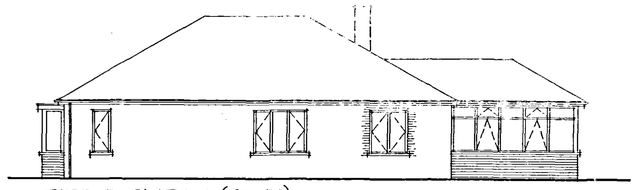
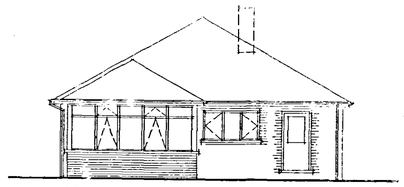


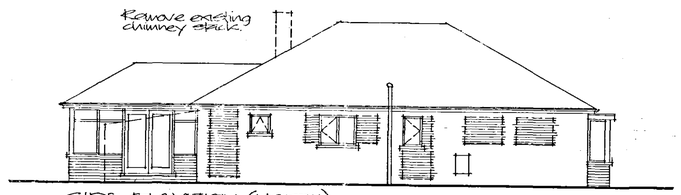
FRONT ELEVATION



SIDE ELEVATION (SOUTH)



REAR ELEVATION



SIDE ELEVATION (NORTH)

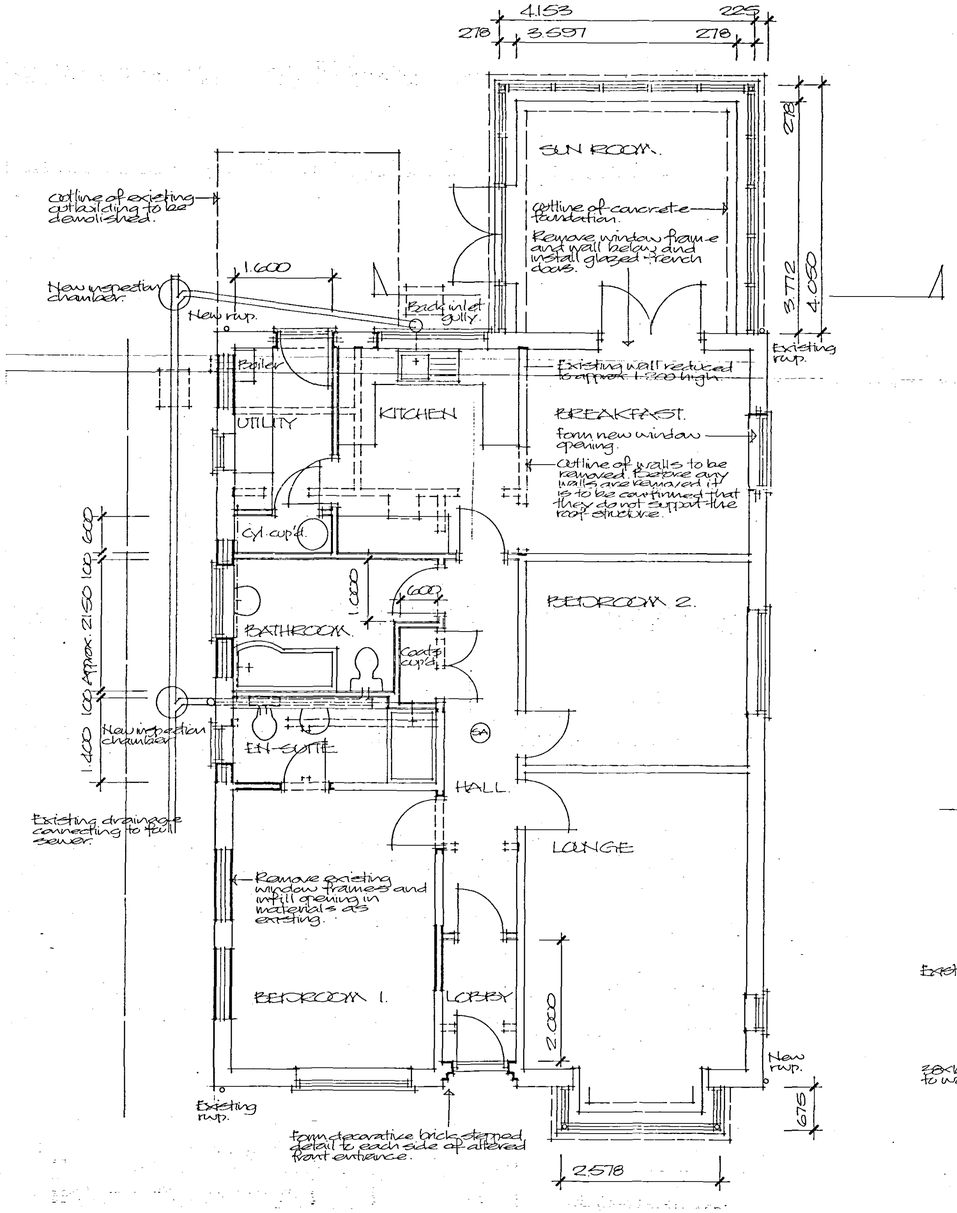


Finishes:

Roof:
Interlocking concrete tiles similar to existing.

Walls:
Facing brickwork to match existing. Where possible Existing bricks from any demolition work are to be Salvaged for re-use.

Windows and external doors/frames:
To be UPVC, colour to be determined.

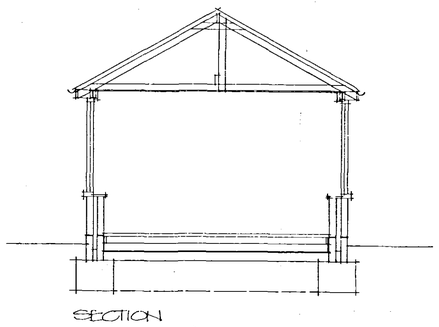


Roof construction:
The existing hipped roof to the bungalow is to be re-tiled in a similar interlocking concrete tile to existing. The same type of tiles are to be installed to the new sun room roof installed at same pitch as existing. (approx. 30 degree pitch, to be confirmed on site). Tiles are to be installed to manufacturers recommendations.
Tiles to sun room roof are to be installed on 25x50 fully treated battens on Proctor Roofshield or similar breathable sarking with eaves carrier on built up timber hipped roof structure formed of:
50x100 rafters at 400mm cts.
47x122 ceiling joists at 400mm cts.
50x175 ceiling beam to span max. of 2.200.
38x100 hangers at 1.200 cts. supporting ceiling beam from ridge.
50x175 hip rafters.
32x150 ridge beam.
25x100 collars at ridge.
Install reducing trusses/infill roof structure formed of 50x100 rafters and bottom ties at max. 400mm cts. with new roof ridge beam taken through to junction with existing roof structure at top of valley gutters.
Install 25x175 layboards below ends of reducing trusses.
Install preformed fibreglass valley gutters.
Eaves construction to be formed to match existing and at same level as existing.
No roof void vents are required to sun room eaves as breathable sarking to be used.
All structural timber to be grade SC3/C16 marked dry or kiln dry.
Refer to structural engineers calculations and drawings for details of steel support structure for roof including method of fixing timber roof structure to the steel support structure..

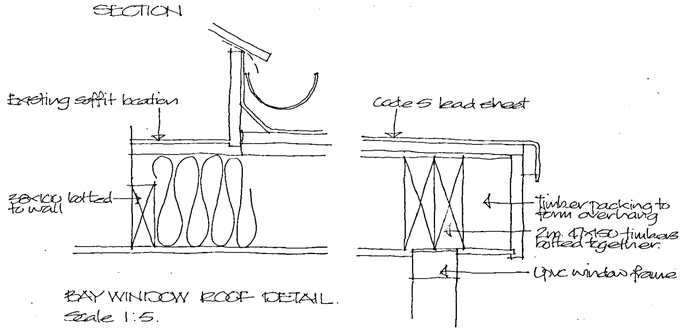
Bay window roof construction:
Formed of code 5 lead sheet finish on 18mm exterior grade plywood decking on firings to fall 1in60 on 47x150 joists at 400mm cts. supported on 38x100 timber bolted to wall at max. 600mm cts and on 2no. 47x150 timbers bolted together at max. 600mm cts supported on steel support posts between window frames at corners of bay window supported on wall below window cill level. Support posts to have fixing plates at top and bottom. Install 150mm thick fibreglass quilt roof insulation between flat roof joists. Refer to detail.

Gutters, rainwater downpipes and stormwater drains:
Install approx. 112mm dia. half round UPVC gutters with approx. 68mm dia. downpipes all to replace all existing and to be installed on sun room extension. Downpipes to be connected to existing RWP/drainage points and new soakpits with 110mm dia. UPVC drains bedded on 100mm peagravel to fall to soakpits min. 1 metre cube at least 5 metres from building. Location of soakpits will be confirmed on site with LA building inspector.

Ceilings:
New ceilings to be formed of 12.5mm thick Gyproc WallboardTen with skim or Artex finish. Perimeter of all new ceilings to be supported. Make good existing ceilings.



SECTION



BAY WINDOW ROOF DETAIL.
Scale 1:5.

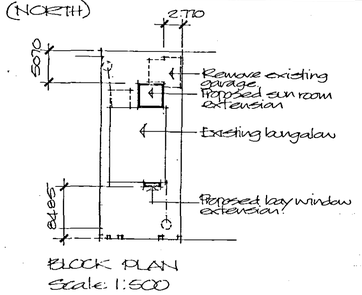
Roof insulation:
Install 100mm thick fibreglass quilt insulation between ceiling ties and 200mm thick quilt over ties to new sun room ceiling. Insulation to existing bungalow to be brought up to similar standard as new sun room.

Floor:
Floor to sun room and bay window constructed of approx. 40mm thick sand/cement screed on 100mm thick grade Gen3 concrete slab with 25mm thick expanded polystyrene insulation to external perimeter on 125mm thick SD grade expanded polystyrene insulation on 1200 guage polythene DPM lapped over wall DPC on min. 150mm thick hardcore well consolidated and blinded.

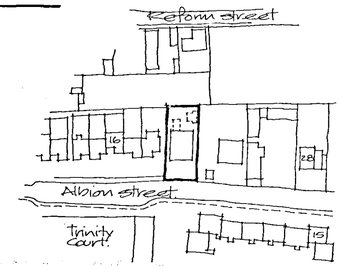
Cavity walls to sun room and bay window:
Constructed of 103mm thick facing brickwork, 75mm thick insulated cavity and 100mm thick insulating concrete block (630 kg/m3-Tarmac Toplite standard or similar block with equal insulation qualities) with internal finish of 12.5mm plasterboard and skim finish on dabs. Cavity insulation to be 75mm thick Dritherm 32 cavity insulation batts (k=0.032 m2K/W) installed to manufacturers recommendations.
Average "U" value = 0.30W/m2K.
Alternative wall construction is facing brick as above, 75mm thick insulated cavity and 100mm thick insulating concrete block (480 kg/m3-Tarmac Toplite GTI or similar block with equal insulation qualities) with internal finish of dense plaster.
Average "U" value = 0.30W/m2K .
Install TDI(UK)Ltd Weathercor or similar insulated cavity closer with frames lapping by min. 30mm. where new window openings formed in existing walls.
Install stainless steel wall ties at 900mm cts. horizontally, 450mm cts. vertically and at 225mm cts. within 225mm of reveals.
Install Hyload DPC min. 150mm above ground level with DPM lapping inner wall DPC.
Install Expanet movement beads in internal plaster at junction between new and existing walls.
Any concrete blockwork below DPC level to be class A.
New walls bonded to existing with Furfix Ceejay construction joint formers to allow for differential movement between existing and new structure.

Foundations:
Install 600mm wide trenchfill grade Gen3 concrete foundations min. 750mm deep (1.000 in shrinkable soil). Depth of foundations to be agreed on site with LA building inspector.

Lintels:
Install IG type L1/S50 steel lintels to new openings in existing external walls up to a clear span of 1200 and type L1/HD50 to larger spans. Openings include two new window openings to kitchen/breakfast and new external door opening to utility. Lintel types to be confirmed on site where openings formed in existing walls where cavity size may require a different lintel type. Install IG internal 100 steel lintel to door opening to bedroom 1 and en-suite.



BLOCK PLAN
Scale: 1:500



LOCATION PLAN Scale 1:1250

Windows:
All new windows and external doors/door frames to be UPVC framed and to be glazed with sealed units with minimum 16mm Argon filled gaps between glass and to incorporate Low E coating to provide "U" value of 1.8 W/m2K. All glass to doors and any glass within 800mm of floor level to be safety glass to BS 6206. All opening lights to be draught sealed. Install trickle vents to all rooms to provide min. 8000mm2 background ventilation (64,000mm2 total). At least 5% floor area ventilation to be provided to habitable rooms with windows opening at least 30 degrees.
Window sizes: (approx. sizes)
Kitchen/breakfast - 1800x1050, 1200x1490 and 1720x2100 (French doors)
Bedroom 1 –as existing
En-suite – 600x1050
Bathroom – 1200x1050
Bedroom 2 – as existing
Lounge – Bay window 1490 x 1050 and as existing.
Utility 900x2100 door and as existing.
All window and door types and sizes shown are to be confirmed.
The French doors between the kitchen/breakfast and the sun room are to be fully double glazed and draught sealed as if external doors.

Floor area to openings ratio:
Total floor area = 101.11m2 (excluding sun room).
25% = 25.277m2
Total openings area when complete (excluding sun room). = 24.866m2

Heating and hot water:
Install gas fired wall mounted condensing type balanced flue boiler within utility with min efficiency of 86% (SEDBUK). Boiler flue outlet to be at least 300mm from any opening into building and fitted with suitable guard. Boiler to be fitted with timing controls and boiler control interlock. Installer of boiler to issue a commissioning certificate on completion. Instructions for use of heating system to be displayed adjacent to boiler. Gas installations (including boiler) to be carried out by a Corgi registered installer. All new radiators to be fitted with thermostatic valves. All hot water and unprotected cold water pipes insulated with Armaflex or similar of thickness to match pipe outside diameter.

Mechanical ventilation:
Install extract fan to kitchen mounted in cooker hood to extract at a rate of 30 litres per second. Install extract fan to utility to extract at a rate of 30 litres per second. Install extract fans to bathroom and en-suite to extract at a rate of 15 litres per second.

Drains above ground:
Install 40mm dia. polypropylene wastes from kitchen sink, bath and washing machine, 32mm dia. wastes from wash basins, 50mm dia. waste from shower tray and 50mm combined wastes. All fittings to have 75mm deep seal traps except shower which is to have 50mm deep cleanable trap. All fittings are to connect to new 110mm dia. UPVC soil and vent stack with rodding point at base except kitchen wastes which are to connect to new back inlet gully fitted with rodding point. New soil and vent stack to terminate at least 900mm above window head level. Form services duct between en-suite and bathroom.

Drains below ground:
New soil and vent stack and back inlet gully connected to new 110mm dia. UPVC drains bedded and surrounded in 100mm peagravel to fall at approx. 1 in 60 to connect to new polypropylene inspection chambers and existing drains. Existing redundant drains/inspection chambers to be removed or sealed off. Drains within 600mm of ground level to be protected by reinforced concrete slab laid above compressible layer above peagravel surround. New inspection chambers to be approx. 450mm dia. Preformed polypropylene type with light duty covers and frames.

Stud partitions:
Formed of 50x75 studs at 400mm cts. with 50x75 sole and head plates and noggings at 1200mm cts. with cladding to both sides of 12.5mm Gyproc Wallboard Ten with skim finish and fibreglass quilt packing installed between studs.

Smoke alarms:
Install smoke alarm (SA) to be mains operated battery back up type, alarm to be min. 300mm from any light fitting and wall and max. 3,000 from any bedroom door and max. 7,000 from any lounge or kitchen door.

Lighting:
Install to at least three locations, compact fluorescent or fluorescent tube type low energy light fittings.

Part P – Electrical installations:
All electrical work required to meet the Requirements of part P (electrical safety) must be designed, installed and tested by a person competent to do so. Prior to completion of the works the council must be satisfied that either:
1. An electrical installation certificate issued under a competent persons scheme has been issued, or
2. An appropriate electrical installation certificate has been issued for the work, and that it has been signed by a person competent to do so.

DETERMINED PLAN
SHDC Planning & Development
- 5 FEB 2007
Ref: 169/07

Project
PROPOSED EXTENSIONS AND ALTERATIONS TO BUNGALOW AT 22 ALBION STREET, CROWLAND.

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Client
MR. & MRS M SLATER

Scale 1:50 & 1:100 Drg. no. 06/69/01
Date February 2007