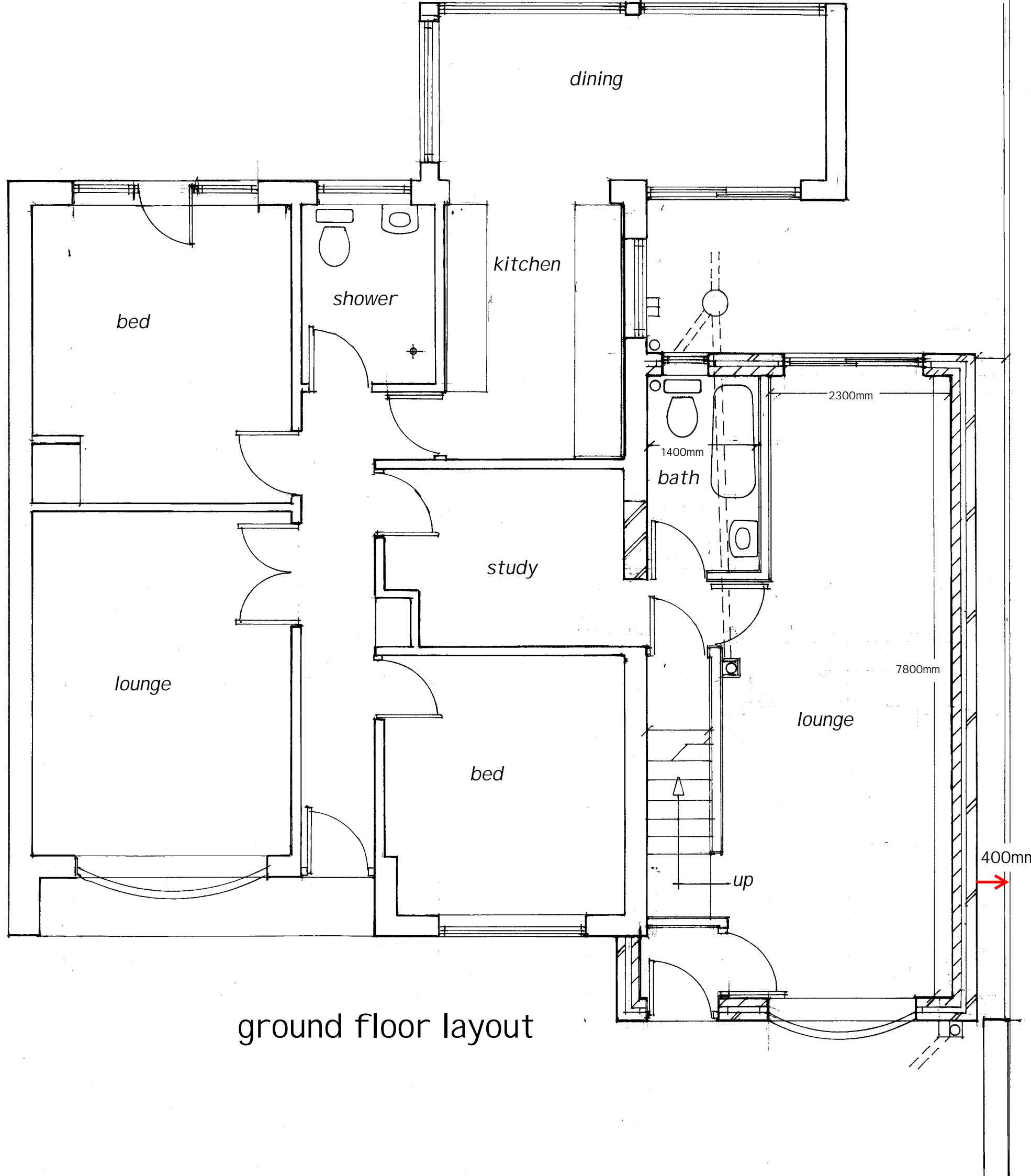


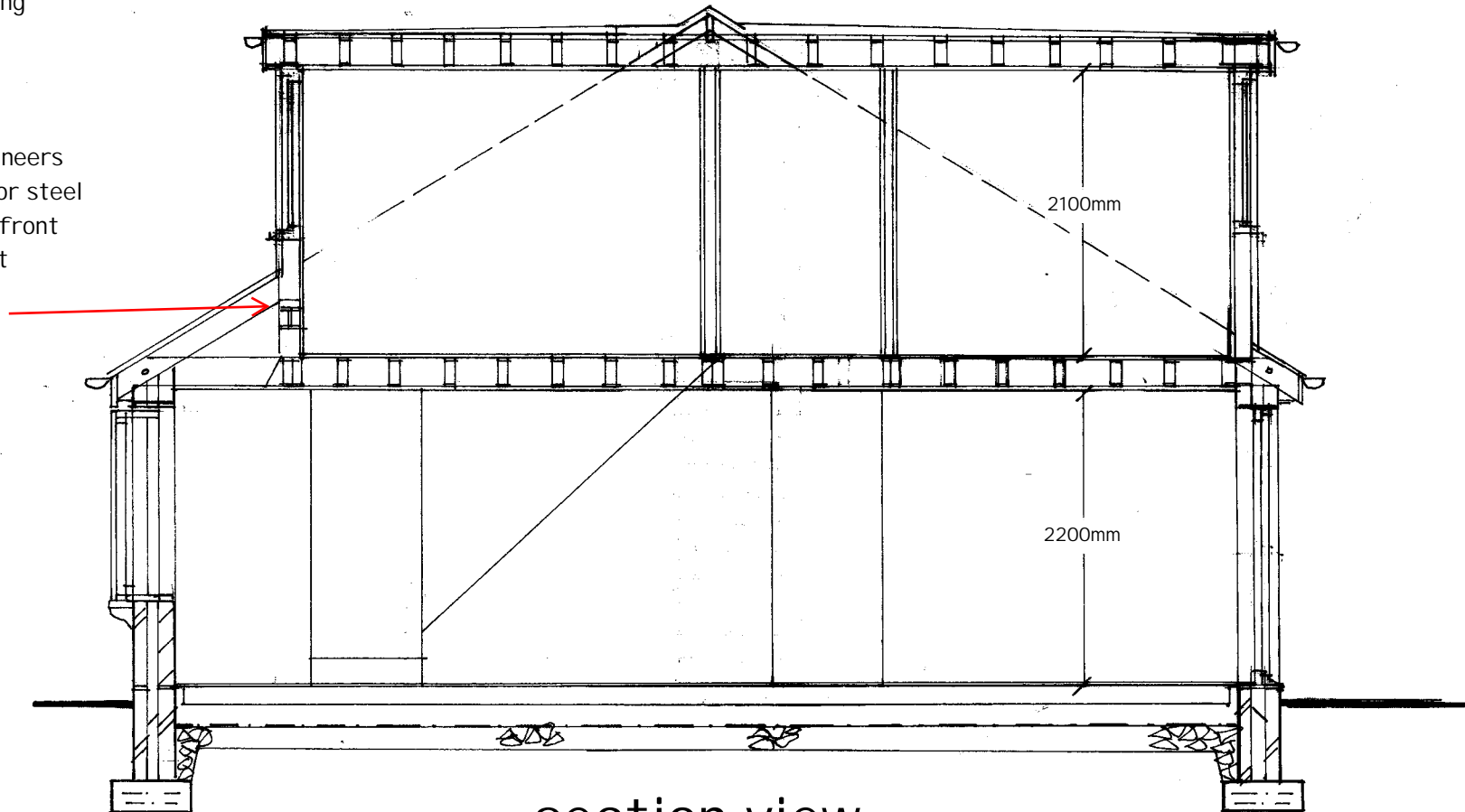
Proposed Extension and Alteration at 5, Moss Close, Werrington, Staffs - scale 1:50 + 1:100 dwg MC1a



ground floor layout

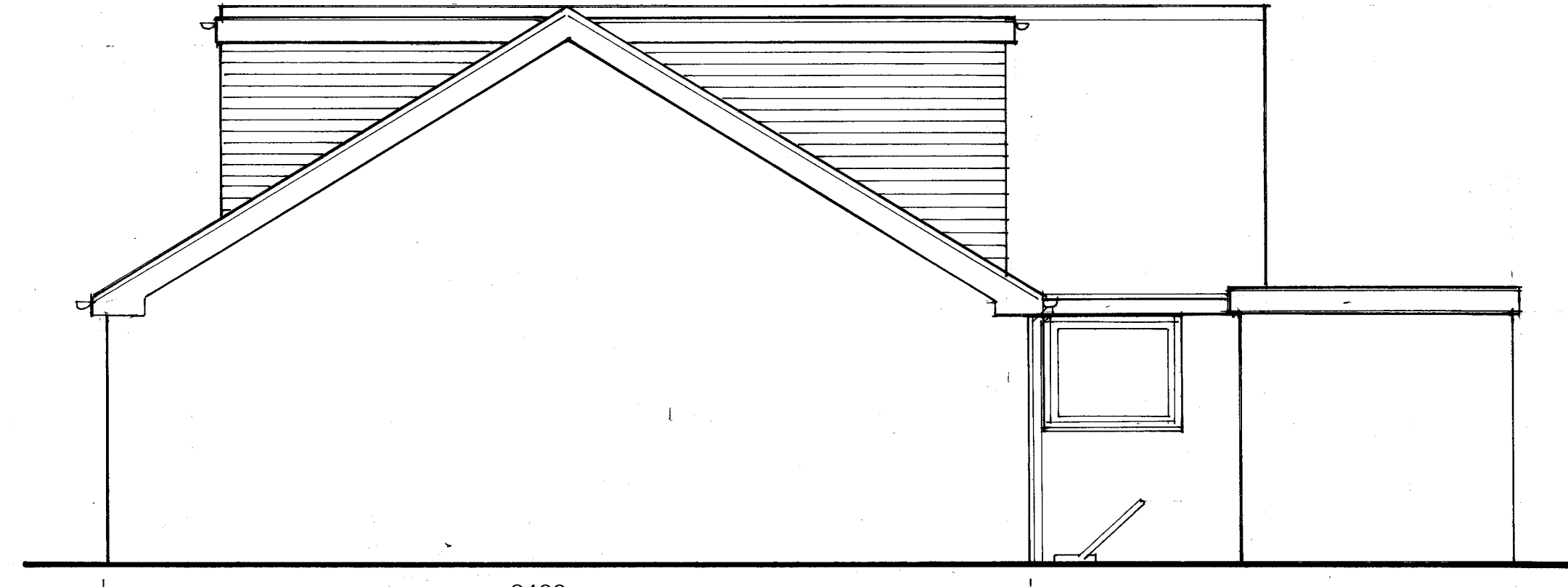
\*Note new extension flat roof to align with existing ridge tile seating

\*Note see engineers design sheet for steel purlin spec. to front dormer support

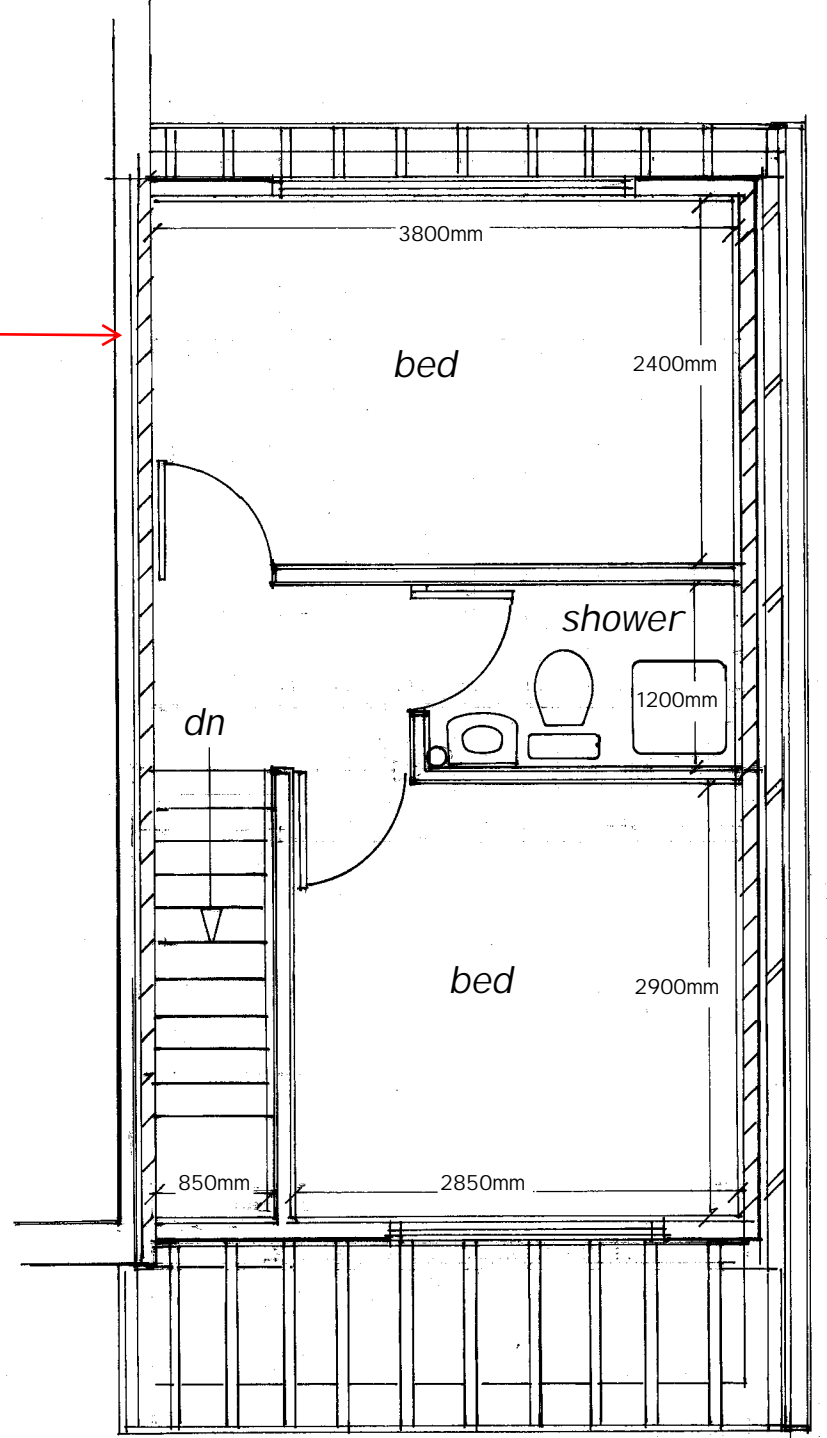


section view

\*Note expose existing cavity wall to allow construction of new load bearing concrete block skin to outer leaf as support to flat roof construction. As necessary line out new leaf internally with insulation backed plasterboard as form dormer spec.

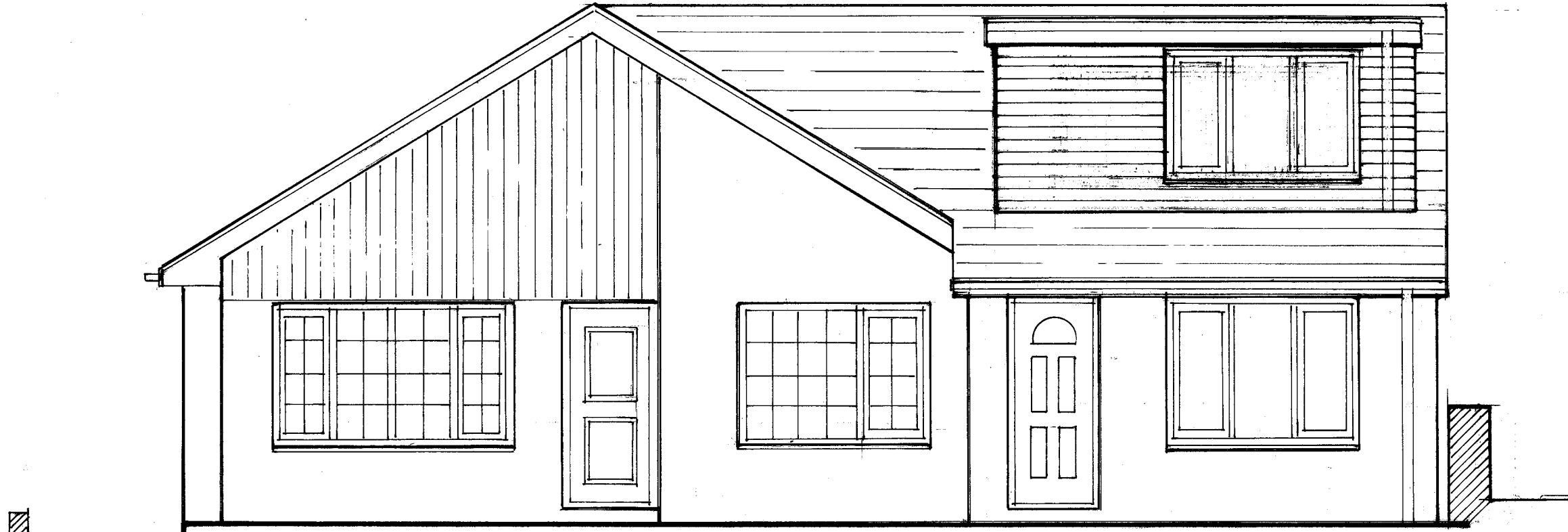


elevation to side

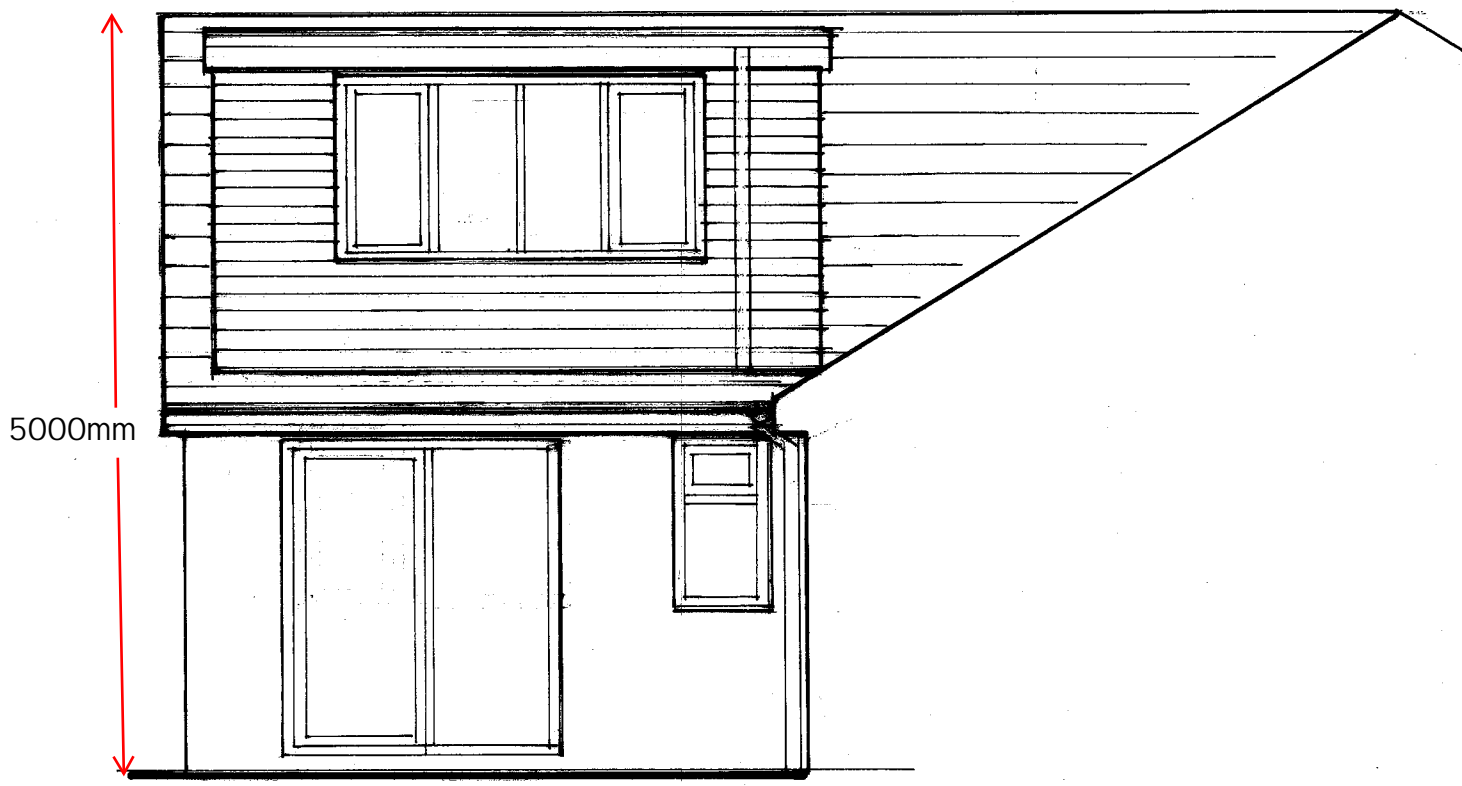


roof layout

\*Note This drawing has been prepared for submission to the local authority for necessary statutory approvals. Nominated contractor to verify all dimensions either written or scaled together with drainage lines and inverts etc. prior to commencement of formal construction work on this site.



elevation to front



elevation to rear side

\*General Specification

\*Preliminary Works

Carefully demolish existing flat roofed structure over similar footprint to proposed extension. Grub up existing foundation if unsuitable for retention and floor slab and remove all rubble from site to approved tip facility. Expose existing drain and prepare to modify drain line to new access chamber position - see drainage notes

\*Walls (External)

Selected brickwork to match existing, min 100mm cavity enclosing Dritherm 32 insulation fill to manufacturer specification and internal leaf of 100mm load bearing thermal blockwork (egg Celcon Solar) faced internally with plasterboard on treated battens or cement dabs. This or similar construction to achieve max 0.28 w/m2 k U-Value  
\*Note: new walling to be effectively bonded to existing structure to satisfaction of local authority surveyor and wall ties to be stainless steel suitable for 100mm cavity width and compliant with DD140.

\*Dormer Walls

Approved v-joint upvc cladding on battens and breathable membrane secured to 100mm load bearing thermal blocks as cavity wall lined internally with Celotex GD5050 (62.5mm) insulation incorporating 12.5mm plasterboard laminate and vapour check.  
\*this or similar construction to achieve 0.28w/m2K U-value

\*Roof (tiled)

Selected tiles to match existing on treated battens on approved breathable membrane over 170x47mm sw C16 rafters at 400mm centres with foot cut to secure to continuous 200x38mm lay board secured to existing rafters. Install 100x47mm sw C16 cross ties bolted through to each rafter with m13 steel bolts using steel timber connector washers. 8Note consider alternative in preformed trussed rafter reducing units by specialist design to BS 5268. Install preformed valley gutter sections suitably weathered to manufacturer specification.

\*Roof (flat)

Approved single ply membrane by specialist contractor on min 18mm ext ply deck laid to fall 1:60 across 170 x47mm sw C16 joists at 400mm max centres with Celotex FR5000 (120mm) insulation between joists allowing for min 50mm clear cross ventilation under deck. Underdraw ceiling with Celotex GD5040 (52.5mm) insulation incorporating 12.5mm plasterboard laminate and vapour check. Joists to be anchored to supporting walls with galv ms straps at 1500mm max centres.

\*Foundation Detail:

lay new 600mm x 225mm concrete strip to abut adjacent foundations reinforced with 2 no layers B503 steel fabric at depth to suitable bearing strata as indicated on section view.  
All foundation works to satisfy local authority surveyor

\*Floor

Floor finish to client requirement on min 60mm screed or power float finish to 100mm concrete slab on 1200g dpm over Celotex GA 4000 (70mm) insulation board turned up in 25mm thickness at floor perimeter to dpc to avoid cold bridge. Lay further dpm linked to dpc over well blinded natural stone, sulphate free hardcore compacted in maximum 150mm layers.

\*Floor - First:

21mm 1/8g boarding across 170x50mm sw C24 joists at max 400mm centres supported off heavy duty galvanised ms joist hangers fixed to comply with manufacturer specification. Under draw joists with plasterboard to achieve min 30 minutes fire resistance incorporating vapour control membrane where required and enclosing 120mm Rockwool between joists. Trim around stairwell with double joists bolted together and galv ms joist hanger support to joist ends. Install double joists beneath partition lines.

\*Drainage - External:

Lay new 100mm pvc drains on granular bed at min 1:40 falls to connect to existing system on site. Ensure adequate support and protection to all drains passing through walls and building footprint. Provide trapped accessible gullies as shown and allow for full inspection by local authority surveyor.  
Upvc rainwater goods to match existing carried to existing system as required

\*Fenestration:

Install high performance double glazed upvc units to match existing style using Pilkington Low E 'k' glass and min 25mm cavity - max 1.60 w/m2 k U-Value Opening casements to represent minimum 5% of adjacent floor as natural vent plus min 10000mm2 trickle ventilators to head of frame.  
Ensure that all doors and critical window areas are fitted with laminated or toughened safety glazing compliant with current BS-EN:12150.

\*Ventilation:

Natural vent as above plus install mechanical ventilation to achieve the following extract rates:  
Bath/Shower - 15 litres/sec

\*Escape Window:

Where required provide opening casements to habitable rooms capable of safe egress in emergency i.e. min 0.33m2 clear opening (say 800x450mm) set within 1100mm of internal floor level.

\* Install Velux type roof lights to client requirements with double rafter trimming and weathering to manufacturer spec. (max U Value 1.30 w/m2k)

\*Electrical Work:

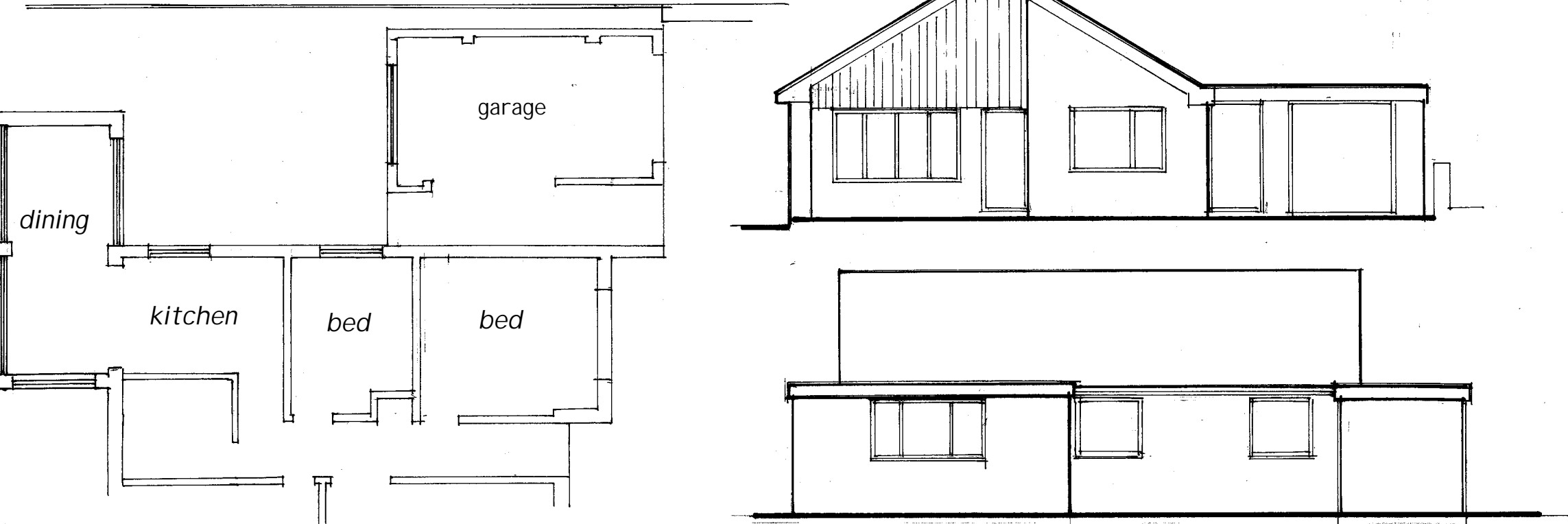
All notifiable electrical work to be carried out by a suitably qualified contractor registered with an approved national body. A formal completion certificate to be issued in compliance with current Part P building regulations and to satisfaction of local authority surveyor.  
Note: all lighting to be low energy type

\*Flashings

Install Code 4 lead flash upstand and cover at abutment of dormer walls and tiled roof etc.

\*New Stair

Install Standard sw flight with equal risers (max 210mm) and equal treads to ensure max 42 degrees pitch. Handrail set at 900mm to pitch line and maintain minimum 2000mm headroom throughout.



existing layout and elevations 1:100

