

Roof construction:
 New section of roof constructed of interlocking concrete tiles to match existing installed to manufacturer's recommendations on 25x50 fully treated battens on existing felt on built up roof formed of:
 25x100 rafters at 600mm cts
 25x125 ceiling joists at 600mm cts
 25x225 purlins
 25x225 main beams
 25x200 main beams at approx. mid span
 25x150 ridge beam
 25x100 batten to support collar at mid span
 25x100 wall plate and pole plate

All structural timber to be grade SC3 and marked dry or kiln dry.
 Roof pitch approx. 35°

Install small area of built up roof above front bedroom window formed of existing truss constructed of 25x100 rafters and ties together with 25x125 bays.

Retain small area of pitched roof over front of garage with rafters and ceiling joists built into new wall. Install 25x100 lead flashing at top of this roof combined with cavity tray d.p.c.

Eaves and verge constructed to match existing including coped lead to roof eaves. Install min. 10,000mm² per m² roof void ventilation strip to new eaves.

Install preformed fibreglass valley gutters.

Install 25x25mm mild steel straps between roof structure and walls and between suspended floors and walls all installed at coverage 100% and spaced at 1200mm cts. Ceiling level and at slope of roof. These straps to help angles. Where they are to extend over two timbers supported by noggings.

Roof insulation:
 Install 1 layer of 100mm fibreglass quilt insulation between joists with 1 layer of 100mm fibreglass quilt insulation over joists. Maintain roof void ventilation over insulation at eaves.

Floor insulation:
 Install 200mm thick fibreglass quilt insulation between floor joists above garage.

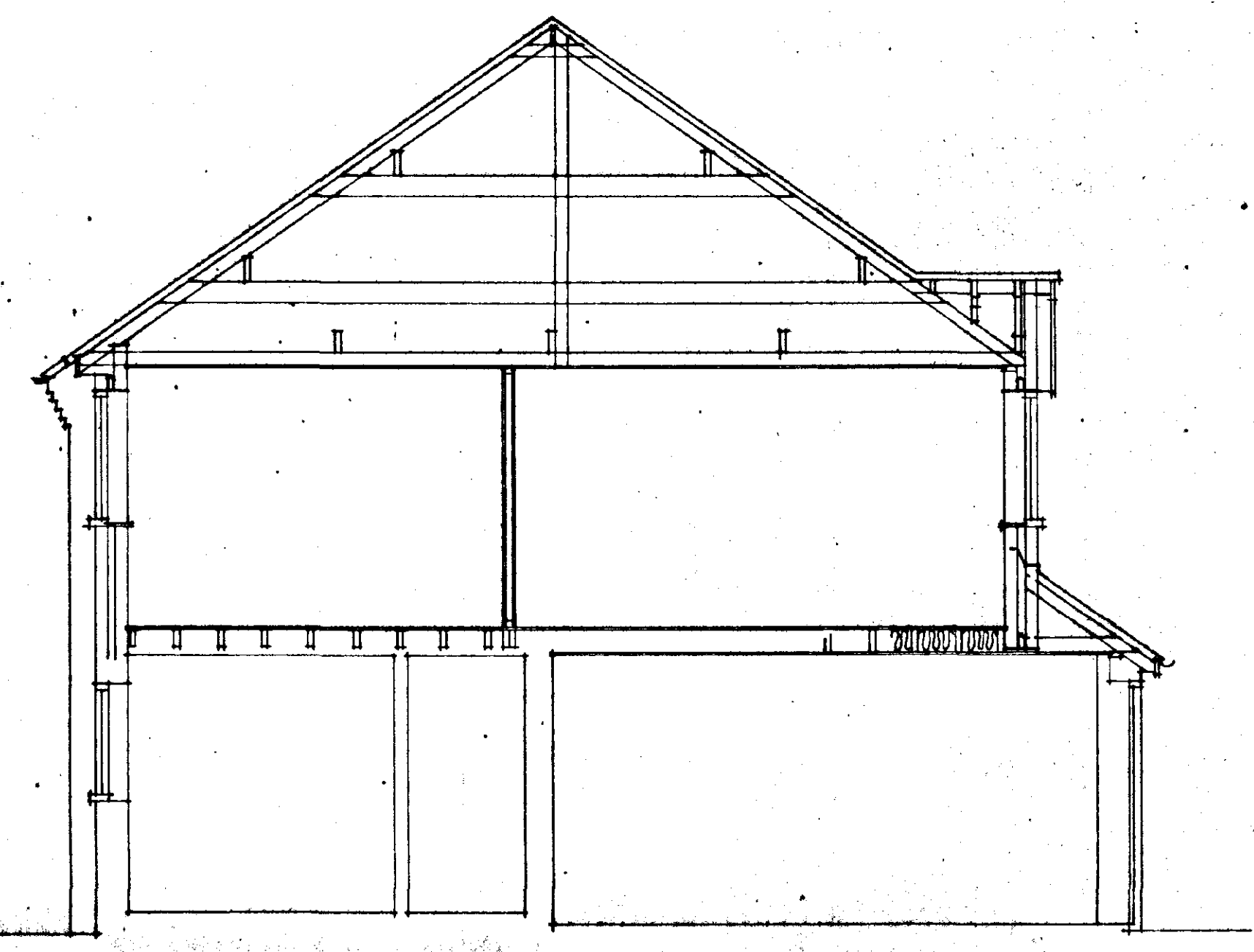
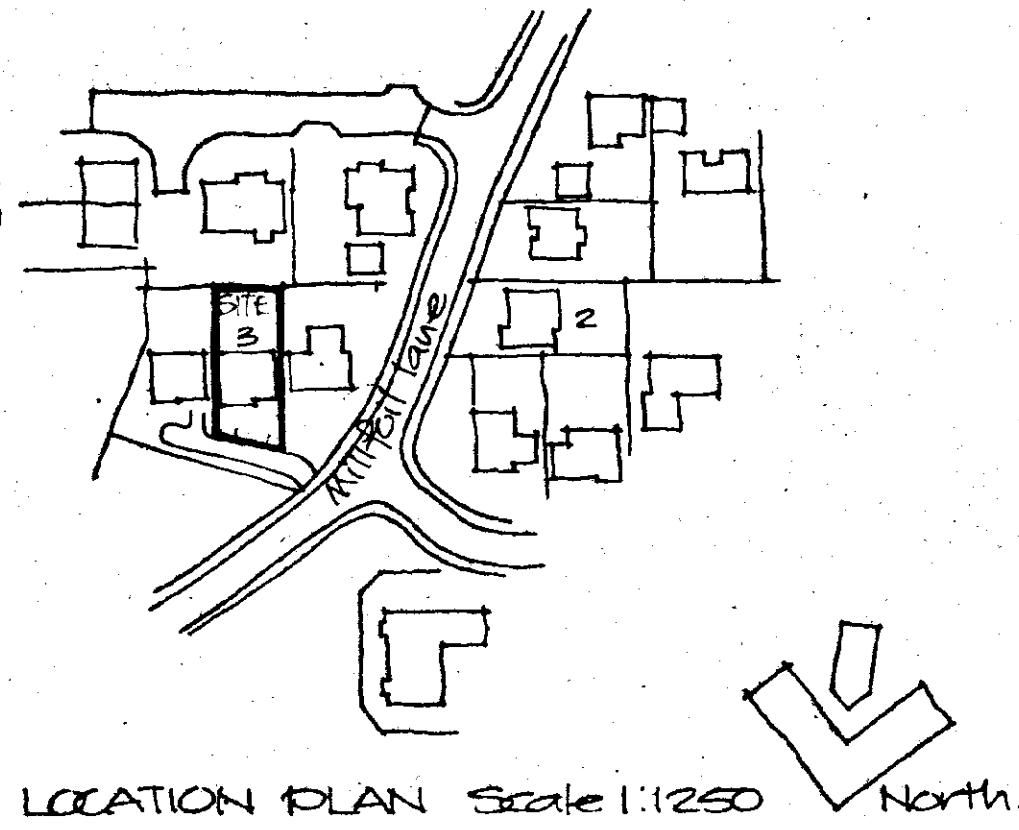
Suspended floor:
 Constructed of 15mm thick T and G flooring grade chipboard on 25x125 joists at 600mm cts. Joists over garage either increased to 200mm depth or be replaced with 200mm deep void for insulation.
 Install solid existing at mid span.
 Install double joists bolted together at 600mm cts below stud partition.

Ceilings:
 Install 12.5mm thick plasterboard ceiling with 'Artex' finish at first floor with all joints and perimeters supported. Install 12.5mm thick Gyproc fireline board ceiling with Artex finish to garage with perimeter supported. This ceiling to extend under new lintel to front wall of extension.

Retain existing ceiling and joists over utility, WC etc with joists supported from new floor joists.

Cavity wall:
 Constructed of 100mm facing bricks, 75mm cavity and 100mm Thermalite standard blocks with internal finish of either 12.5mm plasterboard and chain or d.p.c. or dense plaster.
 Install 15mm thick northern cavity insulation batts installed to manufacturer's recommendations.
 Average U value = 0.55 W/m²K.

Wall ties to be installed at 600mm cts horizontally, 450mm cts vertically and at 22.5mm cts within 22.5mm at reveals.
 New brick bondwork to be fully bonded to existing blockwork bondwork.
 Install cavity tray d.p.c. above ground floor lintels.



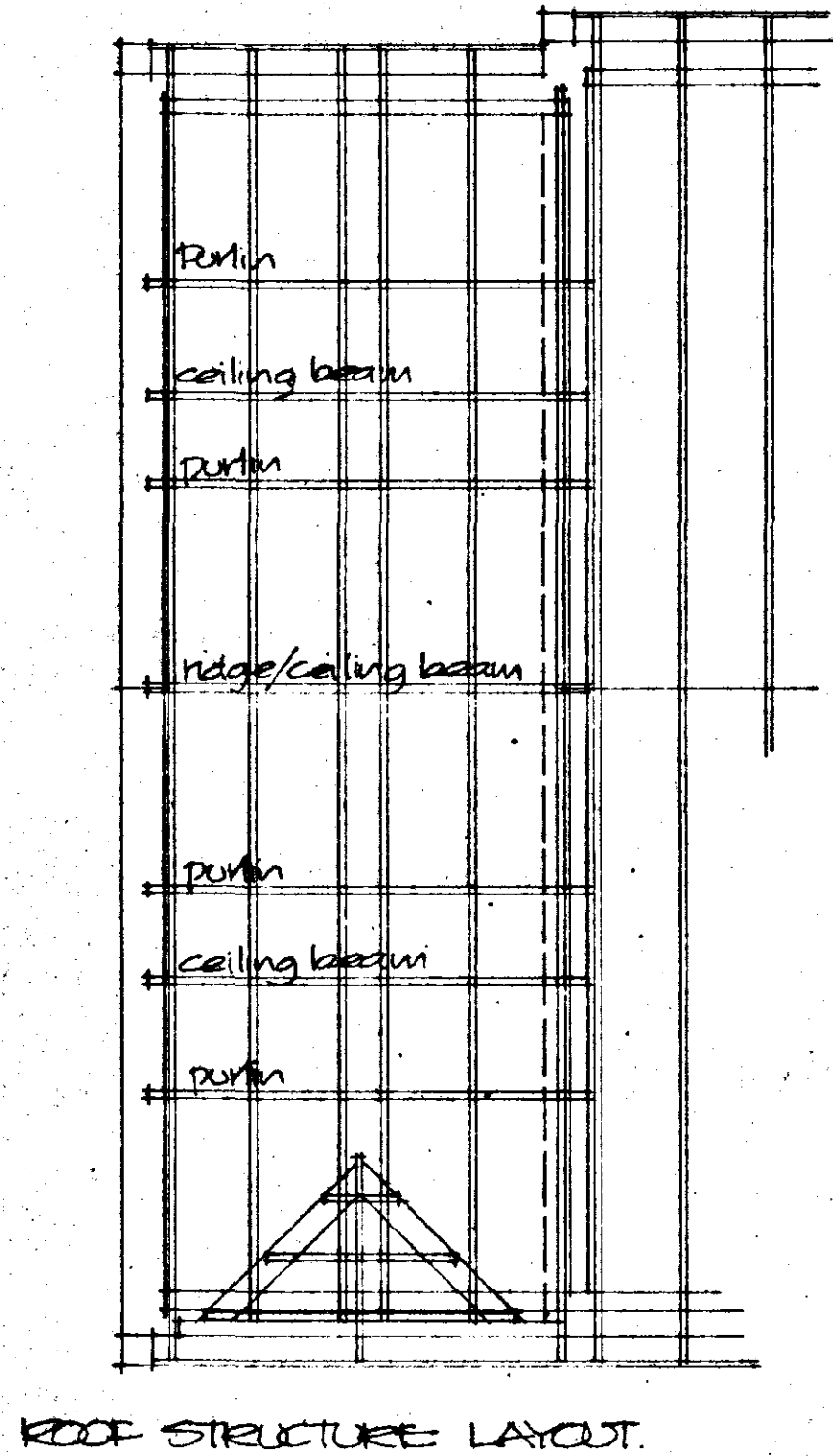
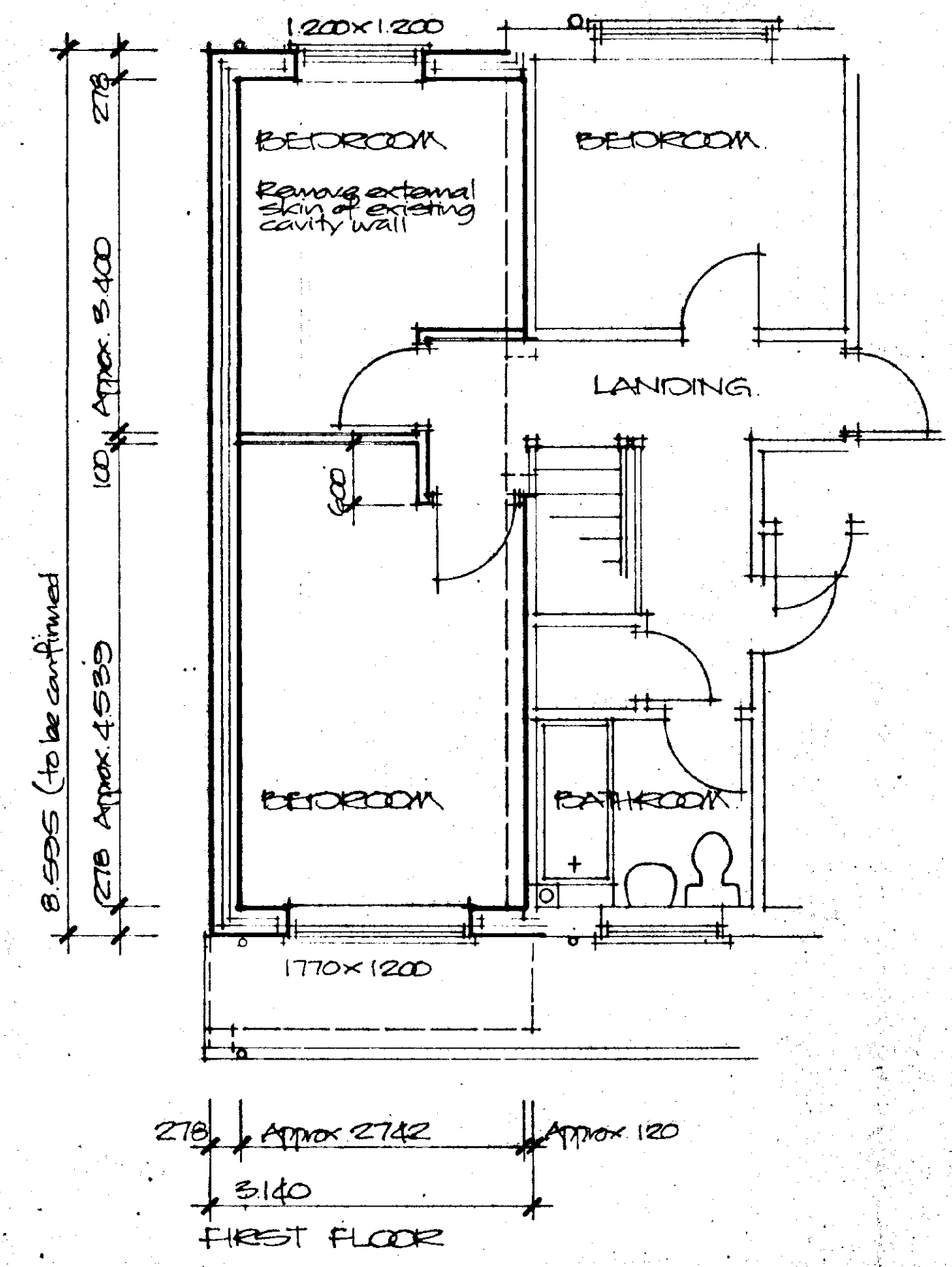
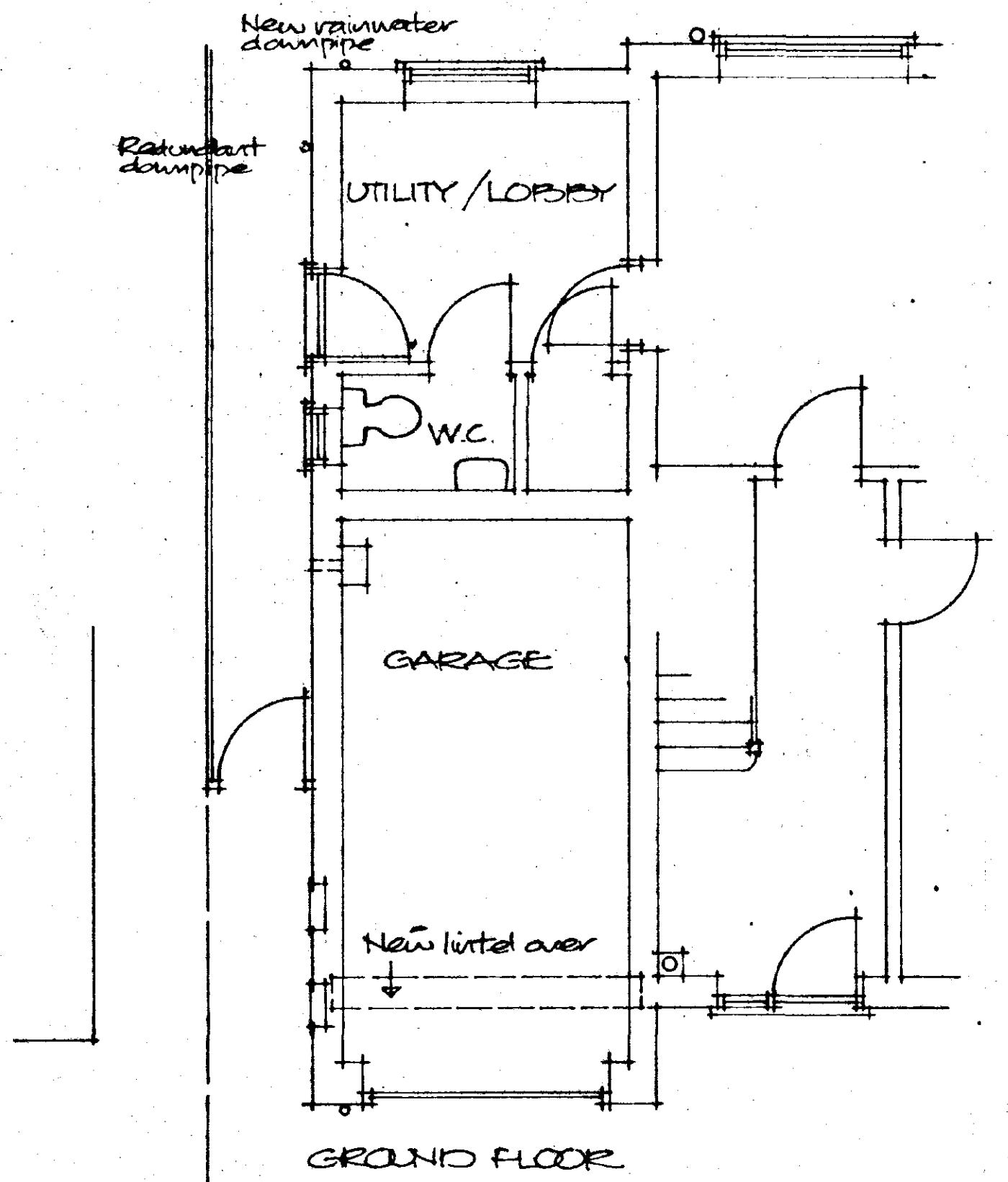
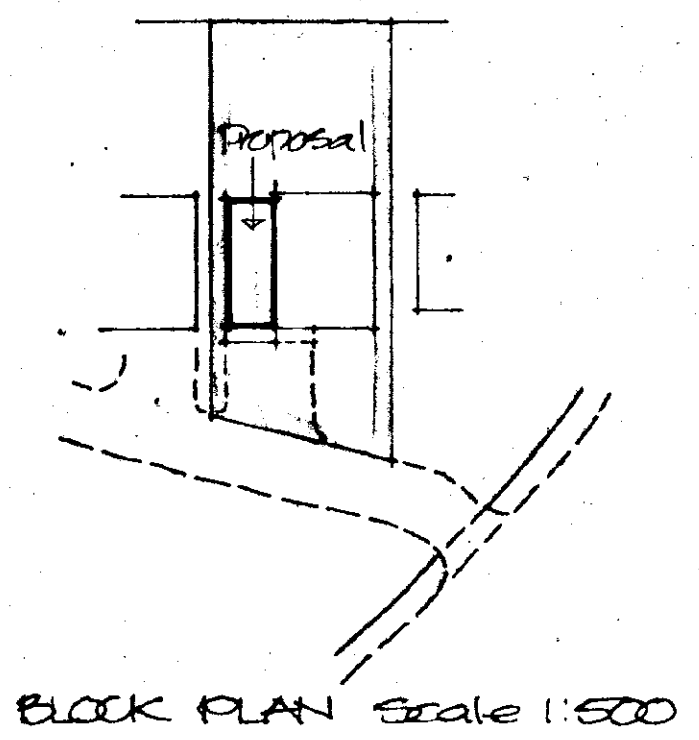
Lintels:
 Install 15 type U/S75 steel lintels to 2nd new window openings and 15 type U/S75 steel lintels to opening through existing 100mm block wall.
 Install 15 type U/S75 over garage.
 Check existing ground floor lintels for suitability.

Windows:
 New UPVC frames as existing to be double glazed with sealed units with 10mm air gap and incorporating Low E glass to give U value 2.0 W/m²K.
 Existing lights to be draught stripped.
 Install trickle vents to provide with 8000mm² background ventilation to each new bedroom.
 Existing lights to provide min. 5% of floor area as main ventilation.
 Bedroom windows to be suitable as fire escapes.

Stud partitions:
 Constructed of 50x75 studs at 600mm cts with 50x75 sole and head plates and noggings at 1200 cts clad both sides with 12.5mm plasterboard and skim.
 Install fibreglass quilt packing between studs.

Heating:
 Extend existing heating system into extension with thermostatic valves fitted to all new radiators. Hot water pipes to be insulated with Armaflex or similar of thickness to match pipe outside diameter.

Gutters and dampers:
 New UPVC gutters and dampers to match existing. New downpipe at rear connected to existing stormwater drain from redundant adjacent dampers.



DETERMINED PLAN

SNDC
 Planning & Development
 17 FEB 2003
 Ref 0168/03

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Project
 PROPOSED EXTENSION
 TO HOUSE
 5 MILLFOL LANE
 CURLEW DRIVE
 COWBIT

Client
 MR & MRS A RUFFY

Scale 1:500/1:100 Date Feb 03