration. A saddle tray drop proof course should be installed across the full span of the stack at the intersection with the roof to prevent water seeping down the chimney. Details of lead saddle trays and flashings are available from the Lead Association, Tel: 01892 656463.

STAIRCASE
Staircase to be based on a standard B & P design.Stair layout to have min 223mm going & max 200mm rise,to suit FFL - FFL of ****mm, 905mm o/all width of stair trimmers with 810mm unobstructed width, 2000mm clear headroom, 905mm raking handrail height, 942mm landing balustrade height.Balustrade is to be capable of withstanding an horizontal impact force of 0.36 Kn/m.Balusters are to be spaced at ctrs which will prevent a 100mm Ø sphere passing through.

EXTERNAL LIGHTING
All external lights to have a sensor which will extinguish the light when there is enough daylight and when not required at night

ACCESSIBLE SWITCHES & SOCKETS
Inorder to use the dwelling more easily by all persons then all mounted switches, sockets, TV sockets, telephone jack points and door bells..... etc should be positioned between 450mm and 1200mm from finished floor level.Door bells & light switches to be fitted 1200mm from FFL and the remainder 450mm from FFL.

PRINCIPAL ENTRANCE
Provide sloped access ramp to entrance door with min.1m clear opening.Level surface at door position to be at least 1.2m² with sloped gradient of not steeper than 1:15 if slope is not longer than 10m or not steeper than 1:12 if slope is less than 5m.Note additional DPC required at coarse above usual DPC level to level landing / sloped areas only.Ensure DPC is lapped with DPM in floorslab.Ensure door is fitted with a level threshold (max 15mm upstand)

SHDC
Planning & Development
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Site :
BUILDING CONTROL SPECIFICATION

Drawing No: D4