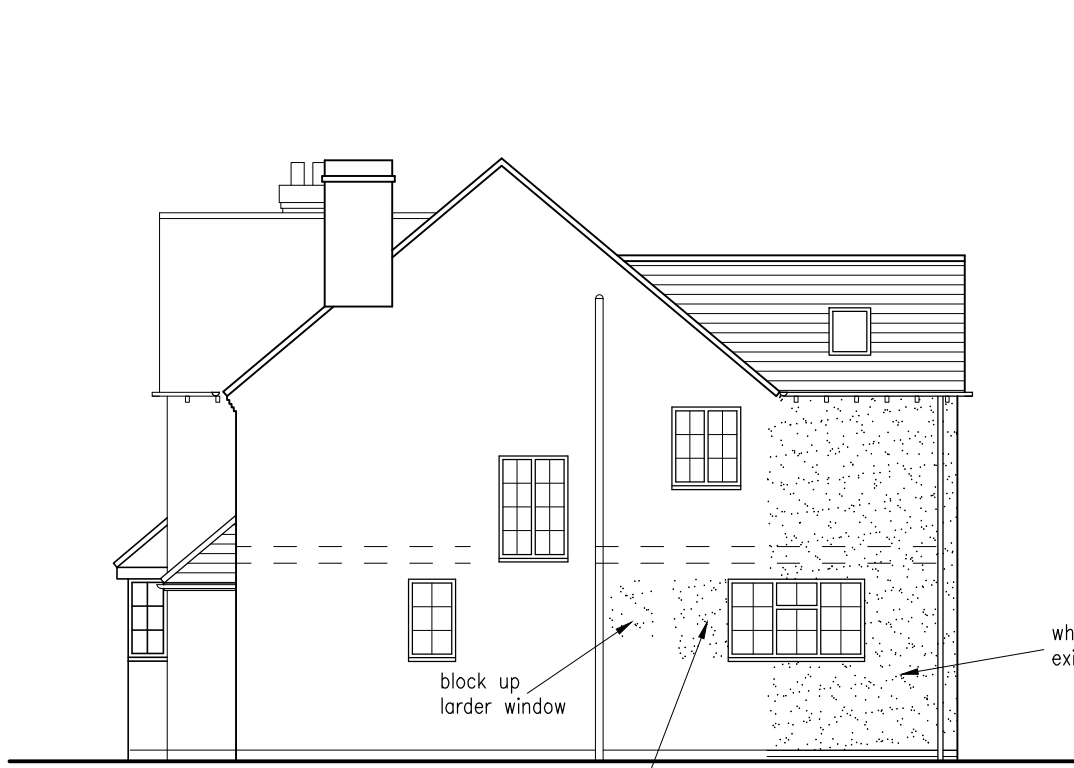




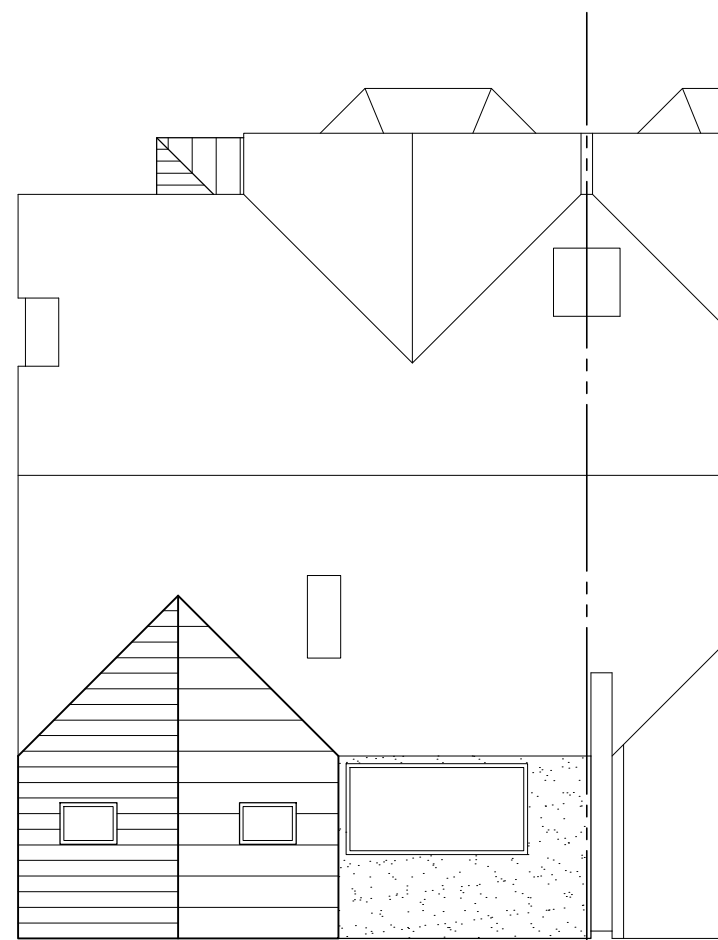
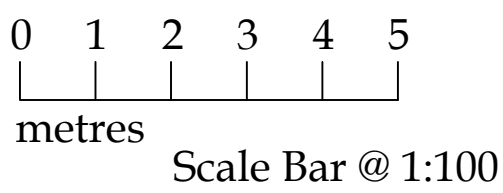
Front Elevation



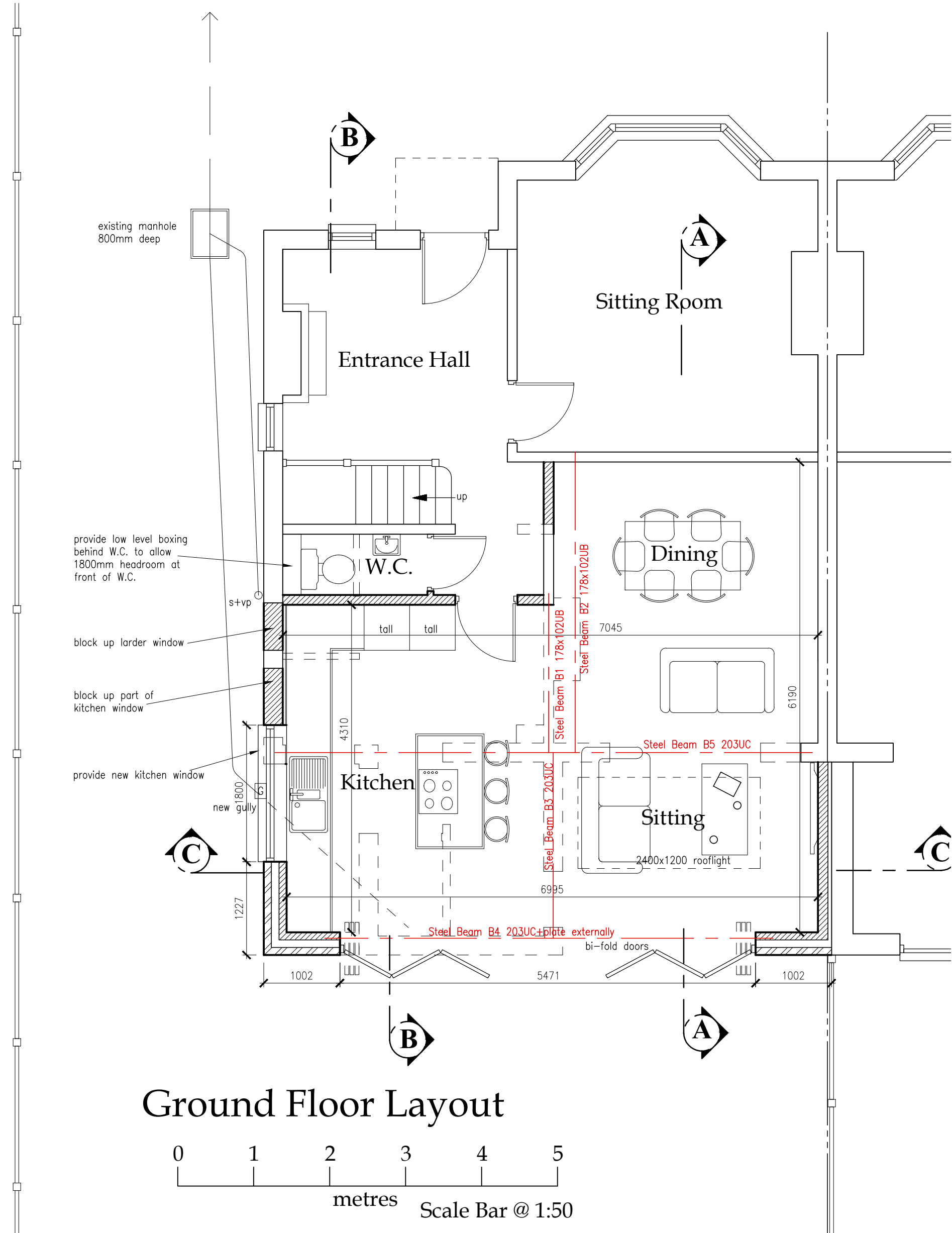
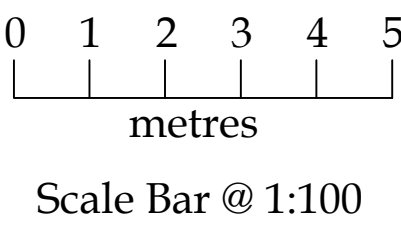
Side Elevation



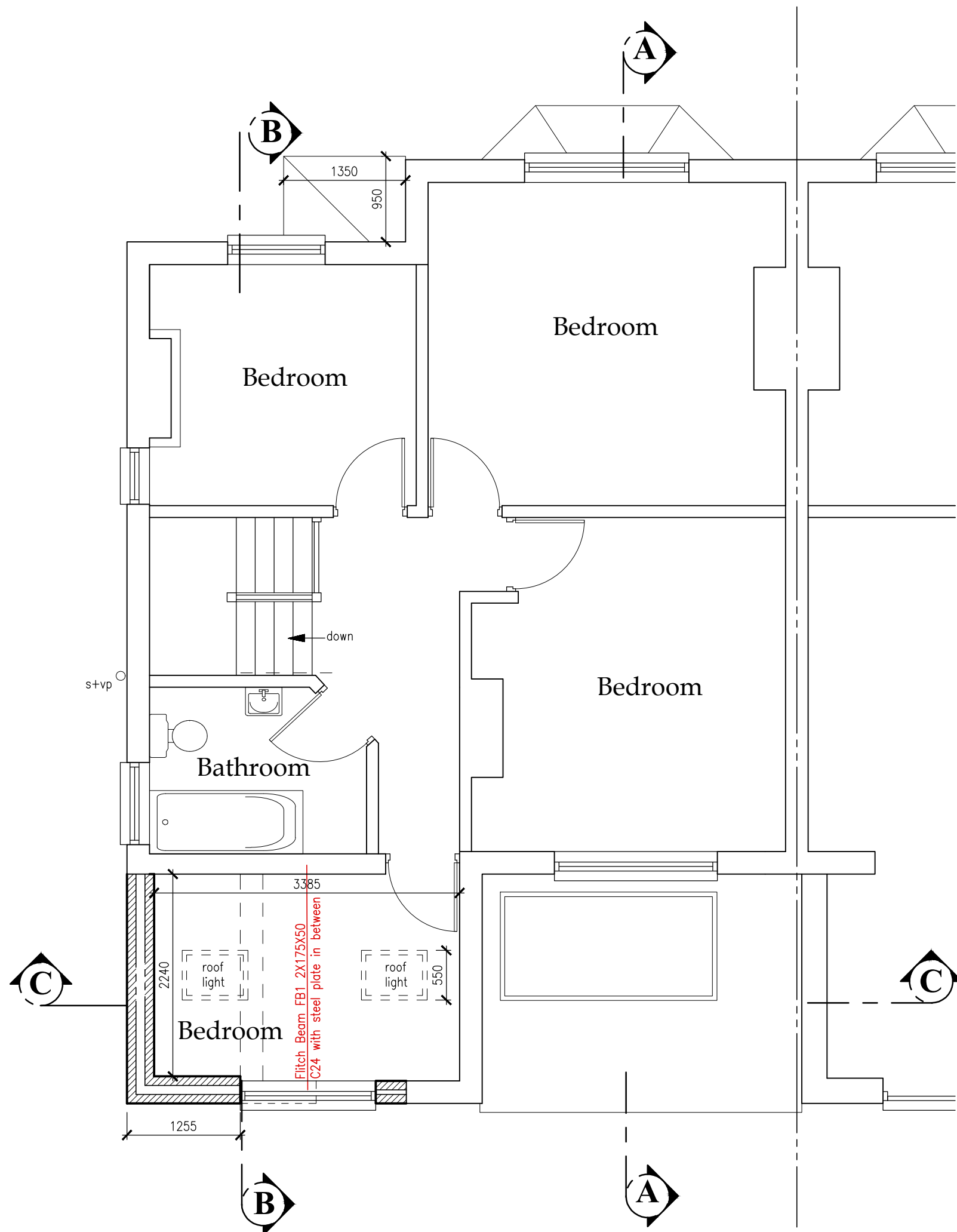
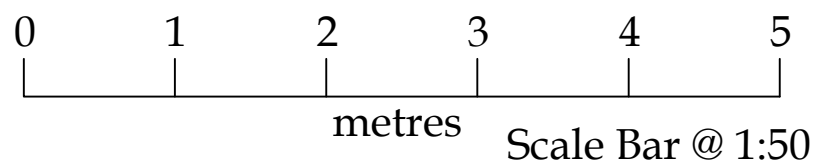
Rear Elevation



Roof Plan



Ground Floor Layout



First Floor Layout

- List Of Elements For Calculation:
- Fitch Beam FB1.
 - Steel Beams B1-B6.
 - Multiple trimmers around roof lights.

SPECIFICATION:

Foundations:- Min. 1m deep x 600 wide in GEN 1 concrete or to suit sub-soil conditions and to be agreed on site with the Local Authority. Foundations to be constructed in accordance with NHBC Standard 4.2 - "Building Near Trees" if a clay sub-soil is determined. Foundations to extend 600mm below any tree roots including fibrous tree roots. Insert bridging lintels in foundations where any drains pass through. Provide 300mm wide foundation laid adjacent to neighbour's side extension wall, drill 150mm into neighbour's existing concrete foundation and grout in 300mm long 12mm diameter steel bars to adjoin extg. and new concrete.

Ground Floor Construction:- 65mm sand/cement screed on 100mm GEN 2 concrete on 500g polythene membrane on 100mm Celotex GA4000 insulation on 1200g polythene d.p.m. turned up at edges and linked to d.p.c. on 150mm well compacted, sand blinded hardcore. Provide 25mm Celotex Tuff-R GA4000 edge insulation to concrete and screed. Link new DPM to existing DPC with mastic seal to the joint. New floor level to line through with extg. Check existing larder/w.c. floor and retain if sound and if incorporates a dpm, otherwise replace with new insulated floor.

Sub Floor Ventilation:- Remove any existing air bricks and lay 100mm dia. uPVC ducts set in thickened oversite from extg. apertures to new 225x75mm air bricks built into external walls to maintain ventilation to extg. ground floor construction.

Cavity Wall Construction:- 19mm two coat render applied in accordance with the block manufacturers instructions and to BS5262 and incorporating a waterproof additive on 100mm plasmor aglite, 100mm cavity with 90mm Kingspan Kooltherm K106 insulation with 10mm residual cavity externally, installed in accordance with BBA Agreement Certificate 16/5299 and 100mm plasmor aglite inner skin. Provide 27.5mm Celotex at reveals with 3mm skin finish. Provide bellmouth render stop at d.p.c. level and render stop to reveals with 3mm skin finish.

Use stainless steel wall ties @ 750 horizontal and 450 vertical centres (225 at reveals) and provide thermabate cavity closer at reveals.

Where adjoining neighbour's side extension wall, provide 100mm block inner skin and 75mm cavity with b-t wall ties (centres as below) screwed into neighbours wall. Provide 75mm rockwool cavity wall batts.

Lay a 100 wide horizontal d.p.c. to each skin, lapped at corners linked to existing d.p.c. and d.p.m. and min. 150 above finished ground level.

All work below d.p.c. to be brickwork and fill cavity with 10:1 semi-dry concrete to within 225 of d.p.c. Use 203UC with steel plate to carry external skin over bi-fold doors with 200mm end bearings. Use Catnic C690/100 lintels over window opening with min. 150 end bearing. All new work to be properly bonded to extg. by either C.T.&B. or by the use of Furfix battens, and connect new cavities to existing.

Steel Beams:- Provide new steel beams as shown on floor plans & sections. See engineers structural plans and calculations for steel beam sizes, padstone sizes and connection details. New steel beams to be encased with 19mm thick Gypsum plasterboard with wire binding at 100mm pitch and finished with 7mm Gypsum plaster finish, or Use brush applied intumescent paint only where beams contained within 1st floor void to achieve half hour fire resistance. Provide adequate propping and bracing during construction. Provide steel beam below first floor chimney breast.

Ground Floor Internal Walls:- 100mm non load bearing blockwork with 13mm thick two coat plaster finish both sides, built off a horizontal d.p. course on concrete floor slab.

Roof Construction Cut Roof:- Roof tiles to match extg. Provide roofing to BS5534, including 50mmx25mm treated BS battens on one layer Tyvek 'Supro' breathable membrane on 100x50 rafters @ 400 centres over 100x50 wallplates strapped down to walls @ 1.2m centres on rear extension and front canopy. Provide a 2X 175X50mm C24 with steel plate in between to form ridge fitch beam supported on load bearing block work raised off outer skin of existing wall as shown on section B-B. Provide a 200x38 ridge board and 200X38 hip board at porch. Provide multiple rafters bolted together all around 2 no. 780x550 rooflights with jiffy hanger connections. Provide at front canopy, 100X50 ceiling joists supported on jiffy hangers on 100X50 wallplate rowbolted to house wall. Form valleys with pre-manufactured fibreglass valley units on 100x50 noggins. Put 200x38 layboards on existing rafters and the new rafters will sit on top of these layboards. Lay 50mm Celotex tuff-R GA4000 insulation board between rafters (with 50mm air gap above) and 125mm below to sloping ceilings with 12.5mm plasterboard finish. No insulation for front canopy roof. Timber should be separated from the flue by at least 200mm. Fascias to be 25mm treated softwood and soffits to be 9.5mm W.B.P. ply (or uPVC). Provide Tyvek eaves carrier at eaves.

Flat Roof (Warm Roof Construction):- Single layer rubberised waterproof membrane (AA rated for surface spread of flame) laid in accordance with manufacturers instructions on 150mm Celotex RR insulation board laid in accordance with the manufacturers instructions on 19mm W.B.P. ply decking on firings to fall 1in 60 on 200x50 C24 joists at 400 centres spanning front to back over 100x50 wall plate strapped down to new rear extension wall @ 1.2m ctrs. and in web of steel beam at existing wall location as shown on section. Ceiling to have one layer of 12.5mm plasterboard. Provide multiple flat roof joists bolted together all around atrium/rooflight with jiffy hanger connections. Fascias to be 25mm treated softwood. Felt to be dressed up under code 4 lead flashing at abutment with rear and side walls. New flat roof covering to achieve a fire rating of BROOF(14). Provide vapour barrier at ceiling level. A slightly dropped ceiling may be required to cover steel beams.

To Be Continued On BR-102

all dimensions to be checked on site as work commences and any discrepancies or omissions reported immediately.

client Mr. S. Baines,
102 Bearton Road,
Hitchin,
SG5 1UF.

job title: Proposed Ground & First Floor Rear
Extension And Front Canopy.

dwg title: Proposed Floor Plans, Elevations,
And Roof Plan.

dwg. no:	2025024-BR-101	drawn by:	Kevin Todd	scales:	1:50, 100 @A1
revision suffix:	-	status:	Building Regs	date:	April 2025
Rev.		Description		Date	
-	-			-	

KEVIN TODD ARCHITECTURAL LTD.

ARCHITECTURAL AND DEVELOPMENT CONSULTANTS

P.O. Box 1643,
Kempston,
MK42 5EJ.

C.A.B.E



Tel: 01582-476404

www.kevintoddarchitectural.co.uk
kt@kevintoddarchitectural.co.uk