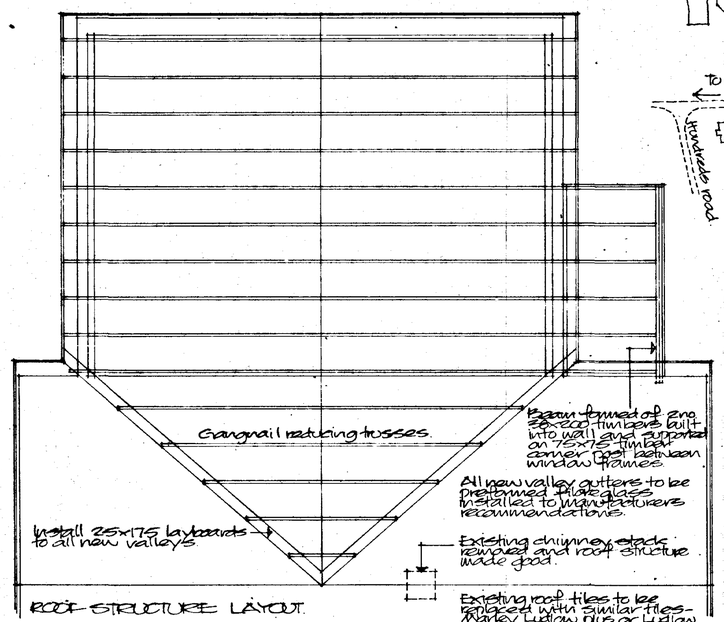
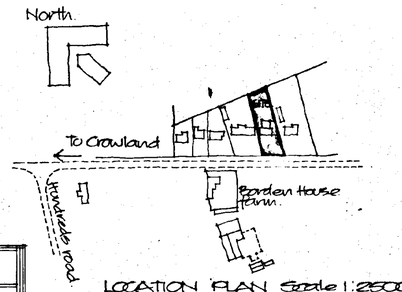
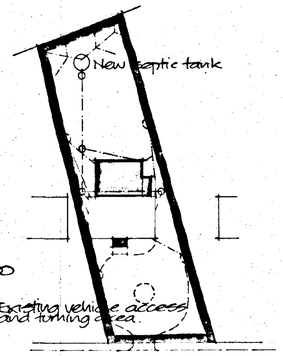


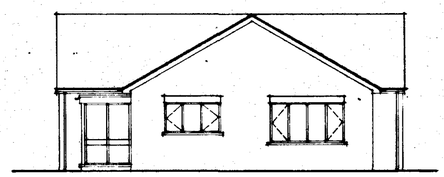

ROOF STRUCTURE LAYOUT.



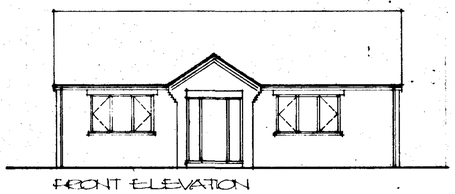

LOCATION PLAN Scale 1:2500




BLOCK PLAN Scale 1:500



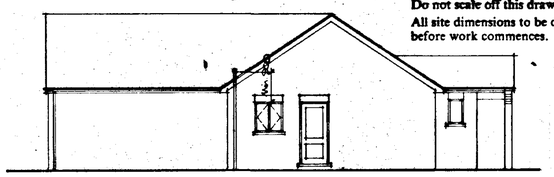
REAR ELEVATION



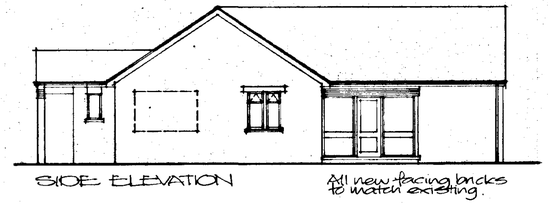
FRONT ELEVATION

All new interlocking concrete tiles to match existing.

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

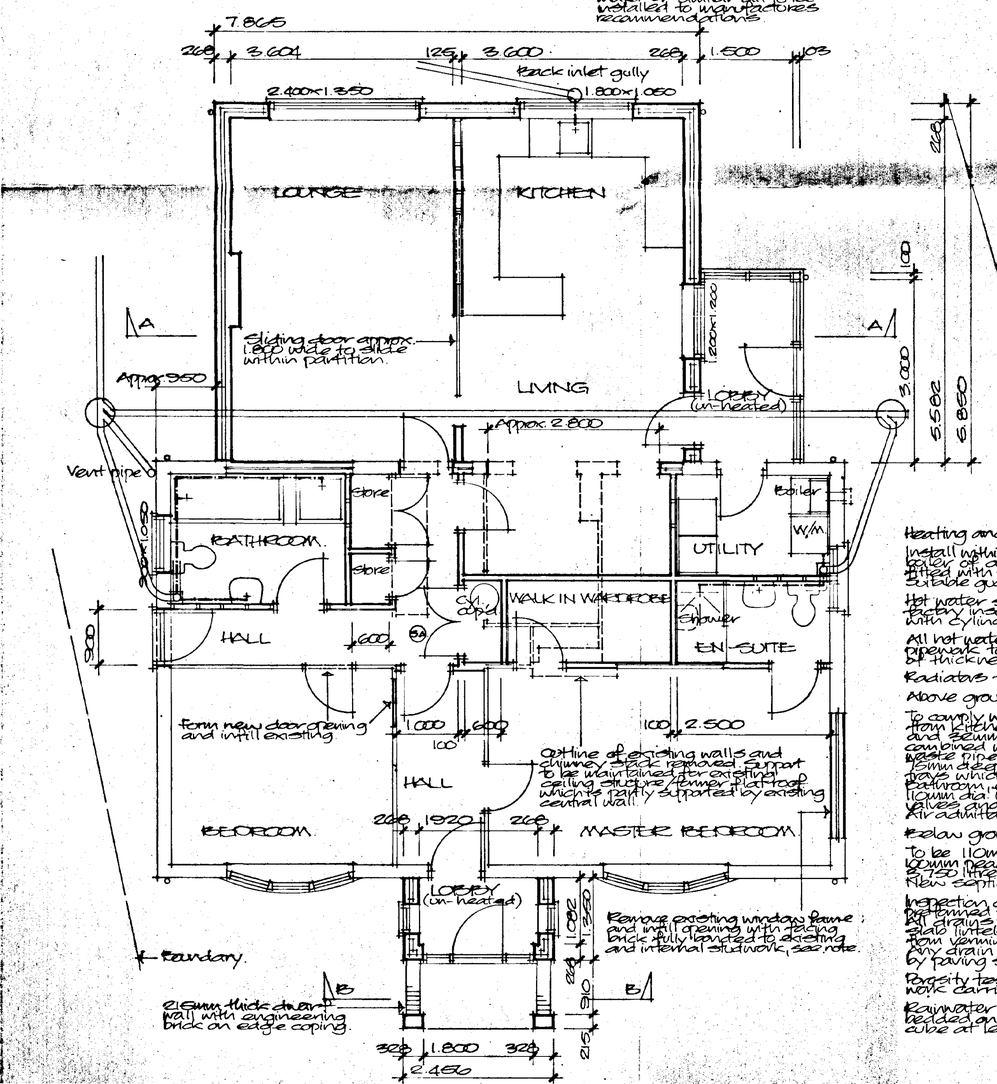


SIDE ELEVATION



SIDE ELEVATION

All new facing bricks to match existing.




Cavity walls:

Constructed of 103mm facing brick, 65mm cavity and 100mm thermalite standard blockwork with internal finish of dense plaster.
Cavity insulation to be 65mm thick fibreglass/mineral wool batts installed to manufacturers instructions.
Average 'U' value = 0.45 W/m²K
Damp course, insulated d.p.c. to be installed at reveals with window and frames lapping by min 12mm.
Cavity wall ties to be installed at 300mm cts. horizontally, 450mm cts. vertically and 225mm cts. within 225mm of reveals.
All concrete blockwork below d.p.c. level to be class 'A'.
Lean mix concrete fill to cavities to within 225mm of lowest d.p.c. level.
Install flyleaf d.p.c. to walls min. 150mm above ground level (external side) and to all skirtings.
Fit splayboard or similar seals to tops of cavity walls.
New walls to be bonded to existing with Furfix wall extension profiles.

Lintels:

Install I.G. type L1/S steel lintels to kitchen window and door openings and windows/door to front lobby. All lintels to have cavity tray d.p.c.'s.
Install I.G. type L1/I steel lintels to bathroom window and adjacent door opening to support existing external brick skin and timber lintel to internal skin wall, to be decided on site.
Install 2no. I.G. box lintel 100 steel lintels to opening in existing wall between living room and adjacent door opening to lounge. Install exposed metal plaster arch below large new opening over living room.

Foundations:

Foundations to new cavity walls to be 225x700, to 103mm single skin walls to be 225x450 and 225x600 to 215mm walls.
Concrete to be grade ST4.
Depth of foundations to be min. 750mm (1.000 in shrinkable soil) depth of all foundations to be agreed on site with L.A. inspector.

Floors:

New floors to extensions to be formed of 65mm thick lightly reinforced sand cement screed on 300 gauge polythene sheeting laid on 50mm thick S.D. grade expanded polystyrene insulation on 100mm thick grade ST4 concrete slab on 1200 gauge visqueen grip dpm min. 150mm thick hardcore filling.
Existing timber floors to be replaced in existing bungalow with 22mm thick S.D. grade expanded polystyrene laid on existing concrete slab with thicken edge 150mm thick and in flooring grade chipboard on 300 gauge sarking membrane.

Stud partitions:

Formed of 50x75* studs at 400mm cts. with cladding to both sides of 12.5mm plasterboard and skim finish.
Noggins to be installed at 1.200 cts.
Install mineral wool packing between studs.
* Partitions between lounge and sunroom to have approx. 50x100 studs at 400mm cts.

Wall plate level in main extension and front lobby to be determined by existing eaves level. Existing bungalow wall plate is scarfed above external skin of wall... at lower level than new wall plate.

Heating and hot water:

Install within utility & wall mounted balanced flue oil fired boiler of approx. 15.5kW/60.000 Btu/h output. Boiler to be fitted with timing, programmer and boiler/room interlock. Suitable guard to be fitted to boiler flue outlet.

Hot water storage cylinder to be min. 120 litre capacity, factory insulated to 35mm thick and to be fitted with 2/cylinder stat to control water temperature.

All hot water, heating and unprotected cold water pipework to be insulated with Armaflex or similar of thickness to match pipe outside diameter.

Radiators to be fitted with thermostatic valves.

Above ground drainage:

To comply with BS 5572 with 40mm polypropylene wastes from kitchen sink, washing machine, dishwasher and basins and 32mm wastes from basins with 50mm dia. combined wastes. Air admittance valve to be installed to waste pipe adjacent to bathroom shower outlet.
75mm dia. soil pipework except shower drive which are 50mm seal traps with cleaning access.
Bathroom, en-suite and utility wastes to connect to 100mm dia. UPVC soil pipe fitted with air admittance valves and trapping points all within ventilated shafts.
Air admittance valves to be installed above flood levels.

Below ground drainage:

To be 110mm dia. UPVC bedded and surrounded in 100mm pea gravel to soil approx. 1m to 150 to minimum capacity 3.750 litre Klargester or similar bottle type septic tank.
New septic tank to replace existing.

Inspection chambers to be approx. 450mm dia. polypropylene for terminal ends installed to manufacturers instructions and trapping fittings to be bedded in B.C. slab lintels with min. 50mm clearance and protection from vermin entry.
Any drain within 600mm of ground level to be protected by paving slabs laid above pea gravel surround.

Porosity test to be carried out and agreed before drainage work carried out to confirm length of land drains.

Rainwater downpipes connected to 110mm dia. UPVC drains bedded on 100mm pea gravel to rest to soakpits min. 1m³ size at least 5.000 from building.

Roof construction:

Main extension roof constructed of Marley Ludlow plus or Ludlow Major or similar interlocking tiles (similar to existing) installed to manufacturers recommendations on 25x50 fully treated battens on sarking felt on gangnail roof trusses at max. 600mm cts.
Roof trusses to comply with BS 5268 parts 2 and 3.
Roof truss manufacturer to supply design certificate before work starts on roof structure.
Roof pitch approx. 30° with ridge at same level as existing.

Longitudinal 25x100 ties to be installed where indicated.
25x100 diagonal wind braces to be installed at gable.
50x100 wall plates.
Approx. 225x150 rafter feet fascia board.
Ex. 225x175 barge boards.
12mm Masterboard soffit.
Eaves to be similar to existing and at same level as existing with a projection of approx 250mm.

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

30x5mm mild steel straps to be installed at average 1.800 cts. to all roof perimeters. Straps to be installed at ceiling level and at slope of roof. Straps to extend over 3no. timbers where installed at right angles with noggings under.

Rear porch flat roof constructed of:

Mineral chippings min. 12mm thick bedded in bitumen to built up flat roofing finish to min. BS 747 standard preferably high performance on 18mm thick external grade plywood decking with all joints supported on noggings on 150x50 joists at 400mm max. cts. supported on 50x100 timber bolted to wall at 600mm cts. and 2no 38x200 timbers bolted together to form beam. See roof structure layout.
Flat roof finish to be taken up face of main roof fascia boards to terminate below roof tiles/sarking felt.
Ex. 225x175 fascia boards.

Front porch roof construction:

Tiles, battens and sarking to be as main extension roof but built up timber roof framed of:
- 38x150 rafters and ceiling joists at 600mm cts.
- 38x150 ridge board
- 50x100 wall plates
- 38x100 purlins at ridge
- 50x100 hangers supporting ceiling joists.

Eaves to be constructed as main extension.
Install I.G. box lintel 100 steel box beams below wall plates spanning from cavity wall to piers.
Install type L1/I steel lintels supporting soldier brick arches to front and sides of open porch area.

Form reducing trusses of 38x100 rafters and ties with 25x175 layboards above existing roof structure.

Ceiling to open porch area to be formed of T & G V jointed boarding with stain/preservative finish.

Roof void ventilation:

Install roof void ventilation strips complete with fly screens to eaves of main extension over fascia (TYP.) to provide min. 10.000mm² per metre run. Min. 50mm gap to be maintained above roof insulation for ventilation.

Roof insulation:

Install 2 layers of 100mm thick fibreglass quilt insulation to main extension roof with 1 layer between and 1 layer over ceiling joists.

Ceilings:

All new ceilings to be 12.5mm plasterboard with all edges supported and artex finish.

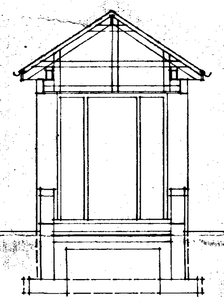
Windows and external doors:

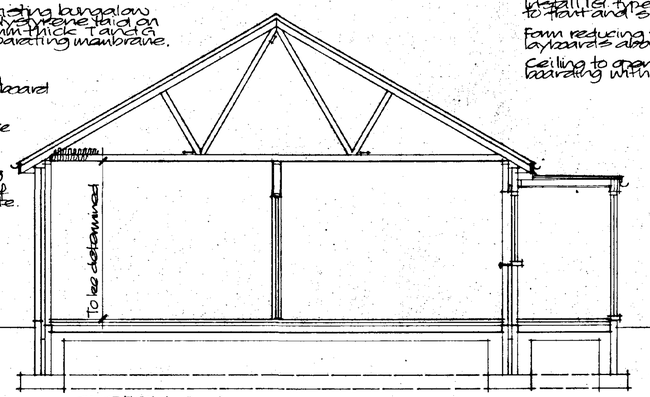
All to be UPVC construction with draught seals to doors and opening lights.
All windows and doors to be double glazed with sealed units with safety glass to doors/sidelights and any glass within 800mm of floor level.
Safety glass to be to BS 6206 standard and mark.

Trickle vents to be installed to provide min. 8000mm² vent to lounge, kitchen/living room and bedrooms and min. 4000mm² to bathroom, en-suite and utility.

Mechanical ventilation:

Install extract fan to kitchen mounted in cooker hood canable of extracting at a rate of not less than 30 litres per second extract fan to utility room.
Install 15 litres per second extract fan to en-suite and bathroom.






SECTION A-A

Gutters and downpipes:

To be 112mm dia. UPVC h.r. with 68mm dia. downpipes colour to be decided.

Smoke alarms: (SA)

Install mains operated battery back up self contained smoke alarm where indicated.
Alarm to be installed at least 300mm from any wall or light fitting and not more than 3.000 from any kitchen or bedroom door.

Where openings infilled in existing external walls the internal skin to be constructed of approx 50x150 s.w. studs (to be determined by above) available with backing on brick side of cavity, breather membrane on outside sheathing ply and internal facing of 12.5mm plasterboard and skim on vapour barrier. Void between studs to be packed with fibreglass quilt insulation.

SOUTH HOLLAND DC
HOUSING & PLANNING
17 AUG 1998
Ref: 0826/98

DETERMINED PLAN

Project
PROPOSED EXTENSIONS TO BUNGALOW 'NENEDALE' NENE TERRACE, THURNEY ROAD, CROWLAND.

ALAN HORNSBY
ARCHITECTURAL SERVICES
'Little Acre'
Peak Hill, Cowbit,
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Client
MR. M. DANIER.

Scale 1:50/1:100
Date Aug. 98

Drg. no.
98/50/02

AM ADM