

Roof construction:

Install interlocking concrete tiles to match existing. Tiles are to be installed to manufacturers recommendations. Existing tiles are to be removed carefully for re use on the re built roof. Tiles are to be installed on 25x50 fully treated battens on Proctor Roofshield or similar breathable sarking with eaves carrier on new built up timber roof structure.

New roof structure formed of:
 50x150 rafters at max. 600mm ctrs. Double rafters bolted together installed below dormer sides.
 2no. 47x150 ties at ceiling level bolted to rafters at each end. (exposed timbers)
 75x225 purlin located at rear of dormer. (exposed timber)
 Existing wall plates to be retained. Install new min. 50x100 wall plate above extended 100mm block wall to support rafters.
 Approx. 32x175 ridge board. Install metal straps between tops of rafters at ridge level.
 Eaves construction to be formed to match existing. Existing verge detail retained.
 No roof void vents are required as breathable sarking to be used.
 All structural timber to be grade SC3 marked dry or kiln dry.
 Install 30x5mm mild steel straps at average 1800mm ctrs. between roof structure and external walls. Straps to be installed at ceiling level and at slope of roof. Straps at gable to extend over 3 timbers and to be supported by noggings. Existing straps to be used where suitable.
 Install code 4 lead flashings at junction of new roof and house wall. Existing flashings re used if suitable and not damaged.
 Retain corbelled brickwork to roof corners.
 Dormer roof constructed of tiles battens and sarking as main roof on built up timber roof structure formed of 38x100 rafters and ceiling joists at 400mm ctrs. together with reducing trusses. Install 25x175 layboards below rafter ends to valleys.
 Sides and front of dormers formed of horizontal timber weather boarding fully preservative treated and stained on 25x38 fully treated vertical battens on breather membrane on 12mm exterior grade plywood sheathing on 38x100 timber frame at max. 400mm ctrs. with internal finish of 12.5mm plasterboard and skim on vapour barrier. Install 90mm thick Celotex insulation (as roof insulation) tightly fitted between framing.
 Install 2no. 50x125 timbers bolted together above dormer window.
 Tops of rafters below dormer supported on studwork below dormer window.
 Install approx. ex.25x125 barge board with plywood soffit
 Install code 4 lead flashings at junction of roof with dormer sides and front. Install preformed fibreglass valley gutters.
 Existing roof above main house entrance to be retained.

Gutters, rainwater downpipes and stormwater drains:

All existing retained.

Ceilings:

New ceilings to be formed of 12.5mm thick plasterboard with Artex or skim finish. All plasterboard joints (where timbers more than 450mm ctrs.) and perimeter of all new ceilings to be supported. Ceiling to garage formed of 12.5mm thick Gyproc Fireline plasterboard with Artex or skim finish with all board joints and perimeter supported.

Roof insulation:

Install 90mm thick Celotex tuff-Rtm Zero GA3000Z to whole roof between rafters with battens fixed to sides of rafters to keep underside of insulation level with underside of rafters. Install 40mm thick continuous Celotex tuff-Rtm Zero GA3000Z below rafters with taped joints. Insulation to be installed to manufacturers recommendations.



Wall insulation:

Insulation to existing gable cavity wall formed of 50mm thick Gyproc Thermaline super installed on GypLynex system or other approved method with skim finish to give "U" value of 0.35 W/m2K.

Suspended floor:

Constructed of 18mm thick T&G moisture resistant flooring grade chipboard throughout on 47x200 joists at 400mm ctrs. supported on joist hangers over garage (47x150 above WC). Install solid/herringbone strutting at mid span. Install 200mm thick fibreglass quilt insulation between joists above garage and 100mm thick above WC.
 Install 50x150 joists bolted to existing ceiling joists below storage area with 100mm thick fibreglass quilt insulation between joists.
 Install 30x5mm mild steel straps at average 1800mm ctrs. between floor structure and external walls. Straps to extend over 3 timbers where at right angles and to be supported by noggings. Existing straps to be used where suitable.

Foundations:

If required existing foundations to be exposed to confirm suitability.

Lintels:

Install IG box lintel 100 steel lintels (2no.) to new internal opening in cavity wall from stairs and above door opening to storage area below wall plate.

Window:

New window frame to dormer to be timber framed 1200x1350 deep glazed with sealed units with minimum 16mm gaps between glass and to incorporate Low E coating to provide "U" value of 2.0 W/m2K. No glass is within 800mm of floor level. Opening light to be draught sealed. Install trickle vents to new window to provide min. 8000mm2 background ventilation. At least 5% floor area ventilation to be provided to new room.
 New window to be suitable as fire escape with min. clear opening width of 450mm and min. opening area of 0.33m2.

Heating and hot water:

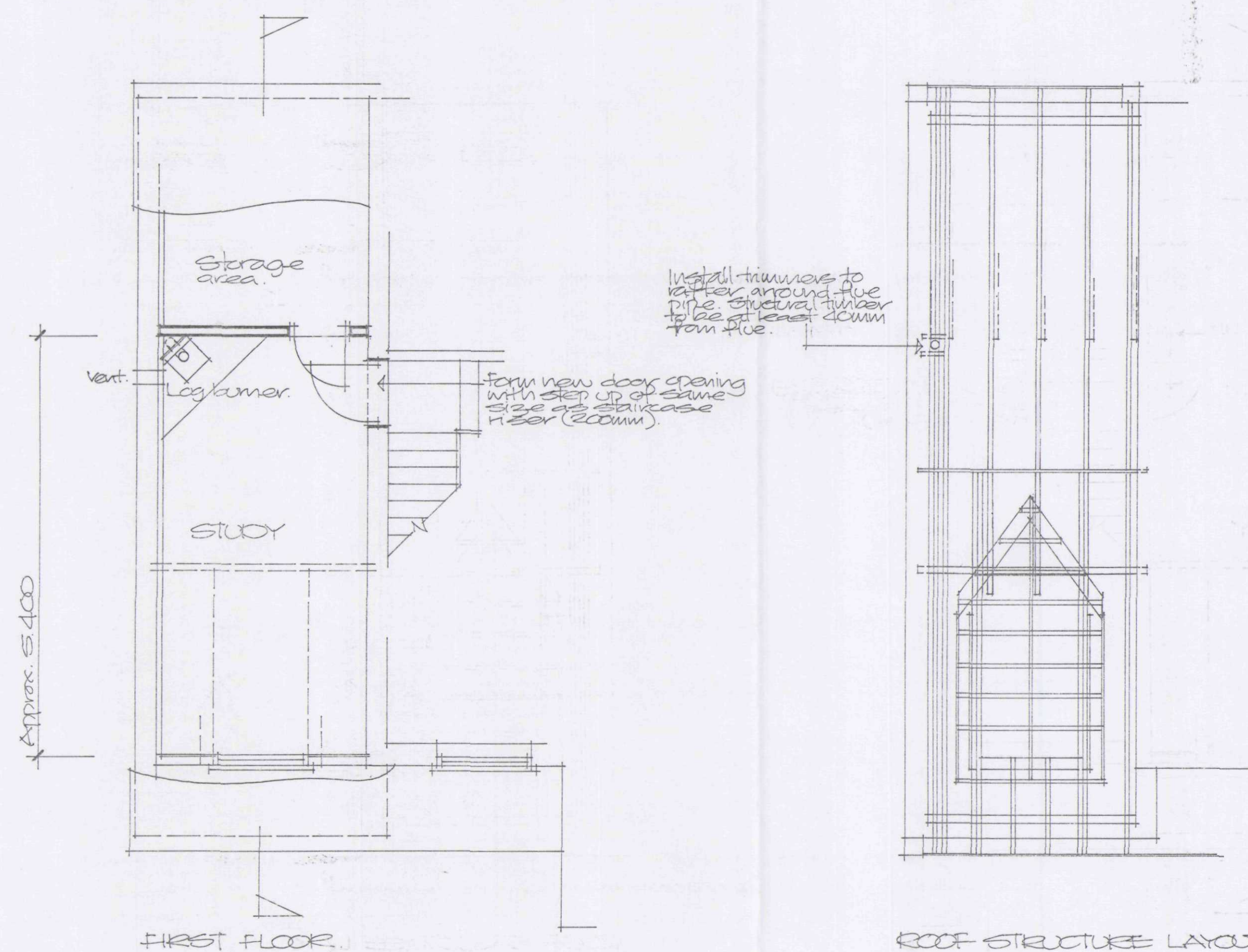
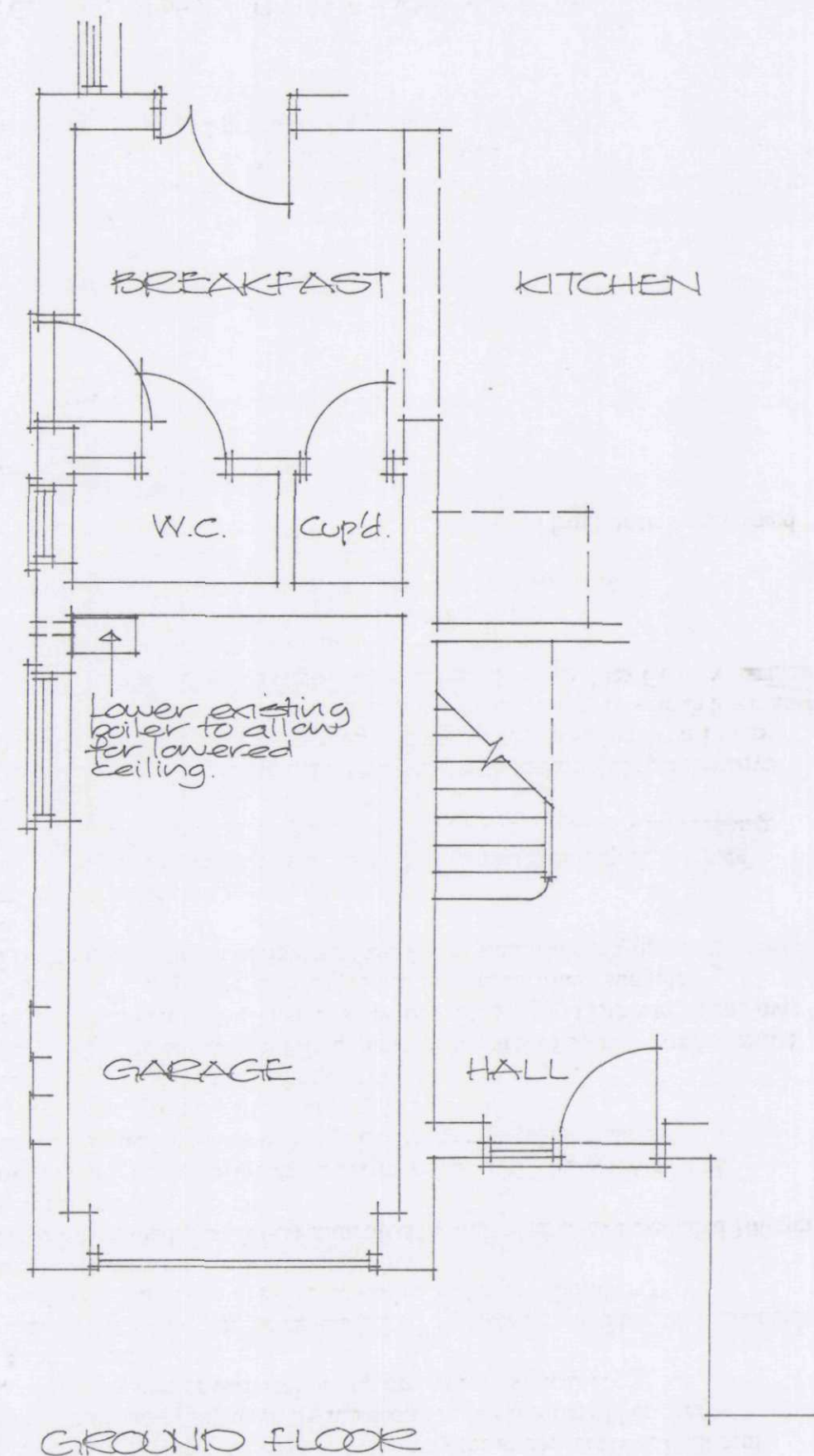
Extend existing central heating into proposal with thermostatic valve fitted to new radiator and all new hot water pipes insulated with Armaflex or similar of thickness to match pipe outside diameter.

Log burner:

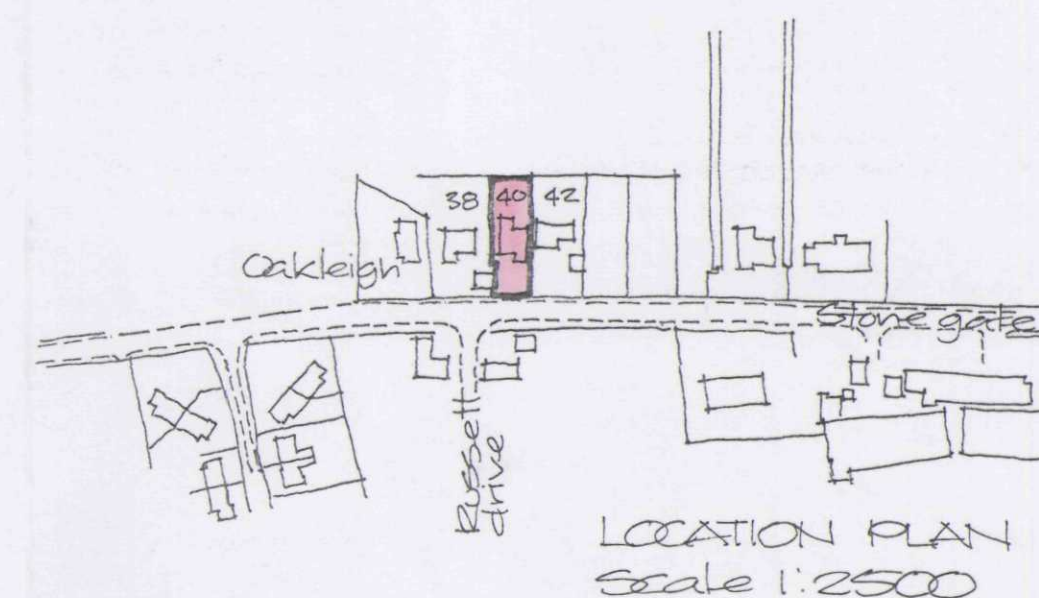
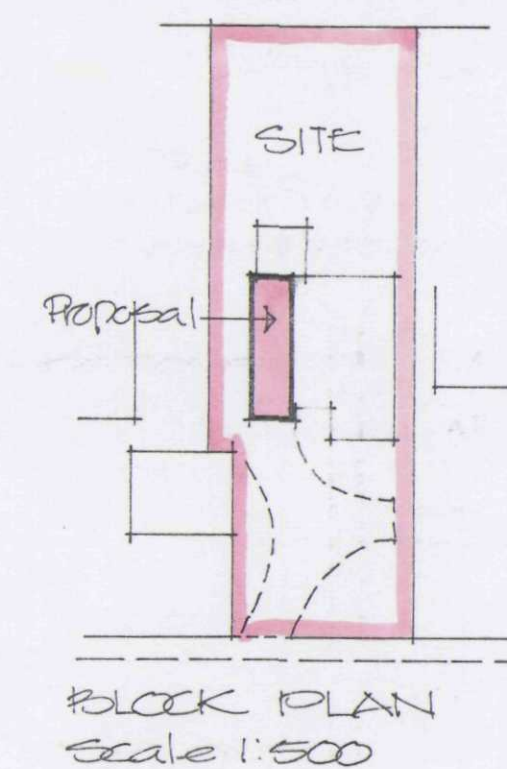
Install Becton Bunny freestanding multifuel stove or similar in location indicated. Appliance of type that cannot cause hearth temperature to exceed 100 degrees C. Hearth formed of non combustible board or tile with surface at least 12mm above floor finish. Hearth to project at least 300mm in front of log burner. Appliance has approx. 102mm dia. flue pipe. No structural timber to be within 40mm of flue pipe. Install combustion air vent through external wall to provide at least 50% of throat area of fire as clear ventilation.

Lighting:

Install compact fluorescent or fluorescent tube type low energy light fittings.



ROOF STRUCTURE LAYOUT.



SHDC
 Planning & Development
 25 OCT 2004
 Ref: 1428/04

**DETERMINED
 PLAN**

Project
**PROPOSED ALTERATIONS
 TO HOUSE
 40 STONEGATE,
 COWBIT,
 ORALING.**

**ALAN HORNSBY
 ARCHITECTURAL SERVICES**

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Client
MR & MRS C. MIDDLETON

Scale **1:50/1:100**
 Date **October 04**

Dwg. no.
04/60/01