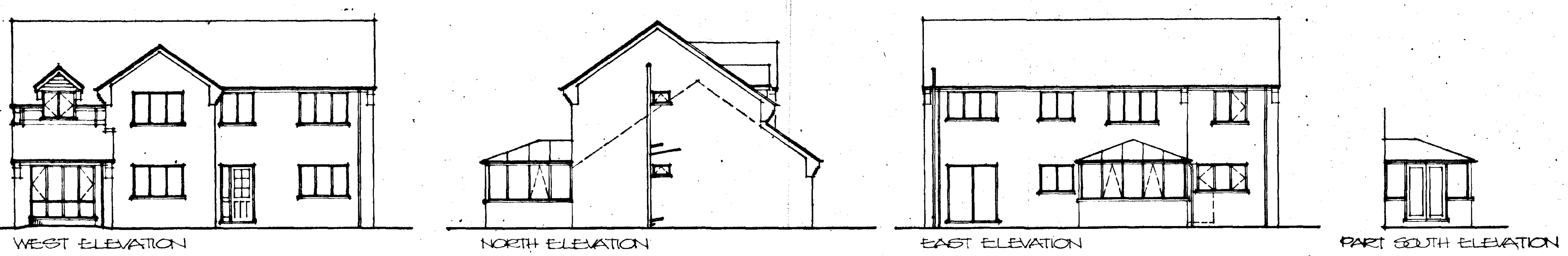
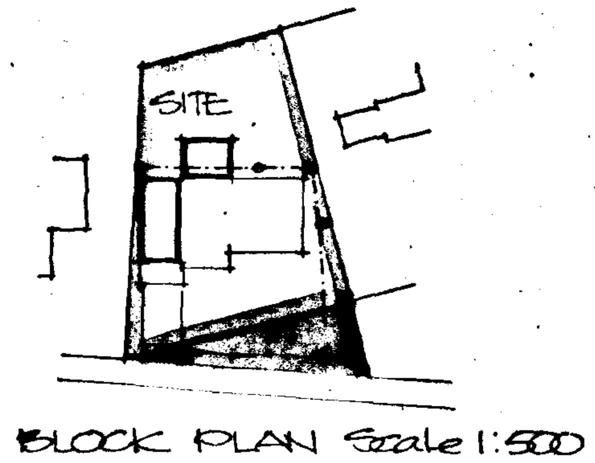
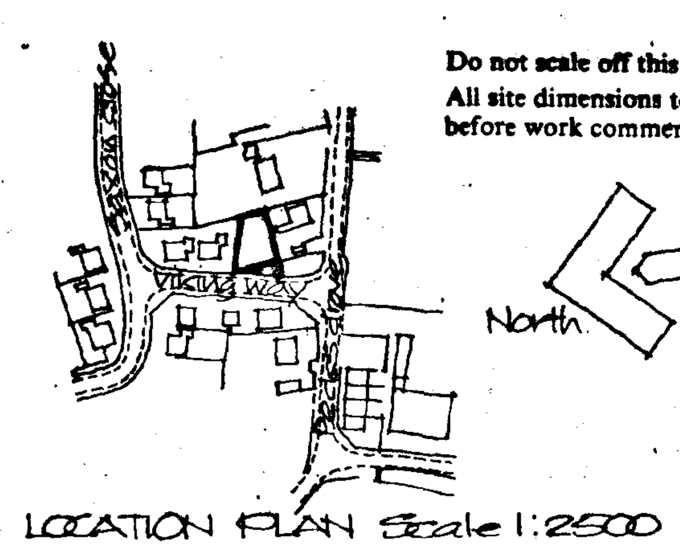
Do not scale off this drawing.
All site dimensions to be checked before work commences.







Roof construction:

New areas of pitched roof constructed of interlocking concrete tiles to match existing and installed to manufacturers recommendations on 25x38 fully treated battens on sarking felt on gangnail roof trusses at max. 600mm cts. to main section of roof.

Roof pitch to match existing (approx. 35°)
Roof trusses to comply with BS 5268 parts 2 and 3.
Roof truss manufacturer to supply design certificate before work starts on roof structure.

Longitudinal 25x100 ties to be installed at ridge and ceiling level.
Install 25x100 diagonal wind braces to gable.

Section of roof at each side of dormer roof formed of tiles, battens and sarking as main roof on 38x150 rafters at 600mm max. cts. supported on wall plates on steel beam and new wall. See section B-B.

Dormer roof formed of tiles, battens and sarking as main roof on 38x100 rafters and ceiling joists at 400mm cts. with 25x150 ridge board and 25x100 collars at ridge.
Dormer sides formed of code 4 lead cladding/flashings on 10mm exterior grade sheathing ply on breather membrane on 38x100 stud framing infilled with fibreglass quilt insulation with internal cladding of 12.5mm plasterboard and skim on vapour barrier.
Dormer sides and roof supported on double rafters spiked together at each side of dormer.

All structural timber to be grade SC3 and marked dry or kiln dry.

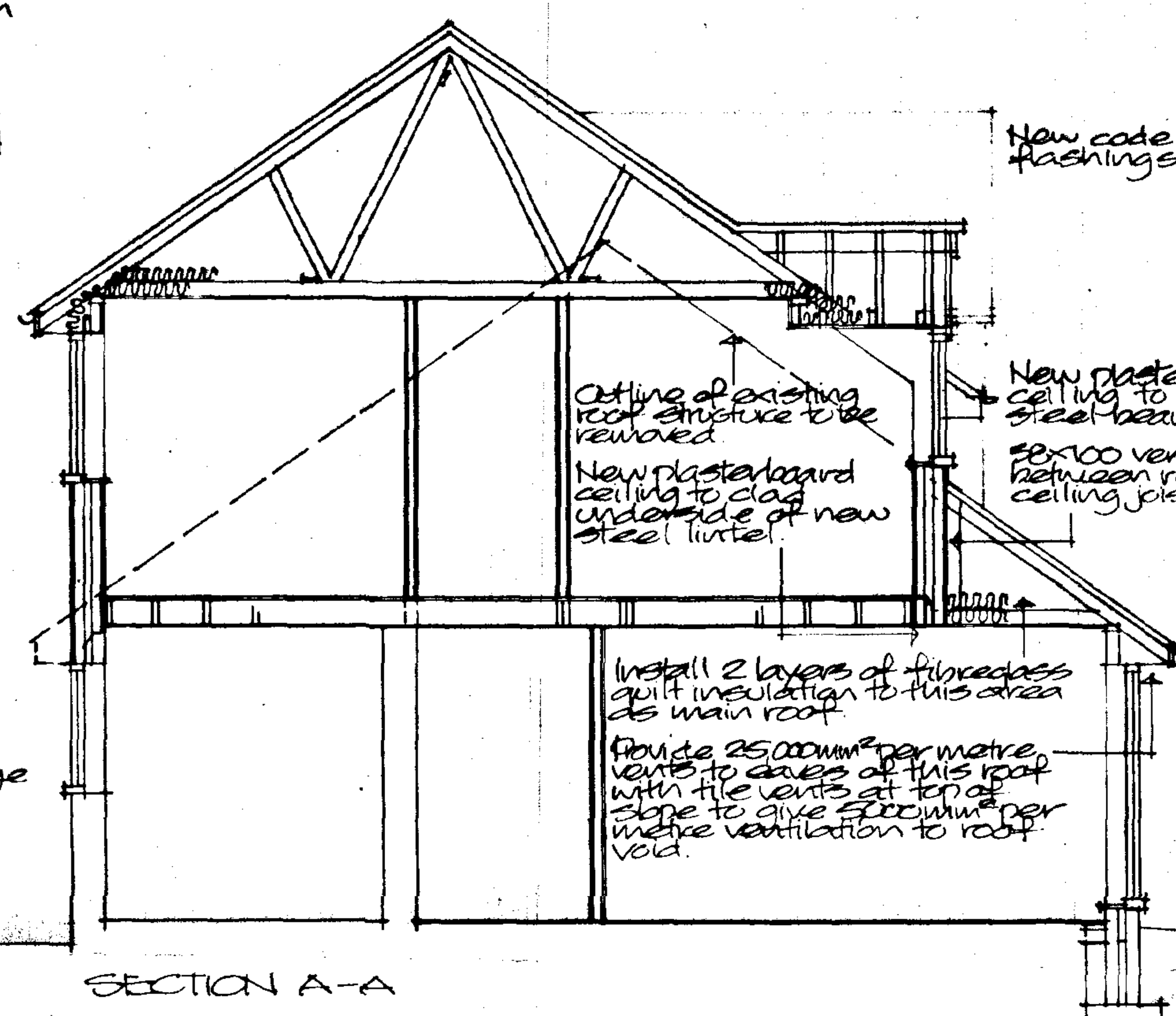
Eaves to be constructed to match existing but to incorporate roof void ventilation strips to provide min. 25,000 mm² vent per metre.
Also provide vents at main ridge level to provide 5,000 mm² vent per metre.
Provide vents to u/s of dormer gable cladding to give 25,000 mm² vent per metre.

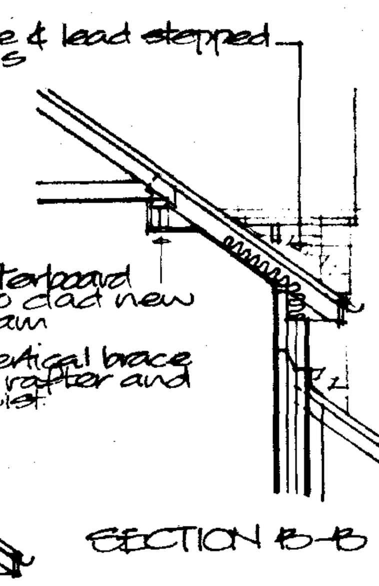
Dormer gable clad with softwood weather boarding on 25x38 fully treated battens on breather membrane on 10mm sheathing ply on 50x75 s.w. framing

Front section of existing garage roof retained and to be supported by new lintel and wall over former garage.

Install code 4 lead flashings around dormer and between roof finish and walls combined with cavity tray d.p.c. to wall each side of dormer.

Install 30x5mm mild steel straps between roof structure and walls at average 1.800 cts. Straps to extend over 3no. timbers where at right angles with solid noggings under.
Straps to be installed at ceiling level and at slope of roof.
Also install 30x5mm straps between new suspended floor structure and walls at 1.800 cts average. Straps to extend over 3no. joists where at right angles with 38x100 noggings under.





Roof insulation:

Install 2 layers of 100mm thick fibreglass quilt to main roof with 1 layer between and 1 layer over ceiling joists. Install similar insulation to dormer roof.
Install 1 layer of 100mm thick semi rigid fibreglass quilt insulation between rafters to roof at each side of dormer window.
Maintain min. 50mm ventilation gap above insulation throughout.

Install preformed fibreglass valley gutters to dormer roof

Roof pitch of dormer increased to 40°.

Ceilings:

All ceilings to be formed of 12.5mm thick plasterboard with 'Artex' finish. Provide support to perimeter of all ceilings and also to all joints where supports at 600mm cts.

Suspended timber floors:

Formed of 18mm thick moisture resistant T and G flooring grade chipboard on 38x170 joists at 400mm cts with double joists below stud partitions.
Install solid strutting at mid span to all joists.

Gutters & downpipes:

Retain/extend existing downpipes and install new upvc gutters to match existing.

Ground floor:

Make good existing former garage floor where new front wall installed incl. d.p.m. Install levelling compound to existing concrete to bring to same level as remaining floors.

Cavity walls:

New cavity walls to be formed of 103mm facing to match existing, 65mm cavity (to be checked) and 100mm concrete blockwork of similar type to existing. Internal finish to be dense plaster.
Cavity insulation to be 65mm thick (to be confirmed) fibreglass batts installed to manufacturers recommendations.
Average 'U' value = 0.42 W/m²K
Damcore insulated d.p.c. to reveals with frames lapping by min. 15mm.
Cavity wall ties to be installed at 900mm cts. horizontally, 450mm cts. vertically and at 225mm cts. within 225mm of reveals.
Concrete blockwork used below d.p.c. level to be class 'A'
Concrete fill to base of cavity to within 225mm of d.p.c. level.
Install Hyload d.p.c to walls min. 150mm above ground level.
Install 6mm Superlux or similar seals to tops of cavity walls

Confirm that existing walls to former garage are insulated.

New walls to be bonded to existing with Furfix wall extension profiles

Lintels:

Install I.G. type L1/S 50 steel lintel to new rear bedroom window and to 2 no. small window openings in gable with cavity tray d.p.c. installed above upper gable window.
Install prestressed concrete slab lintels to new internal openings through block/brick walls.
Confirm that retained lintel to window to new kitchen area is suitable for additional loading. Install cavity tray d.p.c above this lintel.
Install I.G. type L5 steel lintel below wall above former garage.
All lintels to be installed to manufacturers recommendations.

Foundations

Install min. 225x600 grade ST4 concrete strip foundation to new wall below former garage door. Foundation to be min. 750mm deep (1.000 in shrinkable soil)

Heating and hot water:

Extend existing central heating into proposal with thermostatic valves to new radiators. Hot water pipes insulated with Armaflex or similar of thickness to match pipe outside diameter.

Windows/external doors:

New window and external door frames to be upvc double glazed including conservatory.
All glass to doors, attached windows and any glass within 800mm of floor to be safety glass to BS 6206 and marked.
All opening lights and external doors to be draught stripped.
Trickle vents to be installed to provide min. 8000mm² background ventilation to new bedrooms and 4000mm² to new shower rooms/W.C.
2no. small gable windows to be obscure glazed.
Windows to 3no. new bedrooms to provide at least 1/20th room area as ventilation through opening lights.
New window to kitchen to have 4000mm² trickle vent fitted.

New window sizes: (approx.)

New rear bedroom	1.200 x 1.200
New front bedroom (F.F)	1.200 x 1.050 deep.
New ground floor bedroom	To be confirmed
New kitchen window	1.800 x 1.050 deep.
Shower/W.C. windows (2no.)	630 x 450 deep.

Mechanical ventilation:

Install extract fans to both shower rooms to give 15 litres per second extract.

Drains above ground:

To comply with BS. 5572 with 40mm dia polypropylene wastes to showers, kitchen sink and washing machine and 32mm dia. to wash basins.
Combined wastes to be 50mm dia.
All fittings to have 75mm deep seal traps except showers which are to have 50mm deep cleanable traps.
Both shower room fittings are to connect to new 110mm dia. Upvc single stack soil and vent pipe.
Kitchen fittings are to connect to new back inlet gully.
No change to existing bathroom and toilet wastes.

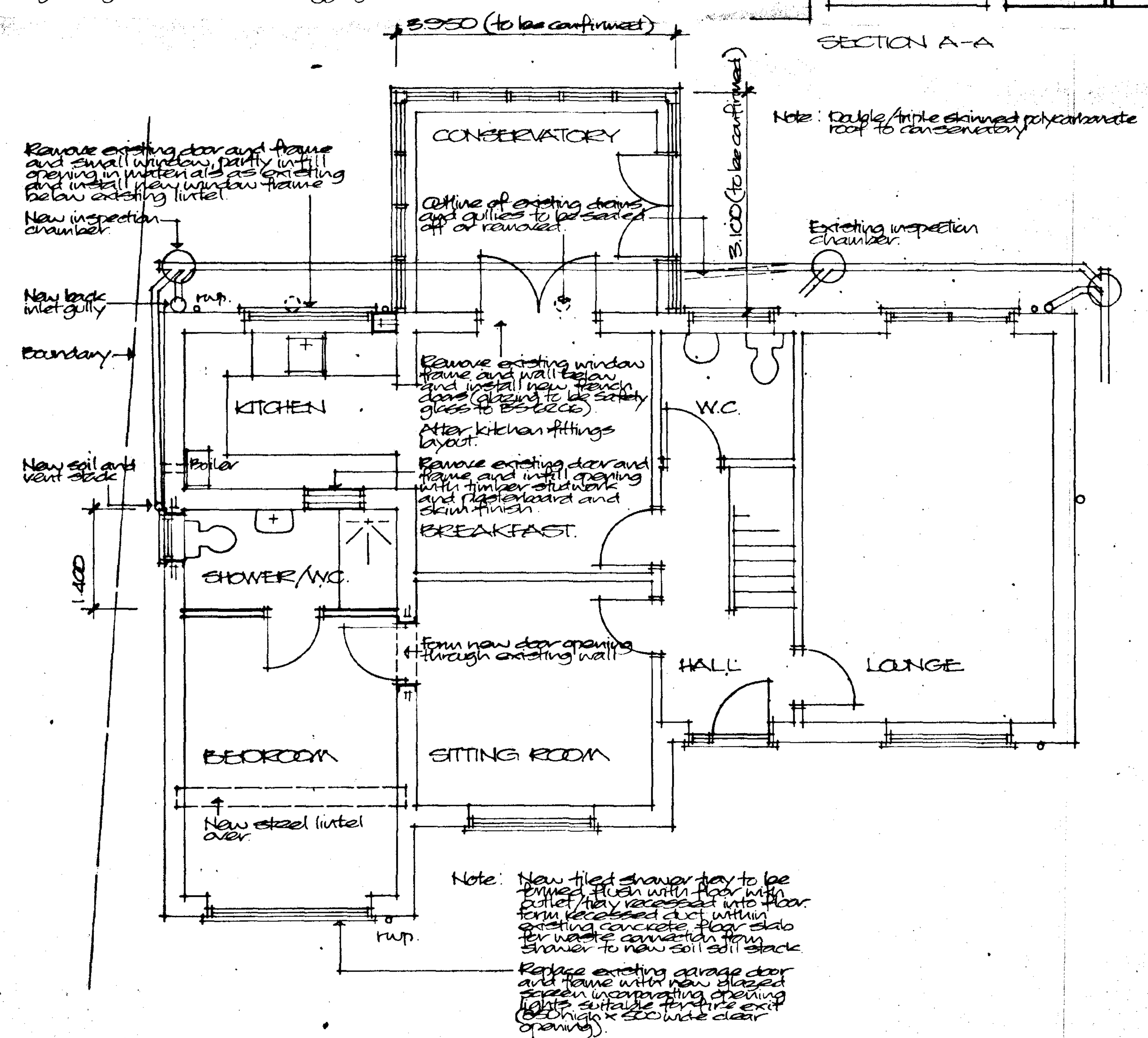
Drains below ground:

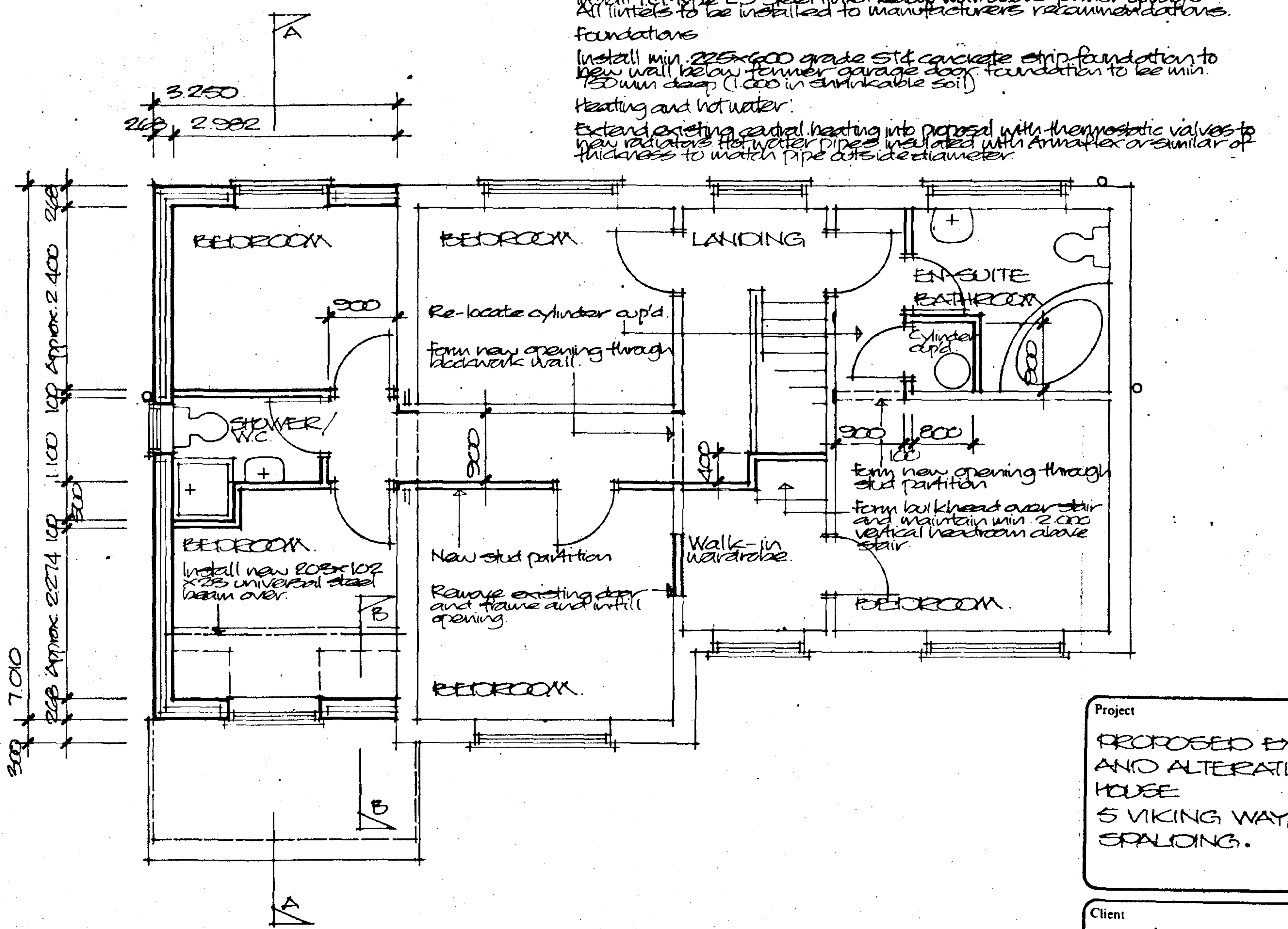
Install new inspection chamber at rear corner of building and connect this chamber to existing inspection chamber.
New drains to be 110mm dia. Upvc bedded and surrounded in 100mm peagravel to fall at 1 in 60
Remove or seal off redundant drains.
Any drains within 600mm of ground level to be protected by concrete paving or paving slabs laid above peagravel surround.
Drains passing through walls to be protected by prestressed concrete slab lintels laid above openings with 50mm clearance around pipes with protection from vermin entry.

New inspection chamber to be approx. 475mm dia. preformed polypropylene type.
Install rodding point at base of new soil stack.

Stud partitions:

New timber stud partitions formed of 50x75 s.w. studs at 400mm cts. with 50x75 sole and head plates and noggings at 1.200 cts.
Cladding to both sides to be 12.5mm plasterboard and skim.
Install fibreglass quilt packing between studs.





SOUTH HOLLAND DC
HOUSING & PLANNING
30 MAY 2000
Ref: 0684/00.

DETERMINED PLAN

Project
PROPOSED EXTENSIONS AND ALTERATIONS TO HOUSE
5 VIKING WAY,
SPALDING.

ALAN HORNSBY
ARCHITECTURAL SERVICES
'Little Acre'
Peak Hill, Cowbit,
Spalding, Lincs. PE12 6AW
Tel. Holbeach (01406) 380591

Client
MR & MRS M. MORLEY

Scale 1:50/1:100
Date May 2000
Drg. no. 00/25/01

AM ADMEL 230