Roof construction:
Plain tiles to match existing installed to manufacturers recommendations on 25x50 tiling battens on sarking felt on gangnail tipped roof trusses at max 600mm cts.
Roof pitch to match existing (min recommended pitch 35°)
Roof trusses to comply with BS 5268 parts 2 and 3 and manufacturer to supply design certificate before installation.
Install over fascia roof void ventilation strip to provide min 10,000mm² ventilation per metre. Maintain ventilation gap above insulation at eaves.
Install 25x100 longitudinal ties at ridge and ceiling level.
Install gangnail reducing trusses together with 25x175 layboards supporting trees ends.
All structural timber to be grade SC3 marked dry or kiln dry.
Eaves constructed to match existing.
Install preformed fibreglass valley gutter to manufacturers instructions.
Install 300x5mm mild steel straps at average 1.800 cts to roof perimeter.

Roof insulation:
Install 1 layer of 100mm thick fibreglass quilt insulation between joists and 1 layer of 150mm thick quilt over joists.

Gutters and downpipes:
112mm dia. h.r. upvc gutters with 68mm dia. downpipes connected to 110mm dia. upvc drains bedded and surrounded in 100mm pea gravel to fall to soakaways min. 1 metre cube at least 5.000 from building.

Ceilings:
Formed of 12.5mm plasterboard with 'Artex' finish and all joints and perimeter supported.

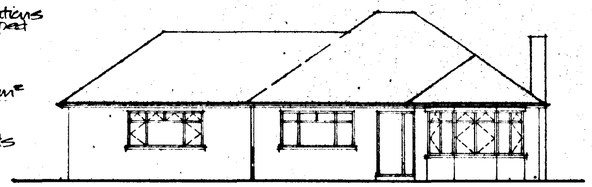
Cavity walls:
Constructed of 102mm facing brick, 75mm cavity and 100mm thick either celcon or thermalite standard blocks with internal finish of dense plaster.
Install Dritherm 75mm thick cavity insulation to manufacturers recommendations.
Average U value = 0.35w/m²K.
Install flaunce insulated dpc to reveals with frames lapping by min 150mm.
Install cavity wall ties at 900mm cts horizontally, 450mm cts vertically and at 225mm cts within 225mm of reveals.
Install Hyload dpc to walls min. 150mm above ground level. Dpm to lap inner skin dpc.
Any blockwork below ground/dpc level to be class A.
New walls bonded to existing with Furfix wall extension profiles.

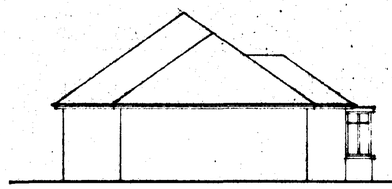
Ground floor:
Constructed of approx. 50mm thick sand/cement screed on 100mm thick grade C15 P concrete slab with 25mm thick expanded polystyrene insulation between slab and external walls.
Concrete slab laid on 500 gauge polythene separating membrane on 100mm thick 20 grade expanded polystyrene insulation on 200mm average gauge hardcore well consolidated and blinded.

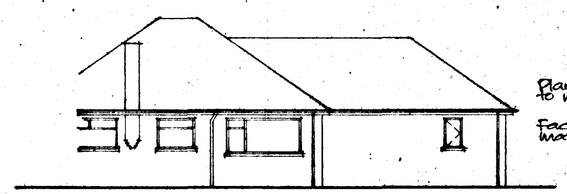
Foundations:
225x600 (225x450 to internal walls) grade C20 P concrete strip foundations min 900mm deep (1000 in shrinkable soil) Depth to be agreed on site with L.A. building inspector.

Lintels:
Install IG type LA/HP75 steel lintel to bedroom window and type LA/75 steel lintel to en-suite window.
Install pre-stressed concrete slab lintels to new floor opening in existing cavity wall. Install 1G internal 100 steel lintel to door opening to en-suite.

Stud partition:
Formed of 50x75 studs at 400mm cts with 50x75 sole and head plates and noggings at 1.200 cts. clad both sides with 12.5mm plasterboard and skim with fibreglass quilt packing between studs.


FRONT ELEVATION


SIDE ELEVATION


REAR ELEVATION

Plain tile roof finish to match existing.

Facing bricks to match existing.

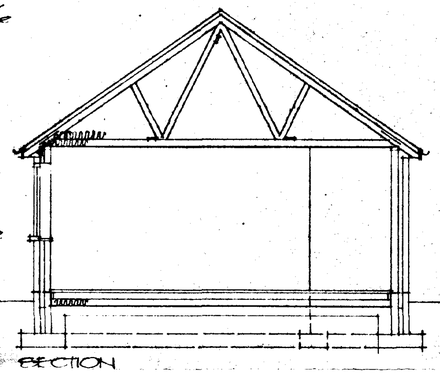
Windows:
Upvc window frames with sealed double glazed units with 16mm gaps and incorporating Low E glass to provide min. U value of 2.8w/m²K.
All openings to be draught sealed.
Any glasses within 800mm of floor level to be safety glass to BS 6206.
Install trickle vents to provide min. 8000mm² background ventilation to bedroom and double to en-suite.
Bedroom window to have opening lights to give min. 5% opening for ventilation related to floor area.
New bay window to lounge to comply with above incl. 5% vent openings and 8000mm² trickle vents.

Drains above ground:
40mm dia. polypropylene waste from shower and 32mm dia. from wash basin. Wash basin to have 75mm deep seal trap and sink to have 50mm deep cleanable trap.
All fittings connected 110mm dia. upvc stub stack fitted with air admittance valve above flood level and rodding point at base. Stub stack installed within vented duct.

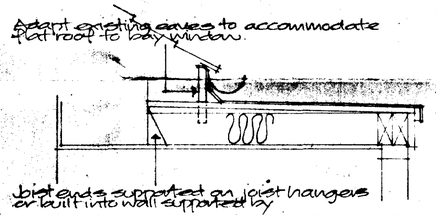
Drains below ground:
New drains to be 110mm dia. upvc bedded and surrounded in 100mm pea gravel. To fall at 1in 40 to connect to existing inspection chamber. Drain run to incorporate a slow curve.
Drain run to be protected by reinforced concrete slab laid above compressible layer over pea gravel surround.
Drain passing through wall to be protected by prestressed concrete slab lintel with min. 50mm clearance around pipe, protection from vermin entry and gas sealed.

Heating/hot water:
Extend existing central heating and water services into proposal with thermostatic valves fitted to new radiator.
All hot water and unprotected cold water pipes to be insulated with Armaflex or similar of thickness to match pipe outside diameter.

Mechanical vent:
Install extract fan to en-suite to extract at a rate of 15 litres per second.

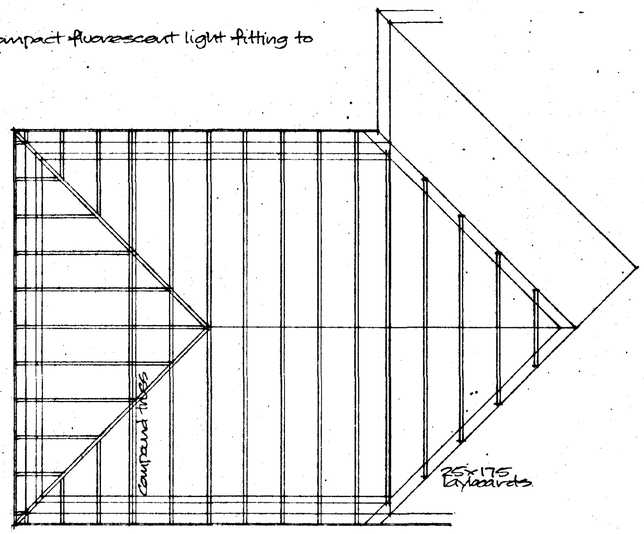

SECTION

Adapt existing eaves to accommodate flat roof to bay window.

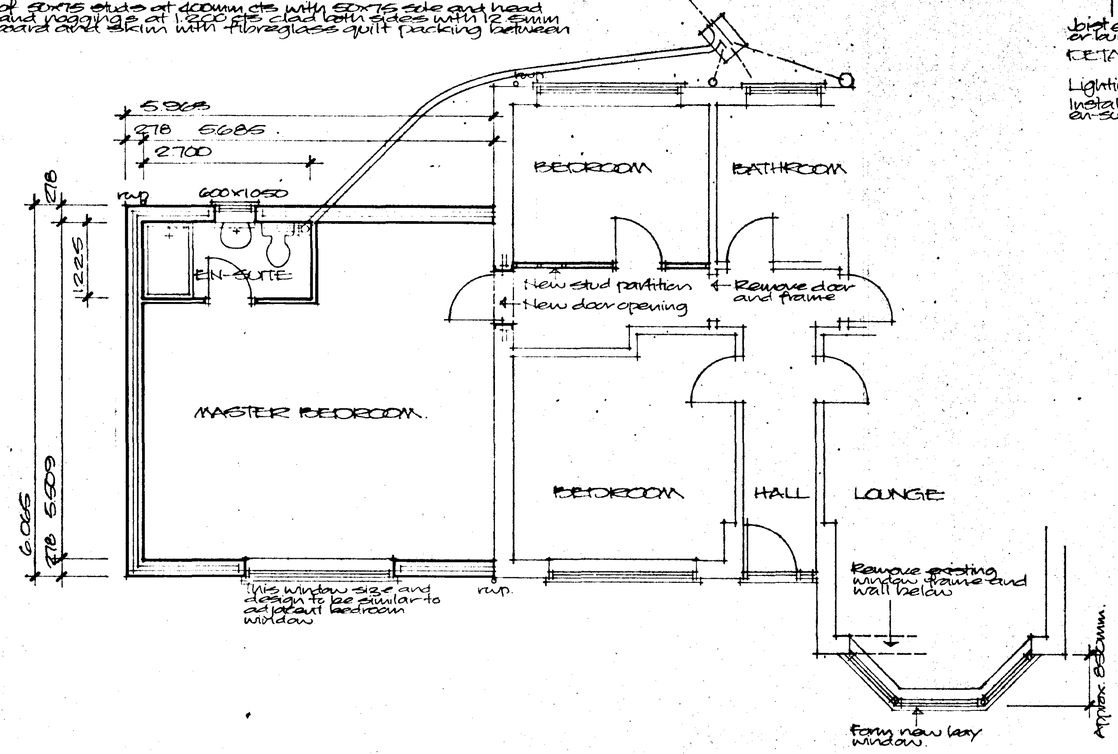

Joist ends supported on joist hangers or built into wall supported by

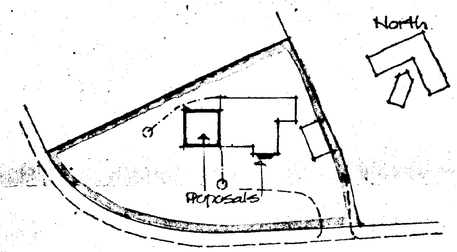
DETAIL THROUGH BAY WINDOW ROOF

Bay window:
Floor walls and foundations to be constructed as main extension.
Roof constructed of high performance PVC single layer roofing system (type to be confirmed) on 9mm 18mm thick external grade plywood decking on timbers to fall. Upper 50mm on bedroom wall and 25mm on existing wall. Timbers at 400mm cts and supported at outer edge on 200x50 timber plate bolted together at 400mm max cts located above window frames supported on existing wall and an 'L' shaped steel support posts located between window frames.
Ex. 25mm thick fascia board.
Install 100mm thick fibreglass quilt insulation between joists.
12.5mm plasterboard ceiling with 'Artex' finish and perimeter supported.

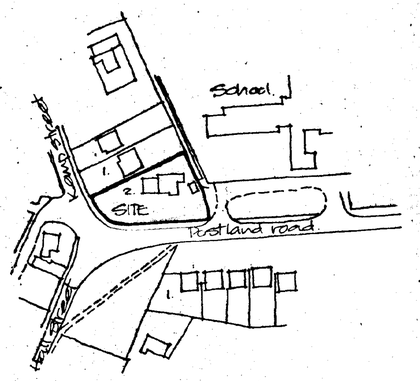


ROOF STRUCTURE LAYOUT





BLOCK PLAN Scale 1:500



SHDC
Planning & Development
23 APR 2003
Ref 0407/03

DETERMINED
PLAN

Project
PROPOSED EXTENSIONS TO BUNGALOW 2 POSTLAND ROAD, CROWLAND.

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

Client
MR. A. HOLLAND

Scale 1:50/1:100
Drg. no. 08/20/01
Date April 03

Summit DS(UK) 0096

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