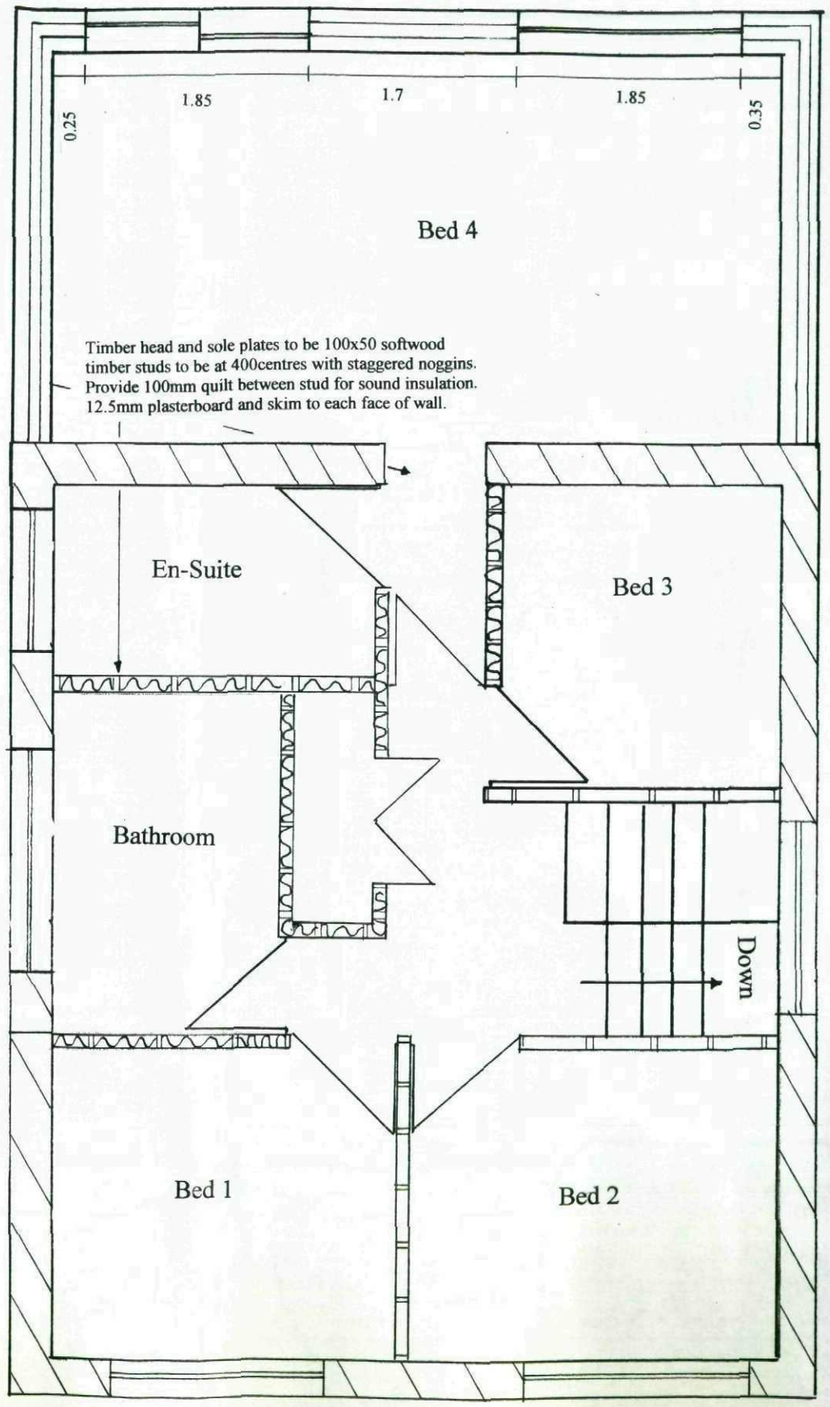
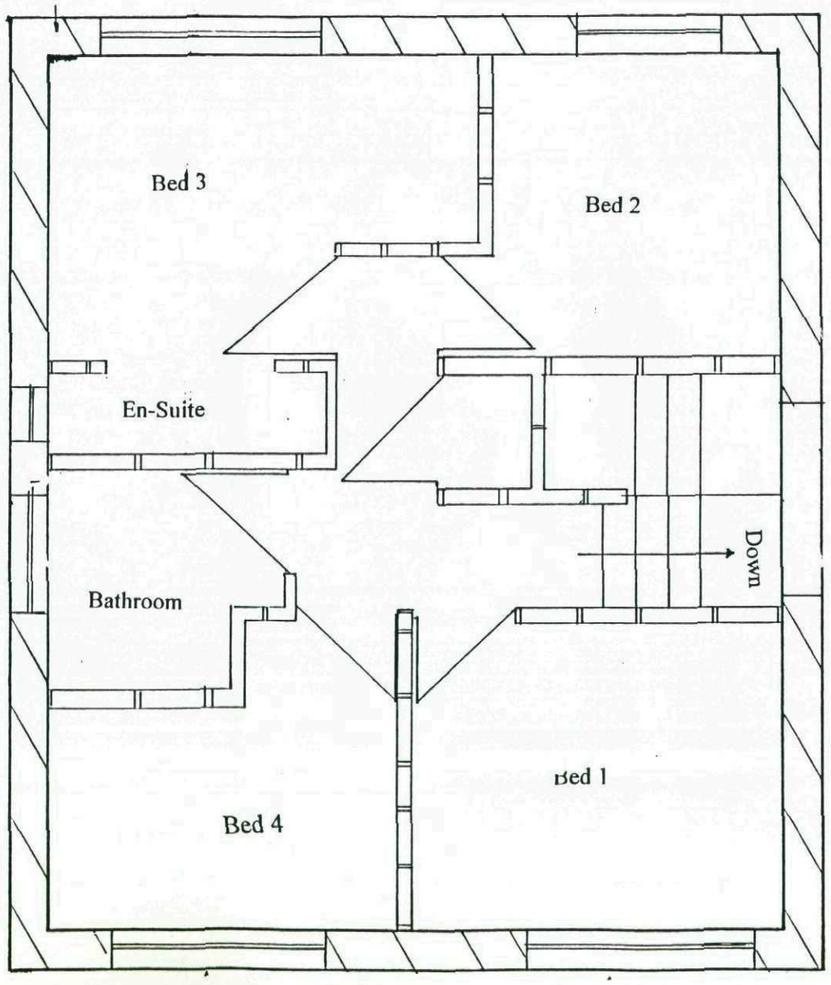
Proposed First Floor - Scale 1:50

New patio doors with guarding at min 1.1m height, ballustrades to be at max 100mm centres



Existing First Floor - Scale 1:50

All lintels to be Catnic Cougar Open back CG 90/100 with min 100mm end bearing



Specification

Foundations

Foundation depth to be determined by ground conditions typically 750-800mm on site and to approval of Local Authority Building Control Surveyor. Foundation thickness to be min 150mm and projection to be Min 150mm using 300mm thick cavity wall construction. Existing foundations where appropiate to be exposed and inspected by Local Authority Building Control Surveyor to ascertain suitability to withstand increased loading.

Walls

External walls to achieve U value of 0.3W/m^{2K} to be 105mm facing brick, 100mm Plasmor or Stranlite block K value of 0.46 100mm cavity with 100mm Dritherm 32 insulation lightweight plaster finish to inner skin. Wall ties to be double triangle or vertical twist to BS 5628. Ties to be at 450mm centres vertically and 750mm centres horizontally. Wall ties to be at each block course and every three brick courses and within 225mm around all openings. Damp proof course to inner and outer leaf to be min 150mm from external ground level. Bonding of existing to new masonry to be achieved by toothing out to keep cavities continuous. Provide thermabate cavity closer or insulated dpc at all window and door reveals

Roof

Roof trusses to be supplied by specialist manufacturer and fitted and braced in accordance with BS 5268 - 3 - 2006 Structural use of Timber - Code of Practice for Trussed rafter roofs Wall plate to be 100x50 sotwood fixed to wall using 30x5 galvanised mild steel straps at max 1.5m centres. Roof tiles to be profiled concrete to match existing and suitable for pitch on site fixed to 38x25 tanalised timber battens with Tyvek or similar breathable felt under. Roof insulation to be Rockwool quilt, 100mm between ceiling joists and 200mm over total thickness 300mm.

Ground Floor

Ground floor joists to be Strength Class C16 145x63mm at 400mm centres built into inner blockwork skin. Provide one row of strutting at mid span, strutting to min 38mm thick and be min three-quarters of the joist depth. Provide Min air space of 150mm between bottom of joists and oversite concrete. Provide 110mm of Kingspan Kooltherm K3 between floor joists and supported on wire netting. Provide sub floor ventilation using air bricks at 1.5m centres with liner and cavity tray over. All existing air bricks to remain unobstructed

First Floor Joists

Joists to be Strength Class C16 145x63mm at 400mm centres.Provide lateral restraint to floor using 30x5 galvanised mild steel straps fixed across joists and fixed to internal block wall. . Joists to be doubled up under all stud wall partitions

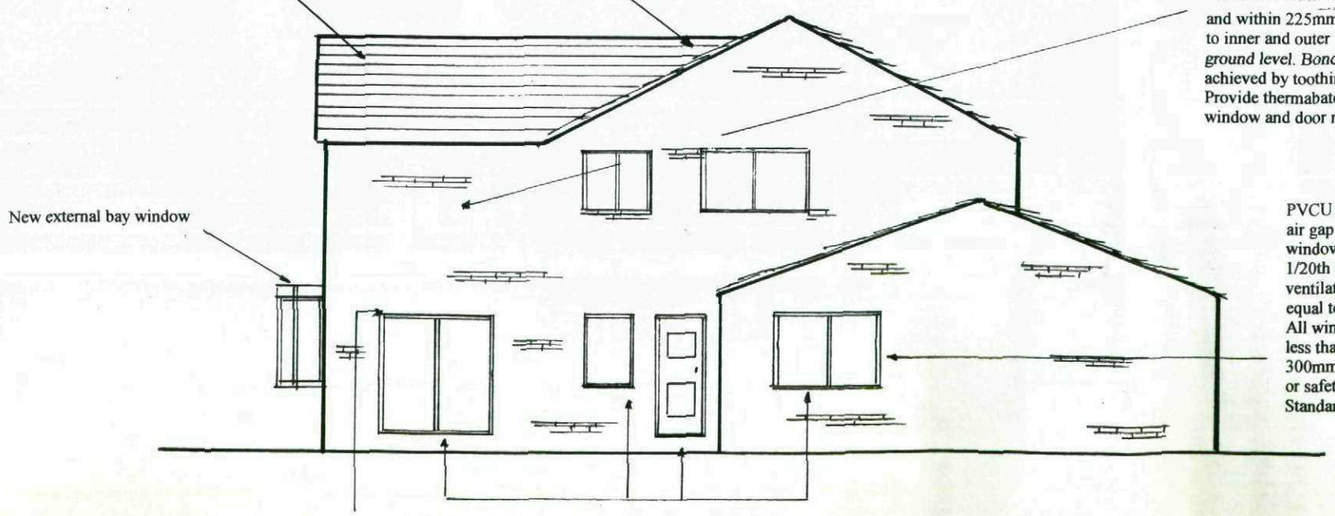
Drawing No 2
First Floor Plans - Scale 1:50

8 Mickleden Way

Existing Side Elevation - Scale 1:100

Roof trusses to be supplied by specialist manufacturer and fitted and braced in accordance with BS 5268 - 3 - 2006 Structural use of Timber - Code of Practice for Trussed rafter roofs Wall plate to be 100x50 sotwood fixed to wall using 30x5 galvanised mild steel straps at max 1.5m centres. Roof tiles to be profiled concrete to match existing and suitable for pitch on site fixed to 38x25 tanalised timber battens with Tyvek or similar breathable felt under. Roof insulation to be Rockwool quilt, 100mm between ceiling joists and 200mm over total thickness 300mm.

Proposed Side Elevation - Scale 1:100



External walls to achieve U value of 0.3W/m^{2K} to be 105mm facing brick, 100mm Plasmor or Stranlite block K value of 0.46, 100mm cavity with 100mm Dritherm 32 insulation, lightweight plaster finish to inner skin. Wall ties to be double triangle or vertical twist to BS 5628. Ties to be at 450mm centres vertically and 750mm centres horizontally. Wall ties to be at each block course and every three brick courses and within 225mm around all openings. Damp proof course to inner and outer leaf to be min 150mm from external ground level. *Bonding of existing to new masonry to be* achieved by toothing out to keep cavities continuous. Provide thermabate cavity closer or insulated dpc at all window and door reveals

PVCU Frames, double glazed with 16mm air gap and Low E (soft) glazing. All windows to have Min opening area of 1/20th of floor area to ensure rapid ventilation. Trickle vents to be provided equal to continuous strip 8000mm2. All windows/doors containing glazing less than 800mm from level, within 300mm of external doors to be toughened or safety glazing complying with British Standard (BS) 6206:1981

All lintels to be Catnic Cougar Open back CG 90/100 with min 100mm end bearing

New white upvc windows and door

Specification

Sound Insulation

100mm Rockwool Min density 10 kgm3 between ceiling joists

Drainage

Existing gutters extended at front and rear elevations and rainwater to discharge into existing down pipes. Existing soil and vent pipes are internal new drainage to bathroom and en-suite to be connected into. Sink/Washing machine/Dishwasher to have Min 40mm trap diameter and depth of seal to be 75mm. Wash Basin Min trap dia 32mm depth of seal 75mm. Bath/Shower trap dia 40mm Depth of seal 50mm. WC trap dia 100mm depth of seal 50mm

Electrical Safety

Electrical installation to be carried out by a person registered with with a Competent persons scheme or installed by person registered under a recognised Trade body such as NICIEC, NAPIT etc who will issue certificate as evidence of work complying with A.D Part P.

Mechanical Ventilation

Provide intermittent mechanical extract fan to kitchen area rate of 30 litres per second adjacent to hob or 60l/s elsewhere.Bathroom and En-suite to have mechanical extract at 15 l/sec

Fire Safety

Provide mains linked smoke detector installed in accordance with BS 5839-6:2004 in areas marked SD with battery backup to confirm to BS 5446 -1 2000. Detector to be ceiling mounted and Min 300mm from walls and light fittings

Steelwork

All steelwork to be encased in 12.5mm fireleine boards and finished with skim coat

External Walls

Masonry below ground to be 2 leaves of 440x215 mm dense concrete blocks 7.3N/mm2 strength with ties at 750 centres horizontally 450 vertically with lean mix fill struck to outer leaf

External walls to achieve U value of 0.3W/m^{2K} to be 105mm facing brick, 100mm Plasmor or Stranlite block K value of 0.46, 100mm cavity with 100mm Dritherm 32 insulation, lightweight plaster finish to inner skin. Wall ties to be double triangle or vertical twist to BS 5628 Ties to be at 450mm centres vertically and 750mm centres horizontally. Wall ties to be at each block course and every three brick courses and within 225mm around all openings. Damp proof course to inner and outer leaf to be min 150mm from external ground level. Bonding of existing to new masonry to be achieved by toothing out to keep cavities continuous. Provide thermabate cavity closer or insulated dpc at all window and door reveals

Drawing No 3
Existing/Proposed Side Elevations
8 Mickleden Way
Existing Side Elevation - Scale 1:100
Proposed Side Elevation - Scale 1:100